UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 20-F

(Mark One)

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2022

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

OR

☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report
For the transition period from to

Commission file number 001-39670

PURETECH HEALTH PLC

(Exact name of registrant as specified in its charter)

N/A
(Translation of Registrant's name into English)

England and Wales
(Jurisdiction of incorporation or organization)
6 Tide Street, Suite 400
Boston, Massachusetts 02210
United States
(Address of principal executive offices)
Daphne Zohar
Chief Executive Officer Tel: (617) 482-2333
E-mail: ir@puretechhealth.com

c/o PureTech Health LLC
6 Tide Street, Suite 400
Boston, Massachusetts 02210
United States
(Name, telephone, e-mail and/or facsimile number and address of company contact person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class:	Trading Symbol(s)	**Name of each exchange on which registered:**
American Depositary Shares, each representing 10 ordinary shares, par value £0.01 per share	PRTC	The Nasdaq Global Market
Ordinary shares, par value £0.01 per share*	*	The Nasdaq Global Market*

* Listed not for trading, but only in connection with the registration of the American Depositary Shares on The Nasdaq Global Market.

Securities registered or to be registered pursuant to Section 12(g) of the Act: None.
Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None.

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: Ordinary Shares: 278,566,306 outstanding as of December 31, 2022.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days: Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files): Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☒	Non-accelerated filer	☐	Emerging growth company	☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐	International Financial Reporting Standards as issued by the International Accounting Standards Board ☒	Other ☐

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17 ☐ Item 18 ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

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Special Note Regarding Forward-Looking Statements

This annual report on Form 20-F contains forward-looking statements that involve substantial risks and uncertainties. All statements contained in this report, other than statements of historical fact, including statements regarding our and our Founded Entities' strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “would,” “could,” “should,” “continue” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. The forward-looking statements in this annual report on Form 20-F include, among other things, statements about:

- our ability to realize value from our Founded Entities, which may be impacted if we reduce our ownership to a minority interest or otherwise cede control to other investors through contractual agreements or otherwise;
- the success, cost and timing of our clinical development of our Wholly Owned Programs, including the progress of, and results from, our preclinical and clinical trials of LYT-100, LYT-200, LYT-300, LYT-310, LYT-503/IMB-150, our technology platforms and other potential therapeutic candidates within our Wholly Owned Pipeline;
- our ability to obtain and maintain regulatory clearance, certification, authorization or approval of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities, and any related restrictions, limitations or warnings in the label of any of the therapeutic candidates if cleared, certified, authorized or approved;
- our ability to compete with companies currently marketing or engaged in the development of treatments for indications within our Wholly Owned Pipeline or those of our Founded Entities are designed to target;
- our plans to pursue research and development of other future therapeutic candidates;
- the potential advantages of the therapeutic candidates within our Wholly Owned Pipeline and the therapeutic candidates being developed by our Founded Entities;
- the rate and degree of market acceptance and clinical utility of our therapeutic candidates;
- the success of our collaborations and partnerships with third parties;
- our estimates regarding the potential market opportunity for the therapeutic candidates within our Wholly Owned Pipeline and the therapeutic candidates being developed by our Founded Entities;
- our sales, marketing and distribution capabilities and strategy;
- our ability to establish and maintain arrangements for manufacture of the therapeutic candidates within our Wholly Owned Pipeline and therapeutic candidates being developed by our Founded Entities;
- our intellectual property position;
- our expectations related to the use of capital;
- the effect of the COVID-19 pandemic, including mitigation efforts and economic effects, on any of the foregoing or other aspects of our business operations;
- our estimates regarding expenses, future revenues, capital requirements and needs for additional financing;
- the impact of government laws and regulations; and
- our competitive position.

SUMMARY OF RISK FACTORS

The risk factors described below are a summary of the principal risk factors associated with our business. These are not the only risks we face. You should carefully consider these risk factors, together with the risk factors incorporated by reference into Item 3D. of this annual report on Form 20-F and the other reports and documents filed by us with the SEC.

- As of December 31, 2022, we had never generated revenue from the therapeutic candidates within our Wholly Owned Pipeline, and we may never be operationally profitable.
- We may require substantial additional funding to achieve our business goals. If we are unable to obtain this funding when needed and on acceptable terms, we could be forced to delay, limit or terminate certain of our therapeutic development efforts. Certain of our Founded Entities will similarly require substantial additional funding to achieve their business goals.
- Our ability to realize value from our Founded Entities may be impacted if we reduce our ownership or otherwise cede control to other investors through contractual agreements or otherwise.
- We have limited information about and limited control or influence over our Non-Controlled Founded Entities.
- The therapeutic candidates within our Wholly Owned Pipeline and most of our Founded Entities' therapeutic candidates are in preclinical or clinical development, which is a lengthy and expensive process with uncertain outcomes and the potential for substantial delays. We cannot give any assurance that any of our and our Founded Entities' therapeutic candidates will receive regulatory clearance, authorization or approval, which is necessary before they can be commercialized.
- Preclinical development is uncertain. Our preclinical programs may experience delays or may never advance to clinical trials, which would adversely affect our ability to obtain regulatory clearance, authorization or approvals or commercialize these programs on a timely basis or at all, which would have an adverse effect on our business.
- Clinical trials of our or our Founded Entities' therapeutic candidates may be delayed, and certain programs may never advance in the clinic or may be more costly to conduct than we anticipate, any of which can affect our ability to fund our company and would have a material adverse impact on our platform or our business.
- If we encounter difficulties enrolling patients in clinical trials, our clinical development activities could be delayed or otherwise adversely affected.
- Use of the therapeutic candidates within our Wholly Owned Pipeline or the therapeutic candidates being developed by our Founded Entities could be associated with side effects, AEs or other properties or safety risks, which could delay or halt their clinical development, prevent their regulatory clearance, authorization or approval, cause us to suspend or discontinue clinical trials, abandon a therapeutic candidate, limit their commercial potential, if cleared, authorized or approved, or result in other significant negative consequences that could severely harm our business, prospects, operating results and financial condition.
- Our clinical trials may fail to demonstrate substantial evidence of the safety and effectiveness of therapeutic candidates that we may identify and pursue for their intended uses, which would prevent, delay or limit the scope of regulatory clearance, certification, authorization or approval and potential commercialization.
- Even if we complete the necessary preclinical studies and clinical trials, the marketing approval and certification process is expensive, time-consuming and uncertain and may prevent us from obtaining clearance, certification, authorization or approvals for the potential commercialization of therapeutic candidates.
- If we are unable to obtain regulatory clearance, certification, authorization or approval in one or more jurisdictions for any therapeutic candidates that we may identify and develop, our business could be substantially harmed.
- Certain of the therapeutic candidates being developed by us or our Founded Entities are novel, complex and difficult to manufacture. We could experience manufacturing problems that result in delays in our development or commercialization programs or otherwise harm our business.
- If, in the future, we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market any therapeutic candidates we may develop, we may not be successful in commercializing those therapeutic candidates if and when they are approved.
- If we fail to comply with healthcare laws, we could face substantial penalties and our business, operations and financial conditions could be adversely affected.
- We face significant competition in an environment of rapid technological and scientific change, and there is a possibility that our competitors may achieve regulatory approval before us or develop therapies that are safer, more advanced or more effective than ours, which may negatively impact our ability to successfully market or commercialize any therapeutic candidates we may develop and ultimately harm our financial condition.
- We are currently party to and may seek to enter into additional collaborations, licenses and other similar arrangements and may not be successful in maintaining existing arrangements or entering into new ones, and even if we are, we may not realize the benefits of such relationships.
- We rely on third parties to assist in conducting our clinical trials and some aspects of our research and preclinical testing, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials, research, or testing.
- If we or our Founded Entities are unable to obtain and maintain sufficient intellectual property protection for our or our Founded Entities' existing therapeutic candidates or any other therapeutic candidates that we or they may identify, or if the scope of the intellectual property protection we or they currently have or obtain in the future is not sufficiently broad, our competitors could develop and commercialize therapeutic candidates similar or identical to ours, and our ability to successfully commercialize our existing therapeutic candidates and any other therapeutic candidates that we or they may pursue may be impaired.
- We may not be able to protect our intellectual property rights throughout the world.
- Our or our Founded Entities' proprietary rights may not adequately protect our technologies and therapeutic candidates, and do not necessarily address all potential threats to our competitive advantage.
- The failure to maintain our licenses and realize their benefits may harm our business.
- If we or our Founded Entities fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or these agreements are terminated or we or our Founded Entities otherwise experience disruptions to our business relationships with our licensors, we could lose intellectual property rights that are important to our business.

- Patent terms may be inadequate to protect our competitive position on therapeutic candidates for an adequate amount of time.
- Issued patents covering our Wholly Owned Programs or our Founded Entities' therapeutic candidates could be found invalid or unenforceable if challenged in courts or patent offices.
- If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed.
- We and our Founded Entities may be subject to claims challenging the inventorship of our patents and other intellectual property.
- The COVID-19 pandemic has impacted, and may in the future impact, our business, including our clinical trials and preclinical studies, and may materially and adversely affect our business in the future.
- Failures in one or more of our programs could adversely impact other programs and have a material adverse impact on our business, results of operations and ability to fund our business.
- Our business is highly dependent on the clinical advancement of our programs and our success in identifying potential therapeutic candidates . Delay or failure to advance our programs could adversely impact our business.
- Our future success depends on our ability to retain key employees, directors, consultants and advisors and to attract, retain and motivate qualified personnel.
- The market price of our ADSs has been and will likely continue to be highly volatile, and you could lose all or part of your investment.
- Holders of ADSs are not treated as holders of our ordinary shares.
- As a foreign private issuer, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from Nasdaq corporate governance listing standards. These practices may afford less protection to shareholders than they would enjoy if we complied fully with corporate governance listing standards.
- If we are unable to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, shareholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our ADSs.

EXPLANATORY NOTE

Pursuant to Rule 12b-23(a) of the Securities Exchange Act of 1934, as amended, the information for the 2022 Form 20-F of PureTech Health plc (the "Company") set out below is being incorporated by reference from PureTech's "Annual Report and Accounts 2022", portions of which are included as exhibit 15.1 to this annual report on Form 20-F. Only the information set out below with specific reference to items and pages of PureTech's "Annual Report and Accounts 2022" is deemed to be filed as part of this annual report on Form 20-F. Other information contained within PureTech's "Annual Report and Accounts 2022" that is not specified, including graphs and tabular data, is not included in this annual report on Form 20-F and is not deemed to be filed as part of this annual report on Form 20-F. Photographs are also not included. References herein to PureTech's websites are textual references only and information on or accessible through such websites does not form part of and is not incorporated into this annual report on Form 20-F.

References below to major headings include all information under such major headings, including subheadings, unless such reference is a reference to a subheading, in which case such reference includes only the information contained under such subheading. Unless the context otherwise requires, "PureTech" and "PureTech Health" refer to the Company, which is comprised of PureTech and its Founded Entities (together, the "Group"). "Founded Entities" are comprised of "Controlled Founded Entities" and "Non-Controlled Founded Entities." References in this annual report on Form 20-F to "Controlled Founded Entities" refer to Follica, Incorporated, Entrega, Inc. and Vedanta Biosciences, Inc., for all periods prior to May 25, 2022, Sonde Health Inc., and for all periods prior to June 10, 2021, Alivio Therapeutics, Inc. References to our "Non-Controlled Founded Entities" refer to Akili Interactive Labs, Inc., Karuna Therapeutics, Inc., VorBio, Inc. and Gelesis, Inc., for all periods following May 25, 2022, Sonde Health, Inc., and for all periods prior to December 18, 2019, resTORbio, Inc. PureTech formed each of its Founded Entities and has been involved in development efforts in varying degrees. In the case of each of the Company's Controlled Founded Entities, the Company continues to maintain majority voting control. With respect to Non-Controlled Founded Entities, the Company may benefit from appreciation in its investment as a shareholder of such companies.

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS.

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

A. [Reserved]

B. CAPITALIZATION AND INDEBTEDNESS

Not applicable.

C. REASONS FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

D. RISK FACTORS

The information (including tabular data) set forth or referenced under the heading “Risk Factor Annex" on pages 175 to 211 of PureTech’s “Annual Report and Accounts 2022” included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

ITEM 4. INFORMATION ON THE COMPANY

A. HISTORY AND DEVELOPMENT OF THE COMPANY

The information set forth under the heading "History and Development of the Company" on page 174 of PureTech's "Annual Report and Accounts 2022" included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

For a description of our principal capital expenditures and divestitures for the three years ended December 31, 2022 and for those currently in progress, see Item 5. "Operating and Financial Review and Prospects—A. Operating Results".

The United States Securities and Exchange Commission (the "SEC") maintains an internet website that contains reports, proxy and information statements, and other information regarding issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov. We also maintain an Internet website at www.puretechhealth.com. The information contained on, or that may be accessed through, our website is not part of, and is not incorporated into, annual report on Form 20-F.

B. BUSINESS OVERVIEW

The information (including graphs and tabular data) set forth under the following headings is incorporated by reference herein: "Highlights of the Year—2022" (for the years of 2020, 2021 and 2022) on page 1, "Components of Our Value" on pages 6to 7, "PureTech's Wholly Owned Programs" on pages 8 to 11, "ESG Report—Chapter 1: Patients-Ensuring Drug Efficacy and Safety" on page 22, "Risk Management—Risks related to regulatory approval" on page 45 and "Risk Management—Risks related to intellectual property protection" on page 46, "Financial Review—Revenue" on page 54, in each case of PureTech's "Annual Report and Accounts 2022" included as exhibit 15.1 to this annual report on Form 20-F, "Consolidated Statements of Comprehensive Income/(Loss)," "Notes to the Consolidated Financial Statements—Note 3.—Revenue" and "Notes to the Consolidated Financial Statements—Note 4.—Segment information," in each case of our audited consolidated financial statements included elsewhere in this annual report on Form 20-F. Seasonality does not materially impact the Company's main business.

Competition

The biotechnology and pharmaceutical industries utilize rapidly advancing technologies and are characterized by intense competition. There is also a strong emphasis on intellectual property and proprietary products. Our pipeline builds on validated biology of known therapeutics while applying unique inventive steps that improve the clinical pharmacology. We further de-risk programs with key experiments at an early stage to validate the underlying value proposition. We believe that our technology, drug discovery and development expertise and capabilities enable such strong pipeline creation and provide us with a competitive advantage. However, we will continue to face competition from different sources including major pharmaceutical companies, biotechnology companies, academic institutions, government agencies, and public and private research institutions. In addition, there are many companies that have approved therapeutics for some of our target indications. For any products that we eventually commercialize, we will not only compete with existing therapies but also compete with new therapies that may become available in the future.

In addition to the competition we will face from the parties described above, we face competition for certain of the product candidates we are developing internally.

LYT-100

In the field of IPF, there are two approved drugs, pirfenidone (Esbriet), marketed by Roche, and nintedanib (Ofev), marketed by Boehringer Ingelheim. These drugs have unfavorable tolerability profiles, leading to sustained unmet need for novel therapies. In May 2022, a generic version of pirfenidone was approved in the US. Other potential competitive product candidates in various stages of development include, but are not limited to: Fibrogen's pamrevlumab in Phase 3 clinical trials, United Therapeutics' treprostinil in Phase 3 clinical trials, Boehringer Ingelheim's BI1015550 in Phase 3 development, Avalyn's AP01 which is expected to enter a Phase 3 trial , Pliant Therapeutics' PLN-74809 in Phase 2 clinical development, Horizon Therapeutics' HZN-825 in Phase 2 clinical development, BMS' BMS-986278 in Phase 2 clinical development, and Galecto's GB0139 in Phase 2 clinical development.

LYT-200

We are aware of one current drug product candidate targeting galectin-9, FibroGen's FG-3165, which FibroGen has previously disclosed, is expected to enter clinical development in the second half of 2023. Additionally, if we are successful in developing LYT-200 as an immuno-oncology (IO) treatment we would expect to compete with currently approved IO therapies and those that may be developed in the future. Current marketed IO products include CTLA-4, such as BMS' Yervoy, and PD-1/PD-L1, such as BMS' Opdivo, Merck's Keytruda and Genentech's Tecentriq, and T cell engager immunotherapies, such as Amgen's Blincyto. In addition, there are other academic groups and/or companies that may be involved in pre-clinical research centered around galectin-9 as a therapeutic target.

LYT-300

In the field of GABAA positive allosteric modulators, there are three approved drugs, allopregnanolone (Zulresso), marketed by Sage Therapeutics, ganaxolone (Ztalmy), marketed by Marinus Pharmaceuticals, and cenobamate (Xcopri), marketed by SK Life Science. Other potential competitive product candidates in various stages of development include, but are not limited to, Sage Therapeutics' SAGE-217 (zuranolone) which has completed a New Drug Application submission to the FDA, Cerevel's darigabat in Phase 2 clinical development, and Sage's SAGE-324 in Phase 2 clinical development.

LYT-310

In the field of cannabidiol agents, there is one FDA approved drug, Epidiolex, marketed by Jazz Pharmaceuticals (originally GW Pharmaceuticals). Other potential competitive product candidates in various stages of development include Zynerba Pharmaceuticals' ZyGel in Phase 3 clinical development, Cardiol Therapeutics' Cardiol Rx in Phase 2 clinical development, and Emerald Health Pharmaceuticals' EPH-101 in Phase 2 clinical development.

LYT-503/IMB-150

In the field of interstitial cystitis/bladder pain syndrome, there are a few FDA approved agents including JnJ's Elmiron, , and Mylan Pharmaceutical's Rimso-50. There are also numerous clinical trials ongoing for interstitial cystitis. If LYT-503 is successful in interstitial cystitis, we would expect to compete with currently approved therapies and those that may be developed in the future. Current interstitial cystitis products in development include, but are not limited to, Urigen Pharmaceutical's URG-101, Vaneltix Pharma's Alenura, and Seikagaku Corp's SI-722 all in Phase 2 clinical development.

Glyph Technology Platform

We are not aware of any direct competitors to our Glyph technology platform, but it may compete with new therapies that become available in the future to target the indications we are focused on.

Government Regulation

Government authorities in the United States, at the federal, state and local level, and in other countries and jurisdictions, including the European Union, or EU, extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, and import and export of drugs, biological products and medical devices. The processes for obtaining regulatory approvals in the United States and in foreign countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations, require the expenditure of substantial time and financial resources.

U.S. Regulation of Drugs and Biologics

In the United States, the FDA regulates drugs under the FDCA, and its implementing regulations, and biologics under the FDCA and the Public Health Service Act and its implementing regulations. FDA approval is required before any new unapproved drug or dosage form, including a new use of a previously approved drug, can be marketed in the United States. Drugs and biologics are also subject to other federal, state, and local statutes and regulations. The process required by the FDA before such product candidates may be marketed in the United States generally involves the following:

- completion of extensive preclinical laboratory tests and preclinical animal studies, all performed in accordance with applicable regulations, including Good Laboratory Practice, or GLP, regulations;
- submission to the FDA of an Investigational New Drug Application, or IND, which must become effective before human clinical studies may begin;
- approval by an independent institutional review board, or IRB, or ethics committee representing each clinical site before each clinical study may be initiated;
- performance of adequate and well-controlled human clinical studies in accordance with Good Clinical Practice, or GCP, requirements to establish the safety and efficacy, or with respect to biologics, the safety, purity and potency of the product candidate for each proposed indication;
- preparation of and submission to the FDA of a new drug application, or NDA, or biologics license application, or BLA, after completion of all pivotal clinical studies;
- potential review of the product application by an FDA advisory committee, where appropriate and if applicable;
- a determination by the FDA within 60 days of its receipt of an NDA or BLA to file the application for review;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facilities where the proposed product drug substance is produced to assess compliance with current Good Manufacturing Practices, or cGMP, and potential audits of selected clinical trial sites to ensure compliance with GCP; and
- FDA review and approval of an NDA or BLA prior to any commercial marketing or sale of the drug in the United States.

An IND is a request for authorization from the FDA to administer an investigational drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol or protocols for preclinical studies and clinical trials. The IND also includes results of animal and in vitro studies assessing the toxicology, pharmacokinetics, pharmacology and pharmacodynamics of the product, chemistry, manufacturing and controls, or CMC, information, and any available human data or literature to support the use of the investigational product. An IND must become effective before human clinical trials may begin. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day period, raises safety concerns or questions about the proposed clinical trial. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before the clinical trial can begin. Submission of an IND therefore may or may not result in FDA authorization to begin a clinical trial.

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCP, which includes the requirement that all research subjects provide their informed consent for their participation in any clinical study. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development and for any subsequent protocol amendments. While the IND is active, progress reports summarizing the results of the clinical trials and nonclinical studies performed since the last progress report, among other information, must be submitted at least annually to the FDA, and written IND safety reports must be submitted to the FDA and investigators for serious and unexpected suspected adverse events, findings from other studies suggesting a significant risk to humans exposed to the drug, findings from animal or in vitro testing suggesting a significant risk to humans exposed to the drug, and any clinically important increased rate of a serious suspected adverse reaction compared to that listed in the protocol or investigator brochure.

Furthermore, an independent IRB for each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial and its informed consent form before the clinical trial begins at that site, and must monitor the study until completed. Regulatory authorities, the IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk or that the trial is unlikely to meet its stated objectives. Some studies also include oversight by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board, which provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study and may halt the clinical trial if it determines that

there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy. There are also requirements governing the reporting of ongoing preclinical studies and clinical trials and clinical study results to public registries.

The clinical investigation of a drug is generally divided into three phases. Although the phases are usually conducted sequentially, they may overlap or be combined.

- Phase 1. The investigational product is initially introduced into healthy human subjects or patients with the target disease or condition. These studies are generally designed to test the safety, dosage tolerance, absorption, metabolism and distribution of the investigational product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness.
- Phase 2. The investigational product is administered to a limited patient population with a specified disease or condition to evaluate the preliminary efficacy, optimal dosages and dosing schedule and to identify possible adverse side effects and safety risks.
- Phase 3. The investigational product is administered to an expanded patient population to further evaluate dosage, to provide statistically significant evidence of clinical efficacy and to further test for safety, generally at multiple geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational product and to provide an adequate basis for product approval.

In some cases, the FDA may condition approval of an NDA or BLA for a product candidate on the sponsor's agreement to conduct additional clinical studies after approval. In other cases, a sponsor may voluntarily conduct additional clinical studies after approval to gain more information about the drug. Such post-approval studies are often referred to as Phase 4 clinical studies. Concurrent with clinical trials, companies may complete additional animal studies and develop additional information about the biological characteristics of the product candidate, and must finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, must develop methods for testing the identity, strength, quality and purity of the final product, or for biologics, the safety, purity and potency.

Special Protocol Assessment

The special protocol assessment, or SPA, process is designed to facilitate the FDA's review and approval of certain drugs and biologics by allowing the FDA to evaluate the proposed design of certain preclinical studies and clinical trials, including among others, trials that are intended to form the primary basis for determining a product candidate's efficacy. Upon specific request by a clinical trial sponsor, the FDA aims to evaluate the protocol and respond to a sponsor's questions regarding, among other things, entry, criteria, dose selection, endpoints, trial conduct and data analyses, within 45 days of receipt of the request. The FDA ultimately assesses whether the protocol design and planned analysis of the trial are acceptable to support regulatory approval of the product candidate with respect to effectiveness of the indication studied. All agreements and disagreements between the FDA and the sponsor regarding an SPA must be clearly documented in an SPA letter or the minutes of a meeting between the sponsor and the FDA.

Even if the FDA agrees to the design, execution and analyses proposed in protocols reviewed under the SPA process, the FDA may rescind or alter its agreement where the FDA determines that a substantial scientific issue essential to determining the safety or efficacy of the product candidate has been identified after the trial has begun, which can include, but is not limited to, the following circumstances:

- identification of data that would call into question the clinical relevance of previously agreed-upon efficacy endpoints;
- identification of safety concerns related to the product or its pharmacological class;
- paradigm shifts in disease diagnosis or management recognized by the scientific community and the FDA; or
- the relevant data, assumptions, or information provided by the sponsor in the SPA submission are found to be false statements or misstatements, or are found to omit relevant facts, such that the clinical relevance of critical components of trial design is called into question, or appropriate safety monitoring and human subject protection are affected.

A documented SPA may be modified, and such modification will be deemed binding on the FDA review division, except under the circumstances described above, if the FDA and the sponsor agree in writing to modify the protocol and such modification is intended to improve the study. If the sponsor fails to follow the protocol that was agreed upon with FDA consistent with the SPA agreement, or makes substantive changes in the protocol without the FDA's agreement, then FDA will consider the results from the study as a BLA or NDA review issue. The FDA will not be bound by an SPA agreement where the sponsor fails to conduct the trial in accordance with the agreed SPA.

NDA and BLA Review Process

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development, nonclinical studies and clinical trials are submitted to the FDA as part of an NDA or BLA requesting approval to market the product for one or more indications. The NDA or BLA must include all relevant data available from pertinent preclinical studies and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's CMC and proposed labeling, among other things. Data can come from company-sponsored clinical studies intended to test the safety and effectiveness of the product, or from a number of alternative sources, including studies initiated and sponsored by investigators. The submission of an NDA or BLA requires payment of a substantial application user fee to the FDA, unless a waiver or exemption applies.

In addition, under the Pediatric Research Equity Act, or PREA, an NDA or BLA or supplement to an NDA or BLA must contain data to assess the safety and effectiveness of the biological product candidate for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA requires that a sponsor who is planning to submit a marketing application for a drug or biological product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial pediatric study plan within sixty days after an end-of-Phase 2 meeting or as may be agreed between the sponsor and FDA. Unless otherwise required by regulation, PREA does not apply to any product candidate for an indication for which orphan designation has been granted.

Within 60 days following submission of the application, the FDA reviews the submitted BLA or NDA to determine if the application is substantially complete before the FDA accepts it for filing. The FDA may refuse to file any NDA or BLA that it deems incomplete or not properly reviewable at the time of submission and may request additional information. In this event, the NDA or BLA must be resubmitted with the additional information. Once an NDA or BLA has been accepted for filing, the FDA's goal is to review applications for original biologics or new-molecular-entity drugs within ten months after the filing date, or, if the application qualifies for priority review, six months after the filing date. In both standard and priority reviews, the review process may also be extended by FDA requests for additional information or clarification.

The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is sufficient to assure and preserve the product's identity, strength, quality and purity. The FDA reviews a BLA to determine, among other things, whether a product is safe, pure and potent and the facility in which it is manufactured, processed, packed or held meets standards designed to assure the product's continued safety, purity and potency. When reviewing an NDA or BLA, the FDA may convene an advisory committee to provide clinical insight on application review questions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Before approving an NDA or BLA, the FDA will typically inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA or BLA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP.

After the FDA evaluates the NDA or BLA and conducts inspections of manufacturing facilities where the investigational product and/or its drug substance will be produced, the FDA may issue an approval letter or a Complete Response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A Complete Response letter will describe all of the deficiencies that the FDA has identified in the NDA or BLA, except that where the FDA determines that the data supporting the application are inadequate to support approval, the FDA may issue the Complete Response letter without first conducting required inspections, testing submitted product lots and/or reviewing proposed labeling. In issuing the Complete Response letter, the FDA may recommend actions that the applicant might take to place the NDA or BLA in condition for approval, including requests for additional clinical studies, or other information supporting the application. Notwithstanding the submission of additional information or data, the FDA may delay or refuse approval of an NDA or BLA if applicable regulatory criteria are not satisfied.

If the FDA approves a BLA or NDA, such approval will be granted for particular indications and may entail limitations on the indicated uses for which such product may be marketed. For example, the FDA may approve the NDA or BLA with a Risk Evaluation and Mitigation Strategy, or REMS, to ensure the benefits of the product outweigh its risks. A REMS is a safety strategy to manage a known or potential serious risk associated with a product and to enable patients to have continued access to such medicines by managing their safe use, and could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling or the development of adequate controls and specifications. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing requirements is not maintained or if problems occur after the product reaches the marketplace. The FDA may require one or more post-market studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization, and may limit further marketing of the product based on the results of these post-marketing studies.

Regulation of Combination Products in the United States

Certain therapeutic products are comprised of multiple components, such as drug or biologic components and device components, that would normally be subject to different regulatory frameworks by the FDA and frequently regulated by different centers at the FDA. These products are known as combination products. Under the FDCA, the FDA is charged with assigning a center with primary jurisdiction, or a lead center, for review of a combination product. The determination of which center will be the lead center is based on the "primary mode of action" of the combination product. Thus, if the primary mode of action of a drug-device combination product is attributable to the drug product, the FDA center responsible for premarket review of the drug product would have primary jurisdiction for the combination product. The FDA has also established the Office of Combination Products to address issues surrounding combination products and provide more certainty to the regulatory review process. That office serves as a focal point for combination product issues for agency reviewers and industry. It is also responsible for developing guidance and regulations to clarify the regulation of combination products, and for assignment of the FDA center that has primary jurisdiction for review of combination products where the jurisdiction is unclear or in dispute. A combination product with a primary mode of action attributable to the drug or biologic component generally would be reviewed and approved pursuant to the drug approval processes set forth in the FDCA. In reviewing the NDA or BLA for such a product, however, FDA reviewers would consult with their counterparts in the FDA's Center for Devices and Radiological Health to ensure that the device component of the combination product met applicable requirements regarding safety, effectiveness, durability and performance. In addition, under FDA regulations, combination products are subject to cGMP requirements applicable to both drugs and devices, including the Quality System Regulation, or QSR, applicable to medical devices.

Expedited Development and Review Programs for Drugs and Biologics

The FDA offers a number of expedited development and review programs for qualifying product candidates. The fast track program is intended to expedite or facilitate the process for reviewing product candidates that meet certain criteria. Specifically, product candidates are eligible for fast track designation if they are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. Fast track designation applies to the combination of the product candidate and the specific indication for which it is being studied. The sponsor of a fast track product candidate has opportunities for more frequent interactions with the review team during product development and, once an NDA or BLA is submitted, the application may be eligible for priority review. A fast track product candidate may also be eligible for rolling review, where the FDA may consider for review sections of the NDA or BLA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the

sections of the NDA or BLA, the FDA agrees to accept sections of the NDA or BLA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA or BLA.

A product candidate intended to treat a serious or life-threatening disease or condition may also be eligible for breakthrough therapy designation to expedite its development and review. A product candidate can receive breakthrough therapy designation if preliminary clinical evidence indicates that the product candidate, alone or in combination with one or more other drugs or biologics, may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The designation includes all of the fast track program features, as well as more intensive FDA interaction and guidance beginning as early as Phase 1 and an organizational commitment to expedite the development and review of the product candidate, including involvement of senior managers.

Any marketing application for a drug or biologic submitted to the FDA for approval, including a product candidate with a fast track designation and/or breakthrough therapy designation, may be eligible for other types of FDA programs intended to expedite the FDA review and approval process, such as priority review and accelerated approval. An NDA or BLA is eligible for priority review if the product candidate has the potential to provide a significant improvement in the treatment, diagnosis or prevention of a serious disease or condition. For new-molecular-entity NDAs and original BLAs, priority review designation means the FDA's goal is to take action on the marketing application within six months of the 60-day filing date (as compared to ten months under standard review).

Additionally, product candidates studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions may receive accelerated approval upon a determination that the product candidate has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of accelerated approval, the FDA will generally require the sponsor to perform adequate and well-controlled confirmatory clinical studies to verify and describe the anticipated effect on irreversible morbidity or mortality or other clinical benefit. Products receiving accelerated approval may be subject to expedited withdrawal procedures if the sponsor fails to conduct the required confirmatory studies in a timely manner or if such studies fail to verify the predicted clinical benefit. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product.

Fast track designation, breakthrough therapy designation, priority review, and accelerated approval do not change the standards for approval but may expedite the development or approval process. Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened. We may explore some of these opportunities for our product candidates as appropriate.

Rare Pediatric Disease Priority Review Voucher Program

In 2012, the U.S. Congress authorized the FDA to award priority review vouchers to Sponsors of certain rare pediatric disease product applications. This program is designed to encourage development of new drug and biological products for prevention and treatment of certain rare pediatric diseases. Specifically, under this program, a sponsor who receives an approval for a drug or biologic for a “rare pediatric disease” may qualify for a voucher that can be redeemed to receive priority review of a subsequent marketing application for a different product. The Sponsor of a rare pediatric disease drug product receiving a priority review voucher may transfer (including by sale) the voucher to another sponsor. The voucher may be further transferred any number of times before the voucher is used, as long as the Sponsor making the transfer has not yet submitted the application. The FDA may also revoke any priority review voucher if the rare pediatric disease drug for which the voucher was awarded is not marketed in the U.S. within one year following the date of approval.

For purposes of this program, a “rare pediatric disease” is a (a) serious or life-threatening disease in which the serious or life-threatening manifestations primarily affect individuals aged from birth to 18 years, including age groups often called neonates, infants, children, and adolescents; and (b) rare diseases or conditions within the meaning of the Orphan Drug Act. On December 27, 2020, the Rare Pediatric Disease Priority Review Voucher Program was extended. Under the current statutory sunset provisions, after September 30, 2024, FDA may only award a voucher for an approved rare pediatric disease product application if the Sponsor has rare pediatric disease designation for the drug, and that designation was granted by September 30, 2024. After September 30, 2026, FDA may not award any Rare Pediatric Disease Priority Review Voucher.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, which is a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States for which there is no reasonable expectation that the cost of developing and making available in the United States a drug or biologic for this type of disease or condition will be recovered from sales in the United States for that drug or biologic. Orphan drug designation must be requested before submitting an NDA or BLA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. The orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review or approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan drug exclusive approval (or exclusivity), which means that the FDA may not approve any other applications, including a full NDA or BLA, to market the same drug or biologic for the same disease or condition for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or if the FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug or biologic was designated. Orphan drug exclusivity does not prevent the FDA from approving a different drug or

biologic for the same disease or condition, or the same drug or biologic for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the NDA or BLA application user fee.

A designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the disease or condition for which it received orphan designation. In addition, exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Post-Approval Requirements for Drugs and Biologics

Any products manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to record-keeping, reporting of adverse experiences, periodic reporting, product sampling and distribution, and advertising and promotion of the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are continuing user fee requirements, under which the FDA assesses an annual program fee for each product identified in an approved NDA or BLA. Drug and biologic manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMPs, which impose certain procedural and documentation requirements upon NDA or BLA holders and any third-party manufacturers. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMPs and impose reporting requirements upon us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMPs and other aspects of regulatory compliance.

The FDA may withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of a product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical studies;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of existing product approvals;
- product seizure or detention, or refusal of the FDA to permit the import or export of products;
- consent decrees, corporate integrity agreements, debarment or exclusion from federal healthcare programs;
- mandated modification of promotional materials and labeling and the issuance of corrective information;
- the issuance of safety alerts, Dear Healthcare Provider letters, press releases and other communications containing warnings or other safety information about the product; or
- injunctions or the imposition of civil or criminal penalties.

The FDA closely regulates the marketing, labeling, advertising and promotion of biologics. A company can make only those claims relating to safety and efficacy, purity and potency that are approved by the FDA and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict manufacturer's communications on the subject of off-label use of their products.

Hatch-Waxman Act and Drug Product Exclusivity

Section 505 of the FDCA describes three types of marketing applications that may be submitted to the FDA to request marketing authorization for a new drug. A Section 505(b)(1) NDA is an application that contains full reports of investigations of safety and efficacy. A 505(b)(2) NDA is an application that contains full reports of investigations of safety and efficacy but where at least some of the information required for approval comes from investigations that were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted. This regulatory pathway enables the applicant to rely, in part, on the FDA's prior findings of safety and efficacy for an existing product, or published literature, in support of its application. Section 505(j) of the FDCA establishes an abbreviated approval process for a generic version of approved drug products through the submission of an Abbreviated New Drug Application, or ANDA. An ANDA provides for marketing of a generic drug product that has the same active ingredients, dosage form, strength, route of administration, labeling, performance characteristics and intended use, among other things, to a previously approved product. ANDAs are termed "abbreviated" because they are generally not required to include preclinical (animal) and clinical (human) data to establish safety and efficacy. Instead, generic applicants must scientifically demonstrate that their product is bioequivalent to, or performs in the same manner as, the innovator drug through in vitro, in vivo, or other testing. The generic version must deliver the same amount of active ingredients into a subject's bloodstream in the same amount of time as the innovator drug and can often be substituted by pharmacists under prescriptions written for the reference listed drug. In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent with claims that cover the applicant's drug or a method of using the drug. Upon approval of a drug, each of the patents listed in the application for the drug is then published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Drugs listed in the Orange Book can, in turn, be cited by potential competitors in support of approval of an ANDA or 505(b)(2) NDA.

Upon submission of an ANDA or a 505(b)(2) NDA, an applicant must certify to the FDA that: (1) no patent information on the drug product that is the subject of the application has been submitted to the FDA; (2) such patent has expired; (3) the date on which such patent expires; or (4) such patent is invalid or will not be infringed upon by the manufacture, use or sale of the drug product for which the application is submitted. Generally, the ANDA or 505(b)(2) NDA cannot be approved until all listed patents have expired, except where the ANDA or 505(b)(2) NDA applicant challenges a listed patent through the last type of certification, also known as a paragraph IV certification. If the applicant does not challenge the listed patents or indicates that it is not seeking approval of a patented method of use, the ANDA or 505(b)(2) NDA application will not be approved until all of the listed patents claiming the referenced product have expired. If the ANDA or 505(b)(2) NDA applicant has provided a Paragraph IV certification to the FDA, the applicant must send notice of the Paragraph IV certification to the NDA and patent holders once the application has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the paragraph IV certification. If the paragraph IV certification is challenged by an NDA holder or the patent owner(s) asserts a patent challenge to the paragraph IV certification, the FDA may not approve that application until the earlier of 30 months from the receipt of the notice of the paragraph IV certification, the expiration of the patent, when the infringement case concerning each such patent was favorably decided in the applicant's favor or settled, or such shorter or longer period as may be ordered by a court. This prohibition is generally referred to as the 30-month stay. In instances where an ANDA or 505(b)(2) NDA applicant files a paragraph IV certification, the NDA holder or patent owner(s) regularly take action to trigger the 30-month stay, recognizing that the related patent litigation may take many months or years to resolve. Thus, approval of an ANDA or 505(b)(2) NDA could be delayed for a significant period of time depending on the patent certification the applicant makes and the reference drug sponsor's decision to initiate patent litigation.

The Hatch-Waxman Act also establishes periods of regulatory exclusivity for certain approved drug products, during which the FDA cannot approve (or in some cases accept) an ANDA or 505(b)(2) application that relies on the branded reference drug. For example, the holder of an NDA, including a 505(b)(2) NDA, may obtain five years of non-patent data exclusivity upon approval of a new drug containing new chemical entities that have not been previously approved by the FDA. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the therapeutic activity of the drug substance. During the exclusivity period, the FDA may not accept for review an ANDA or a 505(b)(2) NDA submitted by another company that contains the previously approved active moiety. However, an ANDA or 505(b)(2) NDA may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The Hatch-Waxman Act also provides three years of non-patent marketing exclusivity to the holder of an NDA (including a 505(b)(2) NDA) for a particular condition of approval, or change to a marketed product, such as a new formulation for a previously approved product, if one or more new clinical studies (other than bioavailability or bioequivalence studies) was essential to the approval of the application and was conducted/sponsored by the applicant. This three-year exclusivity period protects against FDA approval of ANDAs and 505(b)(2) NDAs for the condition of the new drug's approval. As a general matter, the three year exclusivity does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for generic versions of the original, unmodified drug product. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA; however, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and efficacy.

Biosimilars and Reference Product Exclusivity

The Biologics Price Competition and Innovation Act of 2009, or BPCIA, created an abbreviated approval pathway for biological products that are highly similar, or “biosimilar,” to or interchangeable with an FDA-approved reference biological product. Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, is generally shown through analytical studies, animal studies, and a clinical study or studies. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product in any given patient and, for products that are administered multiple times to an individual, the biologic and the reference biologic may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic. A product shown to be biosimilar or interchangeable with an FDA-approved reference biological product may rely in part on the FDA's previous determination of safety and effectiveness for the reference product for approval, which can potentially reduce the cost and time required to obtain approval to market the product.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing that applicant’s own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of its product. The BPCIA also created certain exclusivity periods for biosimilars approved as interchangeable products. At this juncture, it is unclear whether products deemed “interchangeable” by the FDA will, in fact, be readily substituted by pharmacies, which are governed by state pharmacy law.

A biological product can also obtain pediatric market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued “Written Request” for such a study.

U.S. Drug Enforcement Administration Regulation

We are developing certain product candidates that utilize, or may utilize controlled substances regulated by the U.S. Drug Enforcement Administration, DEA. The Controlled Substances Act of 1970, or CSA, establishes registration, security, recordkeeping, reporting, storage, distribution and other requirements administered by the DEA. The DEA is concerned with the control of handlers of controlled substances, and with the equipment and raw materials used in their manufacture and packaging, in order to prevent loss and diversion into illicit channels of commerce. The DEA regulates controlled substances as Schedule I, II, III, IV or V substances. Schedule I substances by definition have no established medicinal use, and may not be marketed or sold in the United States. A pharmaceutical product may be listed as Schedule II, III, IV or V, with Schedule II

substances considered to present the highest risk of abuse and Schedule V substances the lowest relative risk of abuse among such substances.

Annual registration is required for any facility that manufactures, distributes, dispenses, imports or exports any controlled substance. The registration is specific to the particular location, activity and controlled substance schedule. For example, separate registrations are needed for import and manufacturing, and each registration will specify which schedules of controlled substances are authorized. The DEA typically inspects a facility to review its security measures prior to issuing a registration. Security requirements vary by controlled substance schedule, with the most stringent requirements applying to Schedule I and Schedule II substances. Required security measures include background checks on employees and physical control of inventory through measures such as cages, surveillance cameras and inventory reconciliations. Records must be maintained for the handling of all controlled substances, and periodic reports made to the DEA. Reports must also be made for thefts or losses of any controlled substance, and authorization must be obtained to destroy any controlled substance. In addition, special authorization and notification requirements apply to imports and exports.

To meet its responsibilities, the DEA conducts periodic inspections of registered establishments that handle controlled substances. Failure to maintain compliance with applicable requirements, particularly as manifested in loss or diversion, can result in enforcement action. The DEA may seek civil penalties, refuse to renew necessary registrations, or initiate proceedings to revoke those registrations. In certain circumstances, violations could eventuate in criminal proceedings. Individual states also regulate controlled substances, and we and our contract manufacturers are also subject to state regulation on distribution of these products.

U.S. Regulation of Medical Devices

The FDA regulates the development, design, non-clinical and clinical research, manufacturing, safety, efficacy, labeling, packaging, storage, installation, servicing, recordkeeping, premarket clearance or approval, adverse event reporting, advertising, promotion, marketing and distribution, and import and export of medical devices to ensure that medical devices distributed domestically are safe and effective for their intended uses and otherwise meet the requirements of the FDCA.

U.S. Medical Device Classification:

Unless an exemption applies, each medical device commercially distributed in the United States requires either FDA clearance of a 510(k) premarket notification, or approval of a premarket approval, or PMA, application. Under the FDCA, medical devices are classified into one of three classes—Class I, Class II or Class III—depending on the degree of risk associated with each medical device and the extent of manufacturer and regulatory control needed to ensure its safety and effectiveness. Class I includes devices with the lowest risk to the patient and are those for which safety and effectiveness can be assured by adherence to the FDA's General Controls for medical devices, which include compliance with the applicable portions of the QSR, facility registration and product listing, reporting of adverse medical events, and truthful and non-misleading labeling, advertising, and promotional materials. Class II devices are subject to the FDA's General Controls, and special controls as deemed necessary by the FDA to ensure the safety and effectiveness of the device. These special controls can include performance standards, post-market surveillance, patient registries and FDA guidance documents.

While most Class I devices are exempt from the 510(k) premarket notification requirement, manufacturers of most Class II devices are required to submit to the FDA a premarket notification under Section 510(k) of the FDCA requesting permission to commercially distribute the device. The FDA's permission to commercially distribute a device subject to a 510(k) premarket notification is generally known as 510(k) clearance. Devices deemed by the FDA to pose the greatest risks, such as life-sustaining, life-supporting or some implantable devices, or devices that have a new intended use, or use advanced technology that is not substantially equivalent to that of a legally marketed device, are placed in Class III, requiring approval of a PMA. Some pre-amendment devices are unclassified, but are subject to FDA's premarket notification and clearance process in order to be commercially distributed.

510(k) Clearance Marketing Pathway

To obtain 510(k) clearance, a manufacturer must submit to the FDA a premarket notification demonstrating that the proposed device is "substantially equivalent" to a predicate device already on the market. A predicate device is a legally marketed device that is not subject to premarket approval, i.e., a device that was legally marketed prior to May 28, 1976 (pre-amendments device) and for which a PMA is not required, a device that has been reclassified from Class III to Class II or I, or a device that was found substantially equivalent through the 510(k) process. The FDA's 510(k) clearance process usually takes from three to twelve months, but may take longer. The FDA may require additional information, including clinical data, to make a determination regarding substantial equivalence.

If the FDA agrees that the device is substantially equivalent to a predicate device currently on the market, it will grant 510(k) clearance to commercially market the device. If the FDA determines that the device is "not substantially equivalent" to a previously cleared device, the device is automatically designated as a Class III device. The device sponsor must then fulfill more rigorous PMA requirements, or can request a risk-based classification determination for the device in accordance with the "de novo" process, which is a route to market for novel medical devices that are low to moderate risk and are not substantially equivalent to a predicate device.

After a device receives 510(k) clearance, any modification that could significantly affect its safety or effectiveness, or that would constitute a major change or modification in its intended use, will require a new 510(k) clearance or, depending on the modification, PMA approval or de novo reclassification. The FDA requires each manufacturer to determine whether the proposed change requires submission of a 510(k), de novo request or a PMA in the first instance, but the FDA can review any such decision and disagree with a manufacturer's determination. If the FDA disagrees with a manufacturer's determination, the FDA can require the manufacturer to cease marketing and/or request the recall of the modified device until 510(k) marketing clearance or PMA approval is obtained or a de novo request is granted. Also, in these circumstances, the manufacturer may be subject to significant regulatory fines or penalties.

PMA Approval Pathway

Class III devices require PMA approval before they can be marketed, although some pre-amendment Class III devices for which FDA has not yet required a PMA are cleared through the 510(k) process. The PMA process is more demanding than the 510(k) premarket notification process. In a PMA, the manufacturer must demonstrate that the device is safe and effective, and the PMA must be supported by extensive data, including data from pre-clinical studies and human clinical trials. The PMA must also contain a full description of the device and its components, a full description of the methods, facilities, and controls used for manufacturing, and proposed labeling. Following receipt of a PMA, the FDA determines whether the application is sufficiently complete to permit a substantive review. If FDA accepts the application for review, it has 180 days under the FDCA to complete its review of a PMA, although in practice, the FDA's review often takes significantly longer, and can take up to several years. An advisory panel of experts from outside the FDA may be convened to review and evaluate the application and provide recommendations to the FDA as to the approvability of the device. The FDA may or may not accept the panel's recommendation. In addition, the FDA will generally conduct a pre-approval inspection of the applicant or its third-party manufacturers' or suppliers' manufacturing facility or facilities to ensure compliance with the QSR.

The FDA will approve the new device for commercial distribution if it determines that the data and information in the PMA constitute valid scientific evidence and that there is reasonable assurance that the device is safe and effective for its intended use(s). The FDA may approve a PMA with post-approval conditions intended to ensure the safety and effectiveness of the device, or on some form of post-market surveillance when deemed necessary to protect the public health. or to provide additional safety and efficacy data for the device in a larger population or for a longer period of use. In such cases, the manufacturer might be required to follow certain patient groups for a number of years and to make periodic reports to the FDA on the clinical status of those patients. Failure to comply with the conditions of approval can result in material adverse enforcement action, including withdrawal of the approval.

Certain changes to an approved device, such as changes in manufacturing facilities, methods, or quality control procedures, or changes in the design performance specifications, which affect the safety or effectiveness of the device, require submission of a PMA supplement. PMA supplements often require submission of the same type of information as a PMA, except that the supplement is limited to information needed to support any changes from the device covered by the original PMA and may not require as extensive clinical data or the convening of an advisory panel.

De novo classification process

Medical device types that the FDA has not previously classified as Class I, II, or III are automatically classified into Class III regardless of the level of risk they pose. The Food and Drug Administration Modernization Act of 1997 established a route to market for low-to-moderate risk medical devices that are automatically placed into Class III due to the absence of a predicate device, called the "Request for Evaluation of Automatic Class III Designation," or the de novo classification procedure. This procedure allows a manufacturer whose novel device is automatically classified into Class III to request down-classification of its medical device into Class I or Class II on the basis that the device presents low or moderate risk, rather than requiring the submission and approval of a PMA application. The enactment of the Food and Drug Administration Safety and Innovation Act, or FDASIA, streamlined the de novo classification pathway by permitting manufacturers to request de novo classification directly without first submitting a 510(k) pre-market notification to the FDA and receiving a not-substantially-equivalent determination.

Under FDASIA, FDA is required to classify the device within 120 days following receipt of the de novo request, although the process may take significantly longer. If the manufacturer seeks reclassification into Class II, the manufacturer must include a draft proposal for special controls that are necessary to provide a reasonable assurance of the safety and effectiveness of the medical device. If FDA grants the de novo request, the device may be legally marketed in the United States. However, the FDA may reject the request if the FDA identifies a legally marketed predicate device that would be appropriate for a 510(k) notification, determines that the device is not low-to-moderate risk, or determines that general controls would be inadequate to control the risks and/or special controls cannot be developed. After a device receives de novo classification, any modification that could significantly affect its safety or efficacy, or that would constitute a major change or modification in its intended use, will require a new 510(k) clearance or, depending on the modification, another de novo request or even PMA approval.

Clinical Trials for Medical Devices

Clinical trials are almost always required to support a PMA or a de novo request, and are sometimes required to support 510(k) submissions. All clinical investigations of devices to determine safety and effectiveness must be conducted in accordance with the FDA's investigational device exemption, or IDE, regulations which govern investigational device labeling, prohibit promotion of the investigational device, and specify an array of recordkeeping, reporting and monitoring responsibilities of study sponsors and study investigators. If the device presents a "significant risk" to human health, as defined by the FDA, the FDA requires the device sponsor to submit an IDE application to the FDA, which must become effective prior to commencing human clinical trials. If the device under evaluation does not present a significant risk to human health, then the device sponsor is not required to submit an IDE application to the FDA before initiating human clinical trials, but must still comply with abbreviated IDE requirements when conducting such trials. A significant risk device is one that presents a potential for serious risk to the health, safety or welfare of a patient and either is implanted, used in supporting or sustaining human life, substantially important in diagnosing, curing, mitigating or treating disease or otherwise preventing impairment of human health, or otherwise presents a potential for serious risk to a subject. An IDE application must be supported by appropriate data, such as animal and laboratory test results, showing that it is safe to test the device in humans and that the testing protocol is scientifically sound. The IDE will automatically become effective 30 days after receipt by the FDA unless the FDA notifies the company that the investigation may not begin. If the FDA determines that there are deficiencies or other concerns with an IDE for which it requires modification, the FDA may permit a clinical trial to proceed under a conditional approval.

Regardless of the degree of risk presented by the medical device, clinical studies must be approved by, and conducted under the oversight of, an IRB for each clinical site. The IRB is responsible for the initial and continuing review of the IDE, and may pose additional requirements for the conduct of the study. If an IDE application is approved by the FDA and one or more IRBs, human clinical trials may begin at a specific number of investigational sites with a specific number of patients, as approved by

the FDA. An IDE supplement must be submitted to, and approved by, the FDA before a sponsor or investigator may make a change to the investigational plan that may affect its scientific soundness, study plan or the rights, safety or welfare of human subjects.

During a study, the sponsor is required to comply with the applicable FDA requirements, including, for example, trial monitoring, selecting clinical investigators and providing them with the investigational plan, ensuring IRB review, adverse event reporting, record keeping and prohibitions on the promotion of investigational devices or on making safety or effectiveness claims for them. The clinical investigators in the clinical study are also subject to FDA's regulations and must obtain patient informed consent, rigorously follow the investigational plan and study protocol, control the disposition of the investigational device, and comply with all reporting and recordkeeping requirements. Additionally, after a trial begins, we, the FDA or the IRB could suspend or terminate a clinical trial at any time for various reasons, including a belief that the risks to study subjects outweigh the anticipated benefits.

Post-market Regulation

After a device is cleared or approved for marketing, numerous and pervasive regulatory requirements continue to apply. These include:

- establishment registration and device listing with the FDA;
- QSR requirements, which require manufacturers, including third-party manufacturers, to follow stringent design, testing, control, documentation and other quality assurance procedures during all aspects of the design and manufacturing process;
- labeling regulations and FDA prohibitions against the promotion of investigational products, or the promotion of "off-label" uses of cleared or approved products;
- requirements related to promotional activities;
- clearance or approval of product modifications to cleared devices or devices authorized through the de novo classification process that could significantly affect safety or effectiveness, or that would constitute a major change in intended use of such devices, or approval of certain modifications to PMA-approved devices;
- medical device reporting regulations, which require that a manufacturer report to the FDA if a device it markets may have caused or contributed to a death or serious injury, or has malfunctioned and the device or a similar device that it markets would be likely to cause or contribute to a death or serious injury, if the malfunction were to recur;
- correction, removal and recall reporting regulations, which require that manufacturers report to the FDA field corrections and product recalls or removals if undertaken to reduce a risk to health posed by the device or to remedy a violation of the FDCA that may present a risk to health;
- the FDA's recall authority, whereby the agency can order device manufacturers to recall from the market a product that is in violation of governing laws and regulations; and
- post-market surveillance activities and regulations, which apply when deemed by the FDA to be necessary to protect the public health or to provide additional safety and effectiveness data for the device.

Manufacturing processes for medical devices are required to comply with the applicable portions of the QSR, which cover the methods and the facilities and controls for the design, manufacture, testing, production, processes, controls, quality assurance, labeling, packaging, distribution, installation and servicing of finished devices intended for human use. The QSR also requires, among other things, maintenance of a device master file, device history file, and complaint files. As a manufacturer, we are subject to periodic scheduled or unscheduled inspections by the FDA. Failure to maintain compliance with the QSR requirements could result in the shutdown of, or restrictions on, manufacturing operations and the recall or seizure of marketed products. The discovery of previously unknown problems with marketed medical devices, including unanticipated adverse events or adverse events of increasing severity or frequency, whether resulting from the use of the device within the scope of its clearance or off-label by a physician in the practice of medicine, could result in restrictions on the device, including the removal of the product from the market or voluntary or mandatory device recalls.

The FDA has broad regulatory compliance and enforcement powers. If the FDA determines that a manufacturer has failed to comply with applicable regulatory requirements, it can take a variety of compliance or enforcement actions, which may result in a variety of sanctions, including: warning letters, untitled letters, fines, injunctions, consent decrees and civil penalties; recalls, withdrawals, or administrative detention or product seizures; operating restrictions or partial suspension or total shutdown of production; refusing or delaying requests for 510(k) marketing clearance or PMA approvals of new products or modified products; withdrawing 510(k) clearances or PMA approvals that have already been granted; refusal to grant export approvals for; or criminal prosecution.

FDA Regulation of Companion Diagnostics

If safe and effective use of a drug or biologic depends on an in vitro diagnostic test, then the FDA generally will require approval or clearance of that diagnostic, known as a companion diagnostic, at the same time that the FDA approves the therapeutic product. In August 2014, the FDA issued final guidance clarifying the requirements that will apply to approval of therapeutic products and in vitro companion diagnostics. According to the guidance, if the FDA determines that a companion diagnostic device is essential to the safe and effective use of a novel therapeutic product or indication, FDA generally will not approve the therapeutic product or new therapeutic product indication if the companion diagnostic device is not approved or cleared for that indication. Approval or clearance of the companion diagnostic device will ensure that the device has been adequately evaluated and has adequate performance characteristics in the intended population.

Foreign Regulation

To market any product outside of the United States, we would need to comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of our products. The foreign regulatory approval process includes all of the risks associated with FDA approval set forth above, as well as additional country-specific regulation. Because biologically sourced raw materials are subject to unique contamination risks, their use may be restricted in some countries.

Whether or not we obtain FDA approval for a product, we must obtain approval of a product by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. Approval by one regulatory authority does not ensure approval by regulatory authorities in other jurisdictions. The approval process varies from country to country, can involve additional testing beyond that required by FDA, and may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing, promotion, and reimbursement vary greatly from country to country.

Regulation of medicinal products in the European Union

Non-clinical Studies and Clinical Trials

Similar to the United States, the various phases of preclinical and clinical research in the EU are subject to significant regulatory controls.

Non-clinical studies are performed to demonstrate the health or environmental safety of new chemical or biological substances. Non-clinical studies (pharmaco-toxicological) must be conducted in compliance with the principles of good laboratory practice, or GLP, as set forth in EU Directive 2004/10/EC (unless otherwise justified for certain particular medicinal products – e.g., radio-pharmaceutical precursors for radio-labelling purposes). In particular, non-clinical studies, both in vitro and in vivo, must be planned, performed, monitored, recorded, reported and archived in accordance with the GLP principles, which define a set of rules and criteria for a quality system for the organizational process and the conditions for non-clinical studies. These GLP standards reflect the Organization for Economic Co-operation and Development requirements.

Clinical trials of medicinal products in the EU must be conducted in accordance with EU and national regulations and the International Conference on Harmonization, or ICH, guidelines on Good Clinical Practices, or GCP, as well as the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki. If the sponsor of the clinical trial is not established within the EU, it must appoint an EU entity to act as its legal representative. The sponsor must take out a clinical trial insurance policy, and in most EU member states, the sponsor is liable to provide 'no fault' compensation to any study subject injured in the clinical trial.

The regulatory landscape related to clinical trials in the EU has been subject to recent changes. The EU Clinical Trials Regulation, or CTR, which was adopted in April 2014 and repeals the EU Clinical Trials Directive, became applicable on January 31, 2022. Unlike directives, the CTR is directly applicable in all EU member states without the need for member states to further implement it into national law. The CTR notably harmonizes the assessment and supervision processes for clinical trials throughout the EU via a Clinical Trials Information System, which contains a centralized EU portal and database.

While the Clinical Trials Directive required a separate clinical trial application, or CTA, to be submitted in each member state in which the clinical trial takes place, to both the competent national health authority and an independent ethics committee, much like the FDA and IRB respectively, the CTR introduces a centralized process and only requires the submission of a single application for multi-center trials. The CTR allows sponsors to make a single submission to both the competent authority and an ethics committee in each member state, leading to a single decision per member state. The CTA must include, among other things, a copy of the trial protocol and an investigational medicinal product dossier containing information about the manufacture and quality of the medicinal product under investigation. The assessment procedure of the CTA has been harmonized as well, including a joint assessment by all member states concerned, and a separate assessment by each member state with respect to specific requirements related to its own territory, including ethics rules. Each member state's decision is communicated to the sponsor via the centralized EU portal. Once the CTA is approved, clinical study development may proceed.

The CTR foresees a three-year transition period. The extent to which ongoing and new clinical trials will be governed by the CTR varies. Clinical trials for which an application was submitted (i) prior to January 31, 2022 under the Clinical Trials Directive, or (ii) between January 31, 2022 and January 31, 2023 and for which the sponsor has opted for the application of the EU Clinical Trials Directive remain governed by said Directive until January 31, 2025. After this date, all clinical trials (including those which are ongoing) will become subject to the provisions of the CTR.

Medicines used in clinical trials must be manufactured in accordance with Good Manufacturing Practice, or GMP. Other national and EU-wide regulatory requirements may also apply.

Marketing Authorization

In order to market our product candidates in the EU and many other foreign jurisdictions, we must obtain separate regulatory approvals. More concretely, in the EU, medicinal products can only be commercialized after obtaining a marketing authorization, or MA. To obtain regulatory approval of a product candidate under EU regulatory systems, we must submit a MA application, or MAA. The process for doing this depends, among other things, on the nature of the medicinal product. There are two main types of MA.

- "Centralized MAs" are issued by the European Commission through the centralized procedure, based on the opinion of the Committee for Medicinal Products for Human Use, or CHMP, of the European Medicines Agency, or EMA, and are valid throughout the entire territory of the EU. The centralized procedure is mandatory for certain types of products, such as (i) medicinal products derived from biotechnological processes, (ii) designated orphan medicinal products, (iii) advanced-therapy medicinal products (i.e. gene-therapy, somatic cell-therapy or tissue-engineered medicines) and (iv) medicinal products containing a new active substance indicated for the treatment of HIV/AIDS, cancer, neurodegenerative diseases, diabetes, or autoimmune diseases and other immune dysfunctions and viral diseases. The centralized procedure is optional for products containing a new active substance not yet authorized in the EU, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the EU. Under the centralized procedure the maximum timeframe for the evaluation of a MAA by the EMA is 210 days, excluding clock stops. In exceptional cases, the CHMP might perform an accelerated review of a MAA in no more than 150 days (not including clock stops)."National MAs" are issued by the competent authorities of the EU member states, only cover their respective territory, and are available for products not falling within the mandatory scope of the centralized procedure. Where a product has already been authorized for marketing in an EU member state, this national MA can be recognized in other member states through the mutual recognition procedure. If the product has not received a national MA in any member

state at the time of application, it can be approved simultaneously in various member states through the decentralized procedure. Under the decentralized procedure an identical dossier is submitted to the competent authorities of each of the member states in which the MA is sought, one of which is selected by the applicant as the reference member state, or RMS. The competent authority of the RMS prepares a draft assessment report, a draft summary of the product characteristics, or SmPC, and a draft of the labeling and package leaflet, which are sent to the other Member States (referred to as the concerned member states, or CMSs) for their approval. If the CMSs raise no objections, based on a potential serious risk to public health, to the assessment, SmPC, labeling, or packaging proposed by the RMS, the product is subsequently granted a national MA in all the member states (i.e., in the RMS and the CMSs).

Under the above described procedures, before granting the MA, the EMA or the competent authorities of the EU member states make an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy. MAs have an initial duration of five years. After these five years, the authorization may be renewed on the basis of a reevaluation of the risk-benefit balance.

Furthermore, MA may also be granted "under exceptional circumstances" when the applicant can show that it is unable to provide comprehensive data on the efficacy and safety under normal conditions of use even after the product has been authorized and subject to specific procedures being introduced. This may arise in particular when the intended indications are very rare and, in the present state of scientific knowledge, it is not possible to provide comprehensive information, or when generating data may be contrary to generally accepted ethical principles. This MA is reserved to medicinal products to be approved for severe diseases or unmet medical needs and the applicant does not hold the complete data set legally required for the grant of a MA. The applicant does not have to provide the missing data and will never have to. Although the MA "under exceptional circumstances" is granted definitively, the risk-benefit balance of the medicinal product is reviewed annually and the MA is withdrawn in case the risk-benefit ratio is no longer favorable.

Data and Marketing Exclusivity

In the EU, innovative medicinal products (including both small molecules and biological medicinal products) generally receive eight years of data exclusivity and an additional two years of market exclusivity upon MA. The data exclusivity period, if granted, prevents generic or biosimilar applicants from referencing the innovator's pre-clinical and clinical trial data contained in the dossier of the reference product when applying for a generic or biosimilar MA, for a period of eight years from the date on which the reference product was first authorized in the EU. During the additional two-year period of market exclusivity, a generic or biosimilar MA can be submitted, and the innovator's data may be referenced, but no generic or biosimilar product can be marketed until the expiration of the market exclusivity period. The overall ten-year period will be extended to a maximum of 11 years if, during the first eight years of those ten years, the MA holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are determined to bring a significant clinical benefit in comparison with currently approved therapies. However, there is no guarantee that a product will be considered by the EU's regulatory authorities to be a new chemical or biological entity, and products may not qualify for data exclusivity.

In the EU, there is a special regime for biosimilars, or biological medicinal products that are similar to a reference medicinal product but that do not meet the definition of a generic medicinal product, for example, because of differences in raw materials or manufacturing processes. For such products, the results of appropriate preclinical or clinical trials must be provided, and guidelines from the EMA detail the type of quantity of supplementary data to be provided for different types of biological product. There are no such guidelines for complex biological products, such as gene or cell therapy medicinal products, and so it is unlikely that biosimilars of those products will currently be approved in the EU. However, guidance from the EMA states that they will be considered in the future in light of the scientific knowledge and regulatory experience gained at the time.

Orphan Medicinal Products

The criteria for designating an "orphan medicinal product" in the EU are similar in principle to those in the United States. A medicinal product can be designated as an orphan if its sponsor can establish that: (1) the product is intended for the diagnosis, prevention or treatment of life-threatening or chronically debilitating conditions, (2) either (a) such condition affects no more than 5 in 10,000 persons in the EU when the application is made, or (b) where it is unlikely that the marketing of the medicine would generate sufficient return in the EU to justify the necessary investment in its development, and (3) there exists no satisfactory method of diagnosis, prevention or treatment of the condition must have been authorized in the EU or, if such a method exists, the product in question would be of significant benefit to those affected by the condition.

Orphan designation must be requested before submitting an MAA. In the EU, orphan designation entitles a party to incentives such as reduction of fees or fee waivers, protocol assistance and access to the centralized procedure. Upon grant of a MA, orphan medicinal products are entitled to ten years of market exclusivity for the approved indication, which means that the competent authorities cannot accept another MAA, or grant a MA, or accept an application to extend a MA for a similar medicinal product for the same indication for a period of ten years. The period of market exclusivity is extended by two years for orphan medicinal products that have also complied with an agreed pediatric investigation plan, or PIP. No extension to any supplementary protection certificate can be granted on the basis of pediatric studies for orphan indications.

This period may be reduced to six years if, at the end of the fifth year, it is established that the orphan designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity or where the prevalence of the condition has increased above the threshold. Additionally, MA may only be granted to a "similar medicinal product" for the same indication at any time, if (i) the holder of the MA for the original orphan medicinal product consents to a second orphan medicinal product application, (ii) the holder of the MA for the original orphan medicinal product cannot supply sufficient quantities of the orphan medicinal product, or (iii) the second applicant can establish that its medicinal product, although similar, is safer, more effective or otherwise clinically superior to the authorized orphan medicinal product. A "similar medicinal product" is defined as a medicinal product containing a similar active substance or substances as contained in an authorized orphan medicinal product, and which is intended for the same therapeutic indication. Orphan designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

European Pediatric Development

In the EU, MAAs for new medicinal products have to include the results of studies conducted in the pediatric population, in compliance with a PIP, with the EMA's Pediatric Committee, or PDCO. The PIP sets out the timing and measures proposed to generate data to support a pediatric indication of the drug for which MA is being sought. The PDCO can grant a deferral of the obligation to implement some or all of the measures of the PIP until there are sufficient data to demonstrate the efficacy and safety of the product in adults. Further, the obligation to provide pediatric clinical trial data can be waived by the PDCO when this data is not needed or appropriate because the product is likely to be ineffective or unsafe in children, the disease or condition for which the product is intended occurs only in adult populations, or when the product does not represent a significant therapeutic benefit over existing treatments for pediatric patients. Once the MA is obtained in all the EU member states and study results are included in the product information, even where such results are negative, the product is eligible for six months' supplementary protection certificate extension (if any is in effect at the time of approval).

Controlled Substances

Controlled substances are not regulated at EU level and the EU legislation does not establish different classes of narcotic or psychotropic substances. However, the United Nations, or UN, Single Convention on Narcotic Drugs of 1961 and the UN Convention on Psychotropic Substances of 1971, or the UN Conventions, codify internationally applicable control measures to ensure the availability of narcotic drugs and psychotropic substances for medical and scientific purposes. The individual EU member states are all signatories to these UN Conventions. All signatories have a dual obligation to ensure that these substances are available for medical purposes and to protect populations against abuse and dependence.

The UN Conventions regulate narcotic drugs and psychotropic substances as Schedule I, II, III, IV substances with Schedule II substances presenting the lowest relative risk of abuse among such substances and Schedule I and IV substances considered to present the highest risk of abuse.

The UN Conventions require signatories to require all persons manufacturing, trading (including exporting and importing) or distributing controlled substances to obtain a license from the relevant authority. Each individual export or import of a controlled substance must also be subject to an authorization. Before the relevant authority can issue an export authorization for a particular shipment, the exporter must provide the authority with a copy of the import authorization issued by the relevant authority of the importing country. Implementation of the obligations provided in the UN Conventions and additional requirements are regulated at national level and requirements may vary from one member state to another.

Post-Approval requirements

Similar to the United States, both MA holders and manufacturers of medicinal products are subject to comprehensive regulatory oversight by the EMA, the European Commission and/or the competent regulatory authorities of the member states. The holder of a MA must establish and maintain a pharmacovigilance system and appoint an individual qualified person for pharmacovigilance, or QPPV, who is responsible for the establishment and maintenance oversight of that system, and oversees the safety profiles of medicinal products and any emerging safety concerns. Key obligations include expedited reporting of suspected serious adverse reactions and submission of periodic safety update reports, or PSURs.

All new MAA must include a risk management plan, or RMP, describing the risk management system that the company will put in place and documenting measures to prevent or minimize the risks associated with the product. The regulatory authorities may also impose specific obligations as a condition of the MA. Such risk-minimization measures or post-authorization obligations may include additional safety monitoring, more frequent submission of PSURs, or the conduct of additional clinical trials or post-authorization safety studies.

The advertising and promotion of medicinal products is also subject to laws concerning promotion of medicinal products, interactions with physicians, misleading and comparative advertising and unfair commercial practices. All advertising and promotional activities for the product must be consistent with the approved summary of product characteristics, and therefore all off-label promotion is prohibited. Direct-to-consumer advertising of prescription medicines is also prohibited in the EU. Although general requirements for advertising and promotion of medicinal products are established under EU directives, the details are governed by regulations in each member state and can differ from one country to another.

Much like the Anti-Kickback Statue prohibition in the United States, the provision of benefits or advantages to physicians to induce or encourage the prescription, recommendation, endorsement, purchase, supply, order or use of medicinal products is also prohibited in the EU. The provision of benefits or advantages to induce or reward improper performance generally is usually governed by national EU member states anti-bribery laws. Infringement of these laws could result in substantial fines and imprisonment.

Payments made to physicians in certain EU member states must be publicly disclosed. Moreover, agreements with physicians often must be the subject of prior notification and/or approval by the physician's employer, his or her competent professional organization and/or the regulatory authorities of the individual EU member states. These requirements are provided in national laws, industry codes or professional codes of conduct, applicable in the EU member states.

Failure to comply with EU and member state laws that apply to the conduct of clinical trials, manufacturing approval, MA of medicinal products and marketing of such products, both before and after grant of the MA, manufacturing of pharmaceutical products, statutory health insurance, bribery and anti-corruption or with other applicable regulatory requirements may result in administrative, civil or criminal penalties. These penalties could include delays or refusal to authorize the conduct of clinical trials, or to grant MA, product withdrawals and recalls, product seizures, suspension, withdrawal or variation of the MA, total or partial suspension of production, distribution, manufacturing or clinical trials, operating restrictions, injunctions, suspension of licenses, fines and criminal penalties.

The aforementioned EU rules are generally applicable in the European Economic Area, or EEA, which consists of the 27 EU member states plus Norway, Liechtenstein and Iceland.

Regulation of Combination Products in the European Union

The EU regulates medical devices and medicinal products separately, through different legislative instruments, and the applicable requirements will vary depending on the type of drug-device combination product. EU guidance has been published to help manufacturers select the right regulatory framework.

Drug-delivery products intended to administer a medicinal product where the medicinal product and the device form a single integral product are regulated as medicinal products in the EU. The EMA is responsible for evaluating the quality, safety and efficacy of MAAs submitted through the centralized procedure, including the safety and performance of the medical device in relation to its use with the medicinal product. The EMA or the EU member state national competent authority will assess the product in accordance with the rules for medicinal products described above but the device part must comply with the EU Medical Devices Regulation (including the general safety and performance requirements provided in Annex I). MAA must include —where available—the results of the assessment of the conformity of the device part with the Medical Devices Regulation contained in the manufacturer's EU declaration of conformity of the device or the relevant certificate issued by a notified body. If the MAA does not include the results of the conformity assessment and where for the conformity assessment of the device, if used separately, the involvement of a notified body is required, the competent authority must require the applicant to provide a notified body opinion on the conformity of the device.

By contrast, in case of drug-delivery products intended to administer a medicinal product where the device and the medicinal product do not form a single integral product (but are e.g. co-packaged), the medicinal product is regulated in accordance with the rules for medicinal products described above while the device part is regulated as a medical device and will have to comply with all the requirements set forth by the EU Medical Devices Regulation.

The characteristics of non-integral devices used for the administration of medicinal products may impact the quality, safety and efficacy profile of the medicinal products. To the extent that administration devices are co-packaged with the medicinal product or, in exceptional cases, where the use of a specific type of administration device is specifically provided for in the product information of the medicinal product, additional information may need to be provided in the MAA for the medicinal product on the characteristics of the medical device(s) that may impact on the quality, safety and/or efficacy of the medicinal product.

The requirements regarding quality documentation for medicinal products when used with a medical device, including single integral products, co-packaged and referenced products, are outlined in the EMA guideline of July 22, 2021, which became applicable as of January 1, 2022.

The aforementioned EU rules are generally applicable in the EEA

Regulation of Medical Devices in the European Union

In the EU, until May 25, 2021, medical devices were regulated by the Council Directive 93/42/EEC, or the EU Medical Devices Directive which has been repealed and replaced by Regulation (EU) No 2017/745, or the EU Medical Devices Regulation. Our Founded Entities' medical devices current certificates have been granted under the EU Medical Devices Directive whose regime is described below. However, as of May 26, 2021, some of the EU Medical Devices Regulation requirements apply in place of the corresponding requirements of the EU Medical Devices Directive with regard to registration of economic operators and of devices, post-market surveillance and vigilance requirements. Pursuing marketing of medical devices in the EU will notably require that our devices be certified under the new regime set forth in the EU Medical Devices Regulation when our current certificates expire.

Medical Devices Directive

Under the EU Medical Devices Directive, all medical devices placed on the market in the EU must meet the relevant essential requirements laid down in Annex I to the EU Medical Devices Directive, including the requirement that a medical device must be designed and manufactured in such a way that it will not compromise the clinical condition or safety of patients, or the safety and health of users and others. In addition, the device must achieve the performance intended by the manufacturer and be designed, manufactured, and packaged in a suitable manner. The European Commission has adopted various standards applicable to medical devices. These include standards governing common requirements, such as sterilization and safety of medical electrical equipment and product standards for certain types of medical devices. There are also harmonized standards relating to design and manufacture. While not mandatory, compliance with these standards is viewed as the easiest way to satisfy the essential requirements as a practical matter as it creates a rebuttable presumption that the device satisfies that essential requirement.

To demonstrate compliance with the essential requirements laid down in Annex I to the EU Medical Devices Directive, medical device manufacturers must undergo a conformity assessment procedure, which varies according to the type of medical device and its (risk) classification. As a general rule, demonstration of conformity of medical devices and their manufacturers with the essential requirements must be based, among other things, on the evaluation of clinical data supporting the safety and performance of the products during normal conditions of use. Specifically, a manufacturer must demonstrate that the device achieves its intended performance during normal conditions of use, that the known and foreseeable risks, and any adverse events, are minimized and acceptable when weighed against the benefits of its intended performance, and that any claims made about the performance and safety of the device are supported by suitable evidence. Except for low-risk medical devices (Class I non-sterile, non-measuring devices), where the manufacturer can self-assess the conformity of its products with the essential requirements (except for any parts which relate to sterility or metrology), a conformity assessment procedure requires the intervention of a notified body. Notified bodies are independent organizations designated by EU member states to assess the conformity of devices before being placed on the market. A notified body would typically audit and examine a product's technical dossiers and the manufacturer's quality system (the notified body must presume that quality systems which implement the relevant harmonized standards – which is ISO 13485:2016 for Medical Devices Quality Management Systems – conform to these requirements). If satisfied that the relevant product conforms to the relevant essential requirements, the notified body issues a certification of conformity, which the manufacturer uses as a basis for its own declaration of conformity. The manufacturer may then apply the CE mark to the device, which allows the device to be placed on the market throughout the EU.

Throughout the term of the certificate of conformity, the manufacturer will be subject to periodic surveillance audits to verify continued compliance with the applicable requirements. In particular, there will be a new audit by the notified body before it will renew the relevant certificate(s).

Medical Devices Regulation

The regulatory landscape related to medical devices in the EU recently evolved. On April 5, 2017, the EU Medical Devices Regulation was adopted with the aim of ensuring better protection of public health and patient safety. The EU Medical Devices Regulation establishes a uniform, transparent, predictable and sustainable regulatory framework across the EU for medical devices and ensure a high level of safety and health while supporting innovation. Unlike the EU Medical Devices Directive, the EU Medical Devices Regulation is directly applicable in EU member states without the need for member states to implement into national law. This aims at increasing harmonization across the EU.

The EU Medical Devices Regulation became effective on May 26, 2021. In accordance with its recently extended transitional provisions, both (i) devices lawfully placed on the market pursuant to the EU Medical Devices Directive prior to May 26, 2021 and (ii) legacy devices lawfully placed on the market after May 26, 2021 in accordance with the transitional provisions of the EU Medical Devices Regulation may generally continue to be made available on the market or put into service, provided that the requirements of the transitional provisions are fulfilled. However, even in this case, manufacturers must comply with a number of new or reinforced requirements set forth in the EU Medical Devices Regulation, in particular the obligations described below.

The EU Medical Devices Regulation requires that before placing a device, other than a custom-made device, on the market, manufacturers (as well as other economic operators such as authorized representatives and importers) must register by submitting identification information to the electronic system (Eudamed), unless they have already registered. The information to be submitted by manufacturers (and authorized representatives) also includes the name, address and contact details of the person or persons responsible for regulatory compliance. The new Regulation also requires that before placing a device, other than a custom-made device, on the market, manufacturers must assign a unique identifier to the device and provide it along with other core data to the unique device identifier, or UDI, database. These new requirements aim at ensuring better identification and traceability of the devices. Each device – and as applicable, each package – will have a UDI composed of two parts: a device identifier, or UDI-DI, specific to a device, and a production identifier, or UDI-PI, to identify the unit producing the device. Manufacturers are also notably responsible for entering the necessary data on Eudamed, which includes the UDI database, and for keeping it up to date. The obligations for registration in Eudamed will become applicable at a later date (as Eudamed is not yet fully functional). Until Eudamed is fully functional, the corresponding provisions of the EU Medical Devices Directive continue to apply for the purpose of meeting the obligations laid down in the provisions regarding exchange of information, including, and in particular, information regarding registration of devices and economic operators.

All manufacturers placing medical devices into the market in the EU must comply with the EU medical device vigilance system which has been reinforced by the EU Medical Devices Regulation. Under this system, serious incidents and Field Safety Corrective Actions, or FSCAs, must be reported to the relevant authorities of the EU member states. These reports will have to be submitted through Eudamed – once functional – and aim to ensure that, in addition to reporting to the relevant authorities of the EU member states, other actors such as the economic operators in the supply chain will also be informed. Until Eudamed is fully functional, the corresponding provisions of the EU Medical Devices Directive continue to apply. Manufacturers are required to take FSCAs, which are defined as any corrective action for technical or medical reasons to prevent or reduce a risk of a serious incident associated with the use of a medical device that is made available on the market. A serious incident is any malfunction or deterioration in the characteristics or performance of a device on the market (e.g., inadequacy in the information supplied by the manufacturer, undesirable side-effect), which, directly or indirectly, might lead to either the death or serious deterioration of the health of a patient, user, or other persons, or to a serious public health threat. An FSCA may include the recall, modification, exchange, destruction or retrofitting of the device. FSCAs must be communicated by the manufacturer or its legal representative to its customers and/or to the end users of the device through Field Safety Notices. For similar serious incidents that occur with the same device or device type and for which the root cause has been identified or a FSCA implemented or where the incidents are common and well documented, manufacturers may provide periodic summary reports instead of individual serious incident reports.

The aforementioned EU rules are generally applicable in the EEA.

Regulation of In Vitro Diagnostic Medical Devices in the European Union

The EU regulatory landscape concerning in vitro diagnostic medical devices, or IVD MDs, recently evolved. On April 5, 2017 Regulation (EU) 2017/746 of the European Parliament and of the Council on IVD MDs and repealing Directive 98/79/EC and Commission Decision 2010/227/EU, or the IVDR, was adopted to establish a modernized and more robust EU legislative framework, with the aim of ensuring better protection of public health and patient safety. This aims at reducing the risk of discrepancies in interpretation across the different European markets.

The IVDR fully applies since May 26, 2022 but there is a tiered system extending the grace period for many devices (depending on their risk classification) before they have to be fully compliant with the regulation. The IVDR among other things:

- strengthens the rules on placing devices on the market and reinforce surveillance once they are available;
- establishes explicit provisions on manufacturers' responsibilities for the follow-up of the quality, performance and safety of devices placed on the market;
- establishes explicit provisions on importers' and distributors' obligations and responsibilities;
- imposes an obligation to identify a responsible person who is ultimately responsible for all aspects of compliance with the requirements of the new regulation;
- improves the traceability of medical devices throughout the supply chain to the end-user or patient through the introduction of a unique identification number, to increase the ability of manufacturers and regulatory authorities to trace specific devices through the supply chain and to facilitate the prompt and efficient recall of medical devices that have been found to present a safety risk;

- sets up a central database (Eudamed) to provide patients, healthcare professionals and the public with comprehensive information on products available in the EU; and
- strengthens rules for the assessment of certain high-risk devices that may have to undergo an additional check by experts before they are placed on the market.

The aforementioned EU rules are generally applicable in the EEA.

Regulation of Companion Diagnostics in the European Union

In the EU, IVD MDs were regulated by Directive 98/79/EC, or the IVDD, which regulated the placing on the market, the CE marking, the essential requirements, the conformity assessment procedures, the registration obligations for manufactures and devices as well as the vigilance procedure. IVD MDs had to comply with the requirements provided for in the IVDD, and with further requirements implemented at national level (as the case may be).

The regulation of companion diagnostics is subject to further requirements since the IVDR became applicable on May 26, 2022. The IVDR introduced a new classification system for companion diagnostics which are now specifically defined as diagnostic tests that support the safe and effective use of a specific medicinal product, by identifying patients that are suitable or unsuitable for treatment. Companion diagnostics will have to undergo a conformity assessment by a notified body. Before it can issue an EU certificate, the notified body must seek a scientific opinion from the EMA on the suitability of the companion diagnostic to the medicinal product concerned if the medicinal product falls exclusively within the scope of the centralized procedure for the authorization of medicines, or the medicinal product is already authorized through the centralized procedure, or a marketing authorization application for the medicinal product has been submitted through the centralized procedure. For other substances, the notified body can seek the opinion from a national competent authorities or the EMA.

Brexit and the Regulatory Framework in the United Kingdom

Since the end of the Brexit transition period on January 1, 2021, Great Britain, or GB (England, Scotland and Wales) has not been directly subject to EU laws, however under the terms of the Ireland/Northern Ireland Protocol, EU laws generally apply to Northern Ireland. On February 27, the UK Government and the European Commission reached a political agreement on the “Windsor Agreement” which will revise the Protocol on Ireland/Northern Ireland in order to address some of the perceived shortcomings in its operation. Under the proposed changes, Northern Ireland would be reintegrated under the regulatory authority of the Medicines and Healthcare products Regulatory Agency, or MHRA, with respect to medicinal products. These proposed changes need to be codified and agreed by the respective parliaments of the United Kingdom, or UK, and EU before taking effect. There could be additional uncertainty and risk around what these changes will mean to our business. It is currently unclear to what extent the UK Government will seek to align its regulations with the EU. The EU laws that have been transposed into UK law through secondary legislation remain applicable in Great Britain. However, under the Retained EU Law (Revocation and Reform) Bill 2022, which is currently before the UK parliament, any retained EU law not expressly preserved and “assimilated” into domestic law or extended by ministerial regulations (to no later than June 23, 2026) will automatically expire and be revoked by December 31, 2023. In addition, new legislation such as the (EU) CTR is not applicable in GB. Whilst the EU-UK Trade and Cooperation Agreement, or TCA, includes the mutual recognition of GMP inspections of manufacturing facilities for medicinal products and GMP documents issued, it does not contain wholesale mutual recognition of UK and EU pharmaceutical regulations and product standards. There may be divergent local requirements in Great Britain from the EU in the future, which may impact clinical and development activities that occur in the UK in the future. Similarly, clinical trial submissions in the UK will not be able to be bundled with those of EU countries within the EMA Clinical Trial Information System, or CTIS, adding further complexity, cost and potential risk to future clinical and development activity in the UK. Significant political and economic uncertainty remains about how much the relationship between the UK and EU will differ as a result of the UK’s withdrawal.

The UK government has passed a new Medicines and Medical Devices Act 2021, which introduces delegated powers in favor of the Secretary of State or an ‘appropriate authority’ to amend or supplement existing regulations in the area of medicinal products and medical devices. This allows new rules to be introduced in the future by way of secondary legislation, which aims to allow flexibility in addressing regulatory gaps and future changes in the fields of human medicines, clinical trials and medical devices.

Since January 1, 2021, the MHRA is the UK’s standalone medicines and medical devices regulator. As a result of the Northern Ireland protocol, different rules currently apply in Northern Ireland than in England, Wales, and Scotland, together GB, but this may be subject to further revisions following implementation of the proposals set out in the Windsor Agreement. Broadly, Northern Ireland currently follows the EU regulatory regime, but its national competent authority remains the MHRA.

The UK regulatory framework in relation to clinical trials is derived from existing EU legislation (as implemented into UK law, through secondary legislation). On January 17, 2022, the MHRA launched an eight-week consultation on reframing the UK legislation for clinical trials, with the aim to streamline clinical trials approvals, enable innovation, enhance clinical trials transparency, enable greater risk proportionality, and promote patient and public involvement in clinical trials. The resulting new legislation will determine how aligned the UK clinical trials regime is compared to the (EU) CTR.

The MHRA has introduced changes to national licensing procedures, including procedures to prioritize access to new medicines that will benefit patients, including a 150-day assessment and a rolling review procedure. All existing EU MAs for centrally authorized products were automatically converted or grandfathered into UK MAs, effective in GB (only), free of charge on January 1, 2021, unless the MA holder has opted out. In order to use the centralized procedure to obtain a MA that will be valid throughout the EEA, companies must be established in the EEA. Therefore, since Brexit, companies established in the UK can no longer use the EU centralized procedure and instead an EEA entity must hold any centralized MAs. In order to obtain a UK MA to commercialize products in the UK, an applicant must be established in the UK and must follow one of the UK national authorization procedures or one of the remaining post-Brexit international cooperation procedures to obtain an MA to commercialize products in the UK. The MHRA may rely on a decision taken by the European Commission on the approval of a new (centralized procedure) MA when determining an application for a GB authorization; or use the MHRA’s

decentralized or mutual recognition procedures which enable MAs approved in EU member states (or Iceland, Liechtenstein, Norway) to be granted in GB.

With respect to medical devices (including IVD MDs), the TCA does not specifically refer to them but does provide for cooperation and exchange of information in the area of product safety and compliance, including market surveillance, enforcement activities and measures, standardization related activities, exchanges of officials, and coordinated product recalls (or other similar actions). For medical devices that are locally manufactured but use components from other countries, the "rules of origin" criteria will need to be reviewed. The rules for placing medical devices on the Northern Ireland market will differ from those in GB.

New regulations require all medical devices to be registered with the MHRA, and since January 1, 2022, manufacturers based outside the UK have been required to appoint a UK responsible person that has a registered place of business in the UK to register devices with the MHRA.

On June 26, 2022, the MHRA published its response to a 10-week consultation on the post-Brexit regulatory framework for medical devices and diagnostics. The MHRA seeks to amend the UK Medical Devices Regulations 2002, or the "UK MDR" (which continues to be based on the EU legislation which preceded the EU Medical Devices Regulation, primarily the EU Medical Devices Directive and the (EU) IVDD), in particular to create a new access pathway to support innovation, create an innovative framework for regulating software and artificial intelligence as medical devices, reform in vitro diagnostic medical device regulation and foster sustainability through the reuse and remanufacture of medical devices. Regulations implementing the new regime were originally scheduled to come into force in July 2023, but the Government has recently confirmed that this date has been postponed until July 2024. Devices which have valid certification issued by EU notified bodies under the EU Medical Devices Regulation or Medical Devices Directive are subject to transitional arrangements. In its consultation response, the MHRA indicated that the future UK regulations will allow devices certified under the EU Medical Devices Regulation to be placed on the market in Great Britain under the CE mark until either the certificate expires or for five years after the new regulations take effect, whichever is sooner. Devices certified under the Medical Devices Directive could continue to be placed on the market until either the certificate expires or for three years after the new regulations take effect, whichever is sooner. Following these transitional periods, it is expected that all medical devices will require a UK Conformity Assessment, or UKCA, mark. Manufacturers may choose to use the UKCA mark on a voluntary basis prior to the regulations coming into force. However, from July 2024, products which do not have existing and valid CE certification under the EU Medical Devices Directive or EU Medical Devices Regulation and are therefore not subject to the transitional arrangements will be required to carry the UKCA mark if they are to be sold into the market in Great Britain. UKCA marking will not be recognized in the EU. The rules for placing medical devices on the market in Northern Ireland, which is part of the UK, differ from those in Great Britain (England, Scotland and Wales) and continues to be based on EU law.

Under the terms of the Northern Ireland Protocol, Northern Ireland follows EU rules on medical devices and devices marketed in Northern Ireland require assessment according to the EU regulatory regime. Such assessment may be conducted by an EU notified body, in which case a CE mark is required before placing the device on the market in the EU or Northern Ireland. Alternatively, if a UK notified body conducts such assessment, a 'UKNI' mark applied and the device may only be placed on the market in Northern Ireland and not the EU.

Rest of the World Regulation

For other countries outside of the EU, the UK and the United States, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. Additionally, the clinical trials must be conducted in accordance with GCP requirements and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Additional Laws and Regulations Governing International Operations

If we further expand our operations outside of the United States, we must dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate. The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering, authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with certain accounting provisions requiring the company to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Compliance with the FCPA is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

Various laws, regulations and executive orders also restrict the use and dissemination outside of the United States, or the sharing with certain non-U.S. nationals, of information classified for national security purposes, as well as certain products and technical data relating to those products. If we expand our presence outside of the United States, it will require us to dedicate additional resources to comply with these laws, and these laws may preclude us from developing, manufacturing, or selling certain products and product candidates outside of the United States, which could limit our growth potential and increase our development costs.

The failure to comply with laws governing international business practices may result in substantial civil and criminal penalties and suspension or debarment from government contracting. The SEC also may suspend or bar issuers from trading securities on U.S. exchanges for violations of the FCPA's accounting provisions.

Healthcare Laws and Regulation

Manufacturing, sales, promotion and other activities following product approval are also subject to regulation by numerous regulatory authorities in the United States in addition to the FDA, including the Centers for Medicare & Medicaid Services, or CMS, the Office of Inspector General and Office for Civil Rights, other divisions of the Department of Health and Human Services, or HHS, the Department of Justice, the Drug Enforcement Administration, the Consumer Product Safety Commission, the Federal Trade Commission, the Occupational Safety & Health Administration, the Environmental Protection Agency and state and local governments.

Healthcare providers and third-party payors play a primary role in the recommendation and prescription of drug products and other medical items and services. Arrangements with providers, consultants, third-party payors and customers are subject to broadly applicable fraud and abuse, anti-kickback, false claims laws, reporting of payments to physicians and teaching hospitals and patient privacy laws and regulations and other healthcare laws and regulations that may constrain our business and/or financial arrangements. Restrictions under applicable federal and state healthcare and data privacy and security laws and regulations, include the following:

- the federal Anti-Kickback Statute, which makes it illegal for any person, including a prescription drug manufacturer (or a party acting on its behalf), to knowingly and willfully solicit, receive, offer or pay any remuneration (including any kickback, bribe or certain rebate), directly or indirectly, overtly or covertly, in cash or in kind, or in return for, that is intended to induce or reward referrals, including the purchase, recommendation, order or prescription of a particular drug, for which payment may be made under a federal healthcare program, such as Medicare or Medicaid. A person or entity need not have actual knowledge of the federal Anti-Kickback Statute or specific intent to violate it in order to have committed a violation;
- the federal civil and criminal false claims laws, including the civil False Claims Act, or FCA, which prohibit individuals or entities from, among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment or approval that are false, fictitious or fraudulent; knowingly making, using or causing to be made or used, a false statement or record material to a false or fraudulent claim or obligation to pay or transmit money or property to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing an obligation to pay money to the federal government. Manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to “cause” the submission of false or fraudulent claims. The government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA. The FCA also permits a private individual acting as a “whistleblower” to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery.
- the federal civil monetary penalties laws, which impose civil fines for, among other things, the offering or transfer or remuneration to a Medicare or state healthcare program beneficiary if the person knows or should know it is likely to influence the beneficiary’s selection of a particular provider, practitioner, or supplier of services reimbursable by Medicare or a state health care program, unless an exception applies;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes civil and criminal liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services; similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the federal transparency requirements known as the federal Physician Payments Sunshine Act,which requires certain manufacturers of drugs, devices, biologics and medical supplies to report annually to CMS information related to payments and other transfers of value made by that entity to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician practitioners such as physician assistants and nurse practitioners, and teaching hospitals, as well as ownership and investment interests held by the physicians described above and their immediate family members;
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers;
- federal price reporting laws, which require manufacturers to calculate and report complex pricing metrics to government programs, where such reported prices may be used in the calculation of reimbursement and/or discounts on approved products;
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to healthcare items or services that are reimbursed by non-governmental third-party payors, including private insurers; and
- some state laws require pharmaceutical companies to comply with the industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring manufacturers to report information related to payments to physicians and other healthcare providers, marketing expenditures, and pricing information. Certain state and local laws require the registration of pharmaceutical sales and medical representatives.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, in the event we obtain regulatory approval for any one of our products, it is possible that some of our business activities could be subject to challenge and may not comply under one or more of such laws, regulations, and guidance. Law enforcement authorities are increasingly focused on enforcing fraud and abuse laws, and it is possible that some of our practices may be challenged under these laws. Violations of these laws can subject us to administrative, civil and criminal penalties, damages, fines, disgorgement, the exclusion from participation in federal and state healthcare programs, individual imprisonment, reputational harm, and the curtailment or restructuring of our operations, as well as additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws. Efforts to ensure that our current and future business arrangements with third parties, and our business generally, will comply with applicable healthcare laws and regulations will involve substantial costs.

Moreover, analogous state and foreign laws and regulations may be broader in scope than the provisions described above and may apply regardless of payor. These laws and regulations may differ from one another in significant ways, thus further complicating compliance efforts. For instance, in the EU, many EU member states have adopted specific anti-gift statutes that further limit commercial practices for medicinal products, in particular vis-à-vis healthcare professionals and organizations. Additionally, there has been a recent trend of increased regulation of payments and transfers of value provided to healthcare professionals or entities and many EU member states have adopted national "Sunshine Acts" which impose reporting and transparency requirements (often on an annual basis), similar to the requirements in the United States, on pharmaceutical companies. Certain countries also mandate implementation of commercial compliance programs, or require disclosure of marketing expenditures and pricing information.

Coverage and Reimbursement

In the United States and markets in other countries, patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Thus, even if a product candidate is approved, sales of the product will depend, in part, on the extent to which third-party payors, including government health programs in the United States such as Medicare and Medicaid, commercial health insurers and managed care organizations, provide coverage, and establish adequate reimbursement levels for, the product. In the United States, no uniform policy of coverage and reimbursement for drug and other medical products exists among third-party payors. Although CMS determines whether and to what extent a new medicine will be covered and reimbursed under Medicare and private payors tend to follow CMS to a substantial degree, coverage and reimbursement for drug and other medical products can differ significantly from payor to payor. The process for determining whether a third-party payor will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the product once coverage is approved. Third-party payors are increasingly challenging the prices charged, examining the medical necessity, and reviewing the cost-effectiveness of medical products and services and imposing controls to manage costs. Third-party payors may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the approved products for a particular indication.

In order to secure coverage and reimbursement for any product that might be approved for sale, a company may need to conduct expensive pharmacoeconomic or other studies in order to demonstrate the medical necessity and cost-effectiveness of the product, in addition to the costs required to obtain FDA or other comparable regulatory approvals. Additionally, companies may also need to provide discounts to purchasers, private health plans or government healthcare programs. Nonetheless, product candidates may not be considered medically necessary or cost effective. A decision by a third-party payor not to cover a product could reduce physician utilization once the product is approved and have a material adverse effect on sales, our operations and financial condition. Additionally, a third-party payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a product does not assure that other payors will also provide coverage and reimbursement for the product, and the level of coverage and reimbursement can differ significantly from payor to payor. Factors payors consider in determining reimbursement are based on whether the product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that reimbursement will be available for any product candidate that we commercialize and, if reimbursement is available, the level of reimbursement. In addition, many pharmaceutical manufacturers must calculate and report certain price reporting metrics to the government, such as average sales price, or ASP, and best price. Penalties may apply in some cases when such metrics are not submitted accurately and timely. Further, these prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs.

In addition, in many foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing and reimbursement vary widely from country to country. In the EU, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of those products to consumers. Member states are free to restrict the range of pharmaceutical products for which their national health insurance systems provide reimbursement, and to control the prices and reimbursement levels of pharmaceutical products for human use. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed to by the government. Member states may approve a specific price or level of reimbursement for the pharmaceutical product, or alternatively adopt a system of direct or indirect controls on the profitability of the company responsible for placing the pharmaceutical product on the market, including volume-based arrangements, caps and reference pricing mechanisms. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. The downward pressure on health care costs has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

The containment of healthcare costs has become a priority of federal, state and foreign governments, and the prices of products have been a focus in this effort. Governments have shown significant interest in implementing cost-containment

programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit a company's revenue generated from the sale of any approved products. Coverage policies and third-party payor reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which a company or its collaborators receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Healthcare Reform

In the United States and some foreign jurisdictions, there have been, and likely will continue to be, a number of legislative and regulatory changes and proposed changes regarding the healthcare system directed at broadening the availability of healthcare, improving the quality of healthcare, and containing or lowering the cost of healthcare. For example, in March 2010, the U.S. Congress enacted the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively the ACA which, among other things, included changes to the coverage and payment for products under government health care programs. The ACA included provisions of importance to our potential product candidates that:

- created an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic products, apportioned among these entities according to their market share in certain government healthcare programs;
- expanded eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133 percent of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;
- expanded manufacturers' rebate liability under the Medicaid Drug Rebate Program by increasing the minimum rebate for both branded and generic drugs and revising the definition of "average manufacturer price," or AMP, for calculating and reporting Medicaid drug rebates on outpatient prescription drug prices;
- addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- expanded the types of entities eligible for the 340B drug discount program;
- established the Medicare Part D coverage gap discount program by requiring manufacturers to provide a 50 percent point-of-sale-discount (increased to 70% as of January 1, 2019 pursuant to subsequent legislation) off the negotiated price of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D; and
- created a Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

Since its enactment, there have been numerous judicial, administrative, executive, and legislative challenges to certain aspects of the ACA.

On June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. Prior to the Supreme Court's decision, President Biden issued an executive order to initiate a special enrollment period from February 15, 2021 through August 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, included aggregate reductions of Medicare payments to providers, which went into effect in April 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2032 unless additional Congressional action is taken. In January 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. More recently, on March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which eliminates the statutory Medicaid drug rebate cap, currently set at 100% of a drug's average manufacturer price, beginning January 1, 2024.

Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives. For example, CMS may develop new payment and delivery models, such as bundled payment models. In addition, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their commercial products, which has resulted in several Congressional inquiries and proposed and enacted state and federal legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for pharmaceutical products. On August 16, 2022, the Inflation Reduction Act of 2022, or IRA, was into law. Among other things, the IRA requires manufacturers of certain drugs to engage in price negotiations with Medicare (beginning in 2026), imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation (first due in 2023), and replaces the Part D coverage gap discount program with a new discounting program (beginning in 2025). The IRA permits the Secretary of the Department of Health and Human Services to implement many of these provisions through guidance, as opposed to regulation, for the initial years. For that and other reasons, it is currently unclear how the IRA will be effectuated.

Individual states in the United States have also become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs. Furthermore, there has been increased interest by third

party payors and governmental authorities in reference pricing systems and publication of discounts and list prices. It is difficult to predict the future legislative landscape in healthcare and the effect on our business, results of operations, financial condition and prospects. However, we expect that additional state and federal healthcare reform measures will be adopted in the future.

On May 30, 2018, the Right to Try Act was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational new drug products that have completed a Phase 1 clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under the FDA expanded access program. There is no obligation for a drug manufacturer to make its drug products available to eligible patients as a result of the Right to Try Act. Drug manufacturers who provide their investigational product under the Right to Try Act are required to submit to FDA an annual summary of the use of their drug.

Outside the United States, ensuring coverage and adequate payment for a product also involves challenges. Pricing of prescription pharmaceuticals is subject to government control in many countries. Pricing negotiations with government authorities can extend well beyond the receipt of regulatory approval for a product and may require a clinical trial that compares the cost-effectiveness of a product to other available therapies. The conduct of such a clinical trial could be expensive and result in delays in commercialization.

In the EU, pricing and reimbursement schemes vary widely from country to country Some countries may require the completion of additional studies that compare the cost-effectiveness of a particular product candidate to currently available therapies or so-called health technology assessments, in order to obtain reimbursement or pricing approval. For example, the EU provides options for its member states to restrict the range of products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. EU member states may approve a specific price for a product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the product on the market. Other member states allow companies to fix their own prices for products, but monitor and control prescription volumes and issue guidance to physicians to limit prescriptions. Recently, many countries in the EU have increased the amount of discounts required on pharmaceuticals and these efforts could continue as countries attempt to manage healthcare expenditures, especially in light of the severe fiscal and debt crises experienced by many countries in the EU. The downward pressure on healthcare costs in general, particularly prescription products, has become intense. As a result, increasingly high barriers are being erected to the entry of new products. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various EU member states, and parallel trade, i.e., arbitrage between low-priced and high-priced member states, can further reduce prices. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any products, if approved in those countries.

On December 13, 2021, Regulation No 2021/2282 on health technology assessment, or HTA, amending Directive 2011/24/EU, was adopted. While the regulation entered into force in January 2022, it will only begin to apply from January 2025 onwards, with preparatory and implementation-related steps to take place in the interim. Once the regulation becomes applicable, it will have a phased implementation depending on the concerned products. This regulation intends to boost cooperation among EU member states in assessing health technologies, including new medicinal products as well as certain high-risk medical devices, and providing the basis for cooperation at the EU level for joint clinical assessments in these areas. The regulation will permit EU member states to use common HTA tools, methodologies, and procedures across the EU, working together in four main areas, including joint clinical assessment of the innovative health technologies with the most potential impact for patients, joint scientific consultations whereby developers can seek advice from HTA authorities, identification of emerging health technologies to identify promising technologies early, and continuing voluntary cooperation in other areas. Individual EU member states will continue to be responsible for assessing non-clinical (e.g., economic, social, ethical) aspects of health technologies, and making decisions on pricing and reimbursement.

Data Privacy and Security

Numerous state, federal and foreign laws, regulations and standards govern the collection, use, access to, confidentiality and security of health-related and other personal information, and could apply now or in the future to our operations or the operations of our partners. In the United States, numerous federal and state laws and regulations, including data breach notification laws, health information privacy and security laws and consumer protection laws and regulations govern the collection, use, disclosure, and protection of health-related and other personal information. In addition, certain foreign laws govern the privacy and security of personal data, including health-related data. Privacy and security laws, regulations, and other obligations are constantly evolving, may conflict with each other to complicate compliance efforts, and can result in investigations, proceedings, or actions that lead to significant civil and/or criminal penalties and restrictions on data processing.

Foreign Private Issuer Status

We report under the Securities Exchange Act of 1934, as amended, or the Exchange Act, as a non-U.S. company with foreign private issuer status. As long as we qualify as a foreign private issuer under the Exchange Act, we will be exempt from certain provisions of the Exchange Act that are applicable to U.S. domestic public companies, including:

- the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act;
- sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time;
- the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q containing unaudited financial and other specified information, or current reports on Form 8-K, upon the occurrence of specified significant events; and
- Regulation FD, which regulates selective disclosures of material information by issuers.

C. ORGANIZATIONAL STRUCTURE

The information (including tabular data) set forth or referenced under the heading “Highlights of the Year—2022" on page 1 and- "Components of Our Value” on pages 6 to 7 of PureTech’s “Annual Report and Accounts 2022” included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

D. PROPERTY, PLANTS AND EQUIPMENT

The information (including tabular data) set forth or referenced under the headings “Notes to the Consolidated Financial Statements—Note 11. Property and Equipment” and “Notes to the Consolidated Financial Statements—Note 21. Leases” in each case of our audited consolidated financial statements included elsewhere in this annual report on Form 20-F.

ITEM 4A. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

You should read the following discussion and analysis, including those portions incorporated herein by reference, together with our consolidated financial statements, including the notes thereto, included elsewhere in this annual report on Form 20-F. Some of the information contained in this discussion and analysis or incorporated herein, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section incorporated herein by reference, our actual results could differ materially from the results described in or implied by these forward-looking statements.

Our audited consolidated financial statements as of and for the years ended December 31, 2022, 2021 and 2020 have been prepared in accordance with UK-adopted International Financial Reporting Standards (IFRSs). The audited consolidated financial statements also comply fully with IFRSs as issued by the International Accounting Standards Board ("IASB").

The following discussion contains references to the consolidated financial statements of PureTech Health plc and its consolidated subsidiaries, or the Company. These financial statements consolidate the Company's subsidiaries and include the Company's interest in associates and investments held at fair value. Subsidiaries are those entities over which the Company maintains control. Associates are those entities in which the Company does not have control for financial accounting purposes but maintains significant influence over the financial and operating policies. Where we have neither control nor significant influence for financial accounting purposes, we recognize our holding in such entity as an investment at fair value. For purposes of our consolidated financial statements, each of our Founded Entities are considered to be either a "subsidiary" or an "associate" depending on whether PureTech Health plc controls or maintains significant influence over the financial and operating policies of the respective entity at the respective period end date. For additional information regarding the accounting treatment of these entities, see Note 1 of our consolidated financial statements included elsewhere in this annual report on Form 20-F.

A. OPERATING RESULTS

The information (including tabular data) set forth or referenced under the heading "Key Performance Indicators—2022" on page 49 of PureTech's "Annual Report and Accounts 2022" included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

2022 Compared with 2021

The information (including tabular data) set forth or referenced under the heading "Financial Review" on pages 50 to 64 of PureTech's "Annual Report and Accounts 2022" included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

2021 Compared with 2020

The information (including tabular data) set forth or referenced under the heading "Financial Review" on pages 50 to 64 of PureTech's "Annual Report and Accounts 2022" included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

The information (including tabular data) set forth or referenced under the heading "Risk Management" on pages 44 to 47 of PureTech's "Annual Report and Accounts 2022" included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

B. LIQUIDITY AND CAPITAL RESOURCES

The information (including tabular data) set forth or referenced under the following headings is incorporated by reference herein: "Viability" on page 48 and "Financial Review—Cash Flow and Liquidity" on pages 61 to 63 of PureTech's "Annual Report and Accounts 2022" included as exhibit 15.1 to this annual report on Form 20-F and "Notes to the Consolidated Financial Statements—Note 17.—Subsidiary Notes Payable", "Notes to the Consolidated Financial Statements—Note 20.—Long-term Loan", "Notes to the Consolidated Financial Statements—Note 21.—Leases", "Notes to the Consolidated Financial Statements—Note 22.—Capital and Financial Risk Management" and "Notes to the Consolidated Financial Statements—Note 23.—Commitments and Contingencies", in each case of our consolidated financial statements included elsewhere in this annual report on Form 20-F.

Under various license and collaboration agreements we are required to make milestone payments upon successful completion and achievement of certain intellectual property, clinical, regulatory and sales milestones. We will also be required to make royalty payments in connection with the sale of products developed under these agreements, if and when such sales occur. As of December 31, 2022, these milestone events have not yet occurred and therefore the Company does not have a present obligation to make the related payments in respect of the licenses. We believe that the occurrence of many of these milestones is remote at this time. As of December 31, 2022 payments in respect of contingent developmental milestones that are dependent on events that are outside the control of the Company but are reasonably possible to occur amounted to approximately $8.7 million. These milestone amounts represent an aggregate of multiple milestone payments depending on different milestone events in multiple agreements. The probability that all such milestone events will occur in the aggregate is remote. We are not able to predict when and if such milestone events will occur. Payments made to license IP represent the acquisition cost of intangible assets. For more information, see "Note 12 - Intangible Assets" to our audited consolidated financial statements included elsewhere in this annual report on Form 20-F.

We present the preferred shares issued by our subsidiaries to third parties as liabilities. Such preferred shares are redeemable only upon liquidation or deemed liquidation (as defined in the subsidiaries' incorporation documents) of the respective subsidiaries. We are unable to predict when and if such liquidation or deemed liquidation events will occur, and therefore when and if such shares will be redeemed, if at all.

As of December 31, 2022, our off-balance sheet arrangements consist of outstanding standby letters of credit. We have no other off-balance sheet arrangements that have had, or are reasonably likely to have, a material current or future effect on our consolidated financial statements or changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources. See “Notes to the Consolidated Financial Statements—Note 13.—Other Financial Assets” included in our audited consolidated financial statements included elsewhere in this annual report on Form 20-F.

We consider the Group's working capital to be sufficient for its present requirements.

C. RESEARCH AND DEVELOPMENT, PATENTS AND LICENSES, ETC.

The information (including tabular data) set forth or referenced under the following headings is incorporated by reference herein: "Overview - Giving Life To Science" on page 3 and “ESG Report-Chapter 1: Patients—Bioethics: R&D” on page 20 of PureTech’s “Annual Report and Accounts 2022” included as exhibit 15.1 to this annual report on Form 20-F and "Notes to the Consolidated Financial Statements - Note 4.-Segment Information" of our consolidated financial statements included elsewhere in this annual report on Form 20-F.

D. TREND INFORMATION

Other than as disclosed elsewhere in this annual report on Form 20-F, we are not aware of any trends, uncertainties, demands, commitments or events for the period from January 1, 2022 to the present time that are reasonably likely to have a material adverse effect on our net revenue, income, profitability, liquidity or capital resources, or that would cause the disclosed financial information to be not necessarily indicative of future operating results or financial condition.

E. CRITICAL ACCOUNTING ESTIMATES

Not applicable.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. DIRECTORS AND SENIOR MANAGEMENT

The information (including tabular data) set forth under the heading “Board of Directors” on pages 66 to 68, “Management team” on pages 69 to 70 and "Directors’ Report for the year ended December 31, 2022” on pages 78 to 81 in each case of PureTech’s “Annual Report and Accounts 2022" included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

Board Diversity

The table below provides certain information regarding the diversity of our Board and Directors as of the date of this annual report.

Board Diversity Matrix	
Country of Principal Executive Offices	United States
Foreign Private Issuer	Yes
Disclosure Prohibited Under Home Country Law	No
Total Number of Directors	8

	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identity				
Directors	3	5	0	0
Part II: Demographic Background				
Underrepresented Individual in Home Country Jurisdiction		0		
LGBTQ+		0		
Did Not Disclose Demographic Background		0		

B. COMPENSATION

The information (including graphs and tabular data) set forth under the following headings is incorporated by reference herein: “Directors’ Report for the year ended December 31, 2022” on pages 78 to 81, “Directors’ Remuneration Report for the year ended December 31, 2022” on pages 86 to 89, “Directors’ Remuneration Policy” on pages 90 to 94, “Annual Report on Remuneration” on pages 95 to 102, in each case of PureTech’s “Annual Report and Accounts 2022” included as exhibit 15.1 to this annual report on Form 20-F and “Notes to the Consolidated Financial Statements—Note 8.—Share-Based Payments” of our audited consolidated financial statements included elsewhere in this annual report.

C. BOARD PRACTICES

The information (including graphs and tabular data) set forth under the headings "Board of Directors" on pages 66 to 68 “The Board” on pages 71 to 75, “Report of the Nomination Committee” on page 82, “Report of the Audit Committee” on pages 83 to 85, and "Directors' Remuneration Report for the year ended December 31, 2022" on pages 90 to 94 in each case of PureTech’s “Annual Report and Accounts 2022” included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

D. EMPLOYEES

The information (including tabular data) set forth under the heading “ESG Report—Chapter 2: People” on pages 23 to 31 of PureTech’s “Annual Report and Accounts 2022” included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

E. SHARE OWNERSHIP

The information (including graphs and tabular data) set forth under the headings “Directors’ Report for the year ended December 31, 2022” on pages 78 to 81 and “Annual Report on Remuneration” on pages 95 to 102, in each case of PureTech’s “Annual Report and Accounts 2022” included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference. For information regarding the share ownership of our directors and executive officers, see Item 7.A - "Major Shareholders".

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. MAJOR SHAREHOLDERS

The following table sets forth information with respect to the beneficial ownership of our ordinary shares as of by:

- each of our directors;
- each of our executive officers; and
- each person, or group of affiliated persons, who is known by us to beneficially own more than 3 percent of our outstanding ordinary shares.

The column entitled "Percentage of Shares Beneficially Owned" is based on a total of 278,461,805 ordinary shares outstanding as of March 31, 2023.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our ordinary shares. Ordinary shares subject to options that are currently exercisable or exercisable within 60 days after March 31, 2023 are considered outstanding and beneficially owned by the person holding the options for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, the persons and entities in this table have sole voting and investment power with respect to all of the ordinary shares beneficially owned by them, subject to community property laws, where applicable. Except as otherwise set forth below, the address of the beneficial owner is c/o PureTech Health, 6 Tide Street, Suite 400, Boston, Massachusetts 02210. The information in the table below is based on information known to us or ascertained by us from public filings made by the shareholders. We have also set forth below information known to us regarding any significant change in the percentage ownership of our ordinary shares by any major shareholders during the past three years. The major shareholders listed below do not have voting rights with respect to their ordinary shares that are different from the voting rights of other holders of our ordinary shares.

NAME OF BENEFICIAL OWNER	PERCENTAGE OF SHARES BENEFICIALLY OWNED
3 Percent Shareholders	
Invesco Asset Management Limited[1]	23.3 %
Lansdowne Partners Limited[2]	8.8 %
Baillie Gifford & Co[3]	8.1 %
M&G Investment Management, LTD[4]	4.2 %
Vanguard Group, Inc.[5]	4.0 %
Patient Capital Management, Inc. [6]	3.5 %
Recordati S.p.A[7]	3.4 %
Executive Officers and Directors	
Daphne Zohar[8]	4.5 %
Bharatt Chowrira, Ph.D., J.D.	*
Sharon Barber-Lui	*
Raju Kucherlapati, Ph.D.	*
John LaMattina, Ph.D.	*
Robert Langer, Sc.D.[9]	1.1 %
Kiran Mazumdar-Shaw	*
Christopher Viehbacher	*

* Represents beneficial ownership of less than 1 percent of our outstanding ordinary shares.

We are not aware that the Company is directly owned or controlled by another corporation, any foreign government or any other natural or legal person(s) severally or jointly. We are not aware of any arrangement, the operation of which may result in a change of control of the Company.

The number of record holders in the United States is not representative of the number of beneficial holders nor is it representative of where such beneficial holders are resident since many of these ordinary shares were held by brokers or other nominees. As of March 31, 2023, assuming that all of our ordinary shares represented by ADSs are held by residents of the United States, we estimate that approximately 30% of our outstanding ordinary shares were held in the United States by approximately 78 holders of record.

[1] Consists of 64,945,474 shares beneficially held. The address for Invesco Asset Management Limited is c/o Invesco Ltd., 1555 Peachtree Street NE, Suite 1800, Atlanta, GA 30309

[2] Consists of 24,528,171 shares beneficially held. The address for Lansdowne Partners Limited is c/o 15 Davies Street, London W1K 3AG, United Kingdom.

[3] Consists of 22,521,433 shares beneficially held. The address for Baillie Gifford & Co. is c/o Calton Square, 1 Greenside Row, Edinburgh EH1 3AN, United Kingdom.

[4] Consists of 11,761,956 shares beneficially held. The address for M&G Investment Management, LTD is c/o 10 Fenchurch Avenue London EC3M 5BM, United Kingdom..

[5] Consists of 11,256,029 shares beneficially held. The address for Vanguard Group, Inc. is 455 Devon Park Dr Valley Forge, PA, 19482.

[6] Consists of 9,806,500 shares beneficially held. The address for Patient Capital Management, Inc. is 100 Simcoe St., Suite 100, Toronto, ON M5H 3G2, Canada.

[7] Consists of 9,554,140 shares beneficially held. The address for Recordati S.p.A. is c/o Via Civitali, 1, 20148 Milano, Italy.

[8] Consists of an aggregate of 12,564,189 shares held by (i) the Zohar Family Trust I, a U.S. established trust of which Ms. Zohar is a beneficiary and trustee (ii) the Zohar Family Trust II, a U.S. established trust of which Ms. Zohar is a beneficiary (in the event of her spouse's death) and trustee; (iii) Zohar LLC, a U.S. established limited liability company and (iv) Ms. Zohar owns or has a beneficial interest in 100 percent of the share capital of Zohar LLC.

[9] Consists of an aggregate of 2,955,324 shares held by (i) Langer Family 2020 Trust and (ii) Dr. Langer directly.

The information (including graphs and tabular data) set forth under the headings “Directors’ Report for the year ended December 31, 2022—Substantial Shareholders” on page 78 and “Annual Report on Remuneration” on pages 95 to 102, in each case of PureTech’s “Annual Report and Accounts 2022” included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

Change in Ownership of Major Shareholders

To our knowledge, other than as disclosed in the table above, our other filings with the SEC, public disclosure, including without limitation Schedule 13 filings, and this annual report, there has been no significant change in the percentage ownership held by any major shareholder since January 1, 2020.

B. RELATED PARTY TRANSACTIONS

The information (including graphs and tabular data) set forth under the following headings is incorporated reference herein: headings “Directors’ Report for the year ended December 31, 2022—Related party transactions” on page 79, “Highlights of the Year – 2022” on page 1, and "Components of Our Value" on pages 6 to 7—"Founded Entities" on pages 12 to 14, in each case of PureTech’s “Annual Report and Accounts 2022” included as exhibit 15.1 to this annual report on Form 20-F and “Notes to the Consolidated Financial Statements—Note 24—Related Parties Transactions” of our audited consolidated financial statements included elsewhere in this annual report. For information regarding transactions with our Founded Entities, see Item 10.C - "Material Contracts."

C. INTERESTS OF EXPERTS AND COUNSEL

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

Consolidated Financial Statements

Please see the information below under the heading Item 18—"Financial Statements."

Dividend Distribution Policy

We have never declared or paid any dividends on our ordinary shares, though we may consider doing so in the future depending on the progression of our business. Under English law, we may only pay dividends if our accumulated realized profits, which have not been previously distributed or capitalized, exceed our accumulated realized losses, so far as such losses have not been previously written off in a reduction or reorganization of capital. Therefore, we must have sufficient distributable profits before issuing a dividend. Distributable profits are determined at the holding company level and not on a consolidated basis. Subject to such restrictions and to any restrictions set out in the Articles of Association, declaration and payment of cash dividends in the future, if any, will be at the discretion of our Board of Directors (the "Board") (and in the case of final dividends, must be approved by our shareholders), and will depend upon such factors as results of operations, capital requirements, contractual restrictions, our overall financial condition or applicable laws and any other factors deemed relevant by the Board.

Legal Proceedings

As of the date of this annual report, we were not party to any material legal matters or claims. In the future, we may become party to legal matters and claims arising in the ordinary course of business, the resolution of which we do not anticipate would have a material adverse impact on our financial position, results of operations or cash flows.

B. SIGNIFICANT CHANGES

Except as otherwise disclosed in this annual report on Form 20-F, no significant change has occurred since the date of the most recent financial statements included elsewhere in this annual report on Form 20-F.

ITEM 9. THE OFFER AND LISTING

A. OFFER AND LISTING DETAILS

Our American Depositary Shares ("ADSs") have been listed on The Nasdaq Global Market under the symbol “PRTC” since November 16, 2020. Prior to that date, there was no public trading market for our ADSs. Our ordinary shares have been trading on the main market of the London Stock Exchange since June 2015 under the ticker code “PRTC.” Prior to that date, there was no public trading market for our ordinary shares.

B. PLAN OF DISTRIBUTION

Not applicable.

C. MARKETS

Our ADSs have been listed on the Nasdaq Global Market under the symbol “PRTC” since November 16, 2020 and our ordinary shares have been listed on the main market of the London Stock Exchange since June 2015.

D. SELLING SHAREHOLDERS

Not applicable.

E. DILUTION

Not applicable.

F. EXPENSES OF THE ISSUE

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

A. SHARE CAPITAL

Not applicable.

B. MEMORANDUM AND ARTICLES OF ASSOCIATION

Objects

Section 31 of the Companies Act 2006 provides that the objects of a company are unrestricted unless any restrictions are set out in the articles. There are no such restrictions in our Articles of Association ("Articles") and our objects are therefore unrestricted.

A copy of our Articles is attached as Exhibit 1.1 to this annual report on Form 20-F. The information called for by this Item is set forth in Exhibit 2.3 to this annual report on Form 20-F for the year ended December 31, 2022.

C. MATERIAL CONTRACTS

Except as otherwise set forth below or as otherwise disclosed in this report, we are not currently, and have not been in the last two years, party to any material contract, other than contracts entered into in the ordinary course of business.

The PureTech Health plc Performance Share Plan, or PSP, and forms of award agreements thereunder were approved on June 18, 2015. Under the PSP and subsequent amendments, awards of ordinary shares may be made to the Directors, senior managers and employees of, and other individuals providing services to the Company and its subsidiaries up to a maximum authorized amount of 10.0 percent of the total ordinary shares outstanding. The shares have various vesting terms over a period of service between two and four years, provided the recipient remains continuously engaged as a service provider.

On August 10, 2018, we entered into a Lease Agreement with RBK I Tenant, LLC for certain premises of approximately 50,858 rentable square feet of space at 6 Tide Street, Boston, MA 02210. The lease commenced on April 26, 2019 for an initial term consisting of ten years and three months and there is an option to extend for two consecutive periods of five years each.

We have executed agreements with the members of the Board substantially in the form of our Form of Deed of Indemnity.

We entered into an Asset Purchase Agreement by and between Auspex Pharmaceuticals, Inc. and PureTech Health LLC, dated July 15, 2019, pursuant to which Auspex assigned and transferred all patent claims, inventory, technology, contracts and related rights relating to LYT-100 to us. As consideration, we paid an upfront payment, which we do not deem material. In addition, Auspex is eligible to receive milestone payments of approximately $84 million in the aggregate depending upon specified developmental, regulatory and commercial achievements. In addition, for ten years following the first commercial sale of any commercialized product containing LYT-100, Auspex is eligible to receive low to middle single-digit royalties on the worldwide net sales of such product.

We entered into a Royalty Agreement with Follica, Incorporated, dated July 23, 2013, pursuant to which Follica agreed to pay us a two percent royalty on net sales by Follica or its sublicensees of (i) products involving skin disruption using any mechanical, energy or chemical based approaches, applying compounds to the skin, or any other approaches to the treatment of hair follicles or other dermatological disorders commercialized by Follica, (ii) processes involving such products, or (iii) services which use or incorporate any such product or process. In the event that Follica sublicenses the rights to any of these products, processes or services, Follica will be obligated to pay us low teen royalties on any income received from the sublicensee. Either party may terminate this agreement upon an uncured material breach by the other party. To date, we have not received any royalty payments pursuant to this agreement. We do not direct or control the development and commercialization of the intellectual property licensed pursuant to this agreement.

We entered into a Royalty and Sublicense Income Agreement with Gelesis, dated December 18, 2009, pursuant to which we are required to provide certain funding, management services and services relating to intellectual property. In exchange, Gelesis is required to pay us a royalty equal to 2 percent of all net product sales and 10 percent of gross sublicense income received on certain food products as a result of developing hydrogel-based products that are covered by a licensed patent that has issued and has not been revoked or abandoned. The royalty rate is subject to customary downward adjustments in the event Gelesis is required to pay third parties to obtain a license to intellectual property rights that are necessary for Gelesis to develop or commercialize our products. There are no milestone payment obligations under this agreement. Management services provided by us include advisory services on corporate strategy, general and administrative support including office space, supplies and administrative support, payroll services and website development and support. Gelesis' obligation to pay royalties to us will terminate on a country-by-country basis upon termination or expiration of the underlying patents. To date, we have not received any royalty payments pursuant to this agreement. We do not direct or control the development and commercialization of the intellectual property sublicensed pursuant to this agreement.

We entered into an Exclusive Patent License Agreement with Karuna, dated March 4, 2011, pursuant to which we granted Karuna an exclusive license to patent rights relating to combinations of a muscarinic activator with a muscarinic inhibitor for the treatment of central nervous system disorders. Karuna agreed to make milestone payments to us of up to an aggregate of $10 million upon the achievement of specified development and regulatory milestones. In addition, for the term of this agreement Karuna is obligated to pay us low single-digit running royalties on the worldwide net sales of any commercialized product covered by the licenses granted under this agreement. In the event that Karuna sublicenses any of the patent rights granted under this agreement, Karuna will be obligated to pay us royalties within the range of 15 percent to 25 percent on any income received from the sublicensee, excluding royalties. Karuna may terminate this agreement for any reason with proper prior notice to us, provided that it would lose its rights to the underlying patents as a result. Either party may terminate this agreement upon an uncured material breach by the other party. To date, we have not received any royalty payments pursuant to this agreement. We do not direct or control the development and commercialization of the intellectual property licensed pursuant to this agreement.

We entered into a Research and License Agreement with New York University, or NYU, on March 6, 2017, pursuant to which NYU granted to us an exclusive worldwide license to patents relating to certain therapeutic candidates, including LYT-200. In connection with this agreement, we are required to pay an annual license fee in addition to milestone payments upon the achievement of certain clinical and commercial milestones, both of which we deem immaterial. Additionally, for the term of this agreement, we are obligated to make low single digit royalty payments on the net sales of any commercialized product covered by the license granted under the agreement. In the event that we sublicense any of the patent rights granted under the Research and License Agreement, we will be obligated to pay NYU a low teen percentage of any royalties received by such sublicensee, provided that such payments are capped at a low single digit of net sales of any commercialized product by such sublicensee.

Gelesis Business Combination and Other Transactions

On January 13, 2022, Gelesis, Capstar Special Acquisition Corp., a Delaware corporation ("CPSR"), and CPSR Gelesis Merger Sub, Inc., a Delaware corporation, and wholly-owned subsidiary of CPSR ("Merger Sub"), consummated a business combination ("Gelesis Merger") pursuant to the business combination agreement, dated July 19, 2021, as amended on November 8, 2021 (the "Gelesis Business Combination Agreement"). Pursuant to the terms of the Gelesis Business Combination Agreement, Merger Sub merged with and into Gelesis, with Gelesis surviving the merger as a wholly-owned subsidiary of CPSR. In connection with the consummation of the Merger on the Closing Date, CPSR changed its name to Gelesis Holdings, Inc ("GLS"). As a result of the Gelesis Merger, among other things, each common share of Gelesis that was issued and outstanding immediately prior to the effective time of the Merger, after giving effect to the conversion of all preferred shares of Gelesis into common shares of Gelesis immediately prior to the effective time, was canceled and converted into the right to receive a number of shares of GLS Common Stock equal to an exchange ratio of approximately 2.59 multiplied by the number of common shares of Gelesis held by such holder immediately prior to the effective time. In addition, (a) all vested and unvested stock options of Gelesis were assumed by GLS and (b) each warrant of Old Gelesis was cancelled in exchange for a warrant to purchase shares of GLS, in each case based on an implied equity value of $675,000,000 as of the Closing.

Concurrently with the execution of the Gelesis Business Combination Agreement, on July 19, 2021, CPSR entered into subscription agreements (the "Subscription Agreements") with certain investors, including us, pursuant to which we purchased 1.5 million shares of GLS common stock at a price of $10.00 per share, for an aggregate purchase price of $15.0 million (the "PIPE Financing"). The PIPE Financing was consummated concurrently with the closing of the Gelesis Merger.

On December 30, 2021, CPSR entered into a Backstop Agreement (the "Backstop Agreement") with us and SSD2, LLC ("SSD2" and together with us, the "Backstop Purchasers"), pursuant to which the Backstop Purchasers agreed to purchase an aggregate of up to 1,500,000 shares of GLS common stock immediately prior to the closing at a cash purchase price of $10.00 per share (the "Backstop Purchase Shares"), resulting in aggregate proceeds of up to $15.0 million, which amount, when added to the proceeds from the PIPE Financing, would ensure that the minimum cash condition would be satisfied. Based on the number of redemptions at closing, we purchased 496,145 shares for an aggregate price of $5.0 million. In addition, at the closing of the sale of the Backstop Purchase Shares, GLS issued an additional 1,322,500 shares of common stock to us.

On the closing on January 13, 2022, Gelesis, CPSR, certain former directors of CPSR (the "Director Holders") and certain former stockholders of Gelesis (collectively with Sponsor and the Director Holders, the "Holders"), including us, entered into an Amended and Restated Registration and Stockholder Rights Agreement, pursuant to which, among other things, the Holders agreed not to effect any sale or distribution of any equity securities of GLS held by any of them during a lock-up period (180 days after closing of the Gelesis Merger in the case of PureTech Health LLC), and GLS agreed to register for resale, pursuant to Rule 415 of the Securities Act of 1933, as amended, certain shares of common stock and other equity securities of GLS that are held by the parties thereto from time to time.

On July 25, 2022, GLS issued a short term promissory note in the aggregate principal amount of $15.0 million (the "Promissory Note") to us for a cash purchase price of $15.0 million as part of a series of promissory notes issued by GLS. On July 27, 2022, the Promissory Note was amended and restated to revise certain provisions contained therein.

Upon a Payment Default under the Promissory Note that has not been cured by GLS after five days, (x) GLS will be required to issue a warrant to us (a "Promissory Note Warrant") to purchase, at an exercise price of $0.01 per share, subject to adjustment, an aggregate of number of shares of GLS common stock equal to: (i) (A) 0.2 multiplied by (B) the amount of outstanding principal and accrued interest under the Promissory Note as of the date of conversion, divided by (ii) the volume weighted average price of the GLS common stock, as reported by the New York Stock Exchange (the "NYSE"), for the five trading days (the "Common Stock VWAP") occurring immediately prior to the date of exercise and (y) we may elect, at our option, to convert the outstanding principal and accrued interest under the Promissory Note into a number of shares of GLS common stock equal to (i) the amount of outstanding principal and accrued interest under the Promissory Note as of the date of conversion, divided by (ii) the lesser of the price per share of (A) the GLS common stock, as reported by the NYSE or (B) the Common Stock VWAP as of the day prior to the date of our conversion notice. The Promissory Note Warrant will be exercisable from the date of issuance and will expire on the date that is ten years from the date of issuance.

On February 21, 2023, we entered into a Note and Warrant Purchase Agreement (the "NPA") with GLS, Gelesis (together with GLS, the "Notes Issuers"), Gelesis 2012, Inc. and Gelesis, LLC, as guarantors of the Convertible Notes, pursuant to which, for a cash purchase price of $5.0 million, (i) the Notes Issuers issued a short term secured convertible note in the aggregate principal amount of $5.0 million (the "Convertible Notes" and such initial issuance, the "Initial Notes") to us and (ii) GLS issued warrants to purchase 23,688,047 shares of common stock of GLS (the "Warrants") to us. The Convertible Notes are guaranteed by the domestic subsidiaries of Gelesis and are secured by a first-priority lien on any and all assets of GLS, including without limitation, intellectual property, regulatory filings and product approvals, clearances and marks worldwide (other than the equity interests in Gelesis S.r.l. and assets held by Gelesis S.r.l.) and a pledge of the 100% of the equity interests of Gelesis and the domestic subsidiaries of the Notes Issuers. The Convertible Notes bear interest at a rate of 12% per annum, and mature on July 31, 2023, unless earlier converted or extended as described below. The Convertible Notes are not convertible, and the Warrants are not exercisable, until GLS receives stockholder approval of the issuance of the shares of common stock underlying the Convertible Note and the Warrants (the "Stockholder Approval") in accordance with the terms thereof. Upon

receipt of Stockholder Approval, (i) the Convertible Notes shall be convertible at our option into a number of shares of common stock equal to (x) the outstanding principal amount of such Note plus accrued and unpaid interest divided by (y) the Conversion Price (as defined in the Convertible Note) and (ii) the Warrants will become exercisable for a purchase price of $0.2744 per share.

In addition, pursuant to the NPA, we have agreed, upon the request of the Notes Issuers, to purchase from the Notes Issuers an additional $5.0 million principal amount of the Convertible Notes (the "Additional Notes"), and to purchase from GLS additional Warrants, representing warrant coverage of 170% of the principal amount of the Additional Notes, if (i) GLS and we, in our sole discretion, shall have agreed upon a satisfactory over-the-counter operating plan for GLS; (ii) GLS shall have successfully completed and submitted the usability study with respect to the OTC reclassification of its Plenity product; (iii) GLS shall have received Stockholder Approval on or prior to July 31, 2023; and (iv) other commercially reasonable customary conditions are satisfied.

If (i) GLS receives Stockholder Approval prior to July 31, 2023, and (ii) GLS receives proceeds from the sale of additional Convertible Notes to other investors of at least $10.0 million prior to July 31, 2023, the maturity date for all the Convertible Notes issued under the NPA shall be March 31, 2024.

During the terms of the Initial Notes and the Additional Notes, any term of any indebtedness, debt or equity-linked debt security incurred or issued by the Notes Issuers after the issuance of the Initial Notes that is more favorable than the terms of the Initial Notes or the Additional Notes (including warrant coverage), shall, at our option, automatically be incorporated into the Initial Notes, the Additional Notes and/or the Warrants (including warrant coverage).

The NPA provides that all shares of common stock issuable upon conversion of the Convertible Notes and upon exercise of the Warrants shall be entitled to registration rights which require GLS to file a shelf registration statement to register such shares for resale.

Akili Business Combination Transaction

On January 26, 2022, Akili entered into an Agreement and Plan of Merger (the "Akili Merger Agreement"), by and among Akili, Social Capital Suvretta Holdings Corp. I ("SCS"), and Karibu Merger Sub, Inc., a Delaware corporation and a direct wholly owned subsidiary of SCS ("Merger Sub"). Pursuant to the Akili Merger Agreement, among other things: (i) prior to the closing of the transactions contemplated by the Akili Merger Agreement, SCS will domesticate as a Delaware corporation in accordance with the DGCL, and the Cayman Islands Companies Act (As Revised), (ii) at the closing, upon the terms and subject to the conditions of the Merger Agreement, in accordance with the DGCL, Merger Sub will merge with and into Akili, with Akili continuing as the surviving corporation and a wholly owned subsidiary of SCS (the "Merger"), (iii) at the closing, all of the outstanding capital stock of Akili and all options and warrants to acquire capital stock of Akili will be converted into the right to receive shares of common stock, par value $0.0001 per share, of SCS (after its domestication) ("SCS Common Stock") or comparable equity awards that are settled or are exercisable for shares of SCS Common Stock, representing an aggregate of 60 million shares of SCS Common Stock, (iv) at the closing, SCS will be renamed "Akili, Inc." and (v) at the closing, SCS will deposit into an escrow account for the benefit of the pre-Closing Akili stockholders, optionholders and warrantholders an aggregate number of shares of SCS Common Stock equal to 7.5% of the fully diluted shares of SCS Common Stock (including shares reserved under the equity incentive plan to be adopted by the combined company in connection with the Closing), determined as of immediately following the Closing (collectively, the "Earnout Shares"), which Earnout Shares will be subject to release from escrow to the pre-Closing Akili stockholders, optionholders and warrantholders in three equal tranches upon the daily volume weighted average price of a share of SCS Common Stock reaching $15.00/share, $20.00/share and $30.00/share, respectively, over any 20 trading days within any 30 consecutive trading day period following the closing and prior to the fifth anniversary of the closing, in each case, on the terms set forth in the Akili Merger Agreement. The Closing is subject to the satisfaction or waiver of certain closing conditions contained in the Merger Agreement, including the approval of SCS's shareholders.

Sonde Stock Purchase Agreement

On May 25, 2022, we entered into a Series B Preferred Stock Purchase Agreement (the "Sonde Series B Agreement") with Sonde and other investors pursuant to which certain other investors purchased shares of Sonde's Series B Preferred Stock, and the $2.8 million principal amount and accrued interest outstanding under the convertible promissory notes previously issued to us by Sonde shall be converted into 1.1 million shares of Series B Preferred Stock of Sonde.

Royalty Pharma Royalty Purchase Agreement

On March 22, 2023, we entered into a Royalty Purchase Agreement (the "Royalty Pharma Agreement") with Royalty Pharma Investments 2019 ICAV ("Royalty Pharma"), pursuant to which Royalty Pharma acquired an interest in our royalty in Karuna's KarXT for aggregate payments to us of up to $500.0 million. Pursuant to the Royalty Pharma Agreement, Royalty Pharma will receive 100% of the royalty payments that we had a right to receive from Karuna until Royalty Pharma receives $60.0 million in such royalty payments during a calendar year, after which Royalty Pharma will receive 33% and we will receive 67% of such royalty payments for such calendar year. We received an upfront payment of $100.0 million from Royalty Pharma upon closing and are eligible to receive up to $400.0 million in additional payments upon the achievement of certain regulatory and commercial milestones related to KarXT.

Vedanta Note Purchase Agreement

On April 24, 2023, we entered into a Secured Convertible Promissory Note Purchase Agreement with Vedanta and other investors pursuant to which we purchased a secured convertible promissory note (the "Vedanta Note") from Vedanta in the principal amount of $5.0 million. The Vedanta Note bears interest at an annual rate of 9.0% and matures on the later of (i) November 1, 2025 and (ii) the date which is 60 days after all amounts owed under or in connection with Vedanta's loan and security agreement with K2 HealthVentures LLC (if then in effect and outstanding) have been paid in full. The Vedanta Note is mandatorily convertible in a qualified equity financing and a qualified public offering into shares of Vedanta's preferred stock or common stock, respectively. In addition, the Vedanta Note allows for optional conversion immediately prior to a non-qualified equity financing and for a pay-out in the case of a change of control transaction.

Voting and Investors' Rights Agreements

We are party to voting and investors' rights agreements with certain of our Founded Entities as described below:

- Pursuant to an Amended and Restated Investors' Rights Agreement, as amended, between Vedanta and certain of its investors, dated March 1, 2023, we are entitled to designate a total of four directors to Vedanta's board of directors, including (i) two directors for so long as PureTech Health LLC continues to hold a majority of Vedanta's Series A-1 preferred stock, and (ii) two directors for so long as PureTech Health LLC continues to hold a majority of Vedanta's Series B preferred stock. The execution of this agreement replaced and terminated the previous Amended and Restated Investors' Rights Agreement dated July 15, 2021, which had provided us with equivalent rights.
- Pursuant to an Amended and Restated Voting Agreement between Sonde and certain of its investors, dated May 25, 2022, we are entitled to designate one director to Sonde's board of directors for so long as PureTech Health LLC and its affiliates continue to hold at least 1,000,000 shares of Sonde's Series A-2 preferred stock. The execution of this agreement replaced and terminated the previous Voting Agreement dated April 9, 2019, which had provided us with equivalent rights.
- Pursuant to a Voting Agreement between Entrega and certain of its investors, dated December 18, 2017, we are entitled to designate four directors to Entrega's board of directors.
- Pursuant to the Fifth Amended and Restated Voting Agreement between Follica and certain of its investors, dated July 19, 2019, we are entitled to designate one director to Follica's board of directors for so long as PureTech Health LLC and its affiliates continue to own at least 1,000,000 shares of Follica's common stock.

Agreements with Founded Entities Restricting Sale of Shares in Connection with an Underwritten Offering

We are party to agreements containing market stand-off provisions with certain of our Founded Entities that restrict our ability to sell shares of such Founded Entities for 180 days (or for a period of time as specified below) after their initial public offerings or initial public listing through a business combination, or an underwritten offering, as follows:

- Amended and Restated Registration Rights Agreement, by and among Akili and the holders listed therein, dated as of August 19, 2022, which provides for a 90-day market stand-off period;
- Lock-Up Agreement, by and among Akili and the holders listed therein, dated as of August 19, 2022;
- Third Amended and Restated Investors' Rights Agreement between Akili and the investor parties named therein, dated May 25, 2021, the execution of which replaced and terminated the Second Amended and Restated Investors' Rights Agreement dated May 8, 2018, which had contained an equivalent restriction;
- Fifth Amended and Restated Investors' Rights Agreement between Follica and the investor parties named therein, dated July 19, 2019;
- Amended and Restated Investors' Rights Agreement between Vedanta, as amended, and the investor parties named therein, dated March 1, 2023, the execution of which replaced and terminated the previous Amended and Restated Investors' Rights Agreement dated July 15, 2021, which had contained an equivalent restriction;
- Investors' Rights Agreement between Entrega and the investor parties named therein, dated December 18, 2017;
- Amended and Restated Investors' Rights Agreement between Sonde and the investor parties named therein, dated May 25, 2022, the execution of which replaced and terminated the previous Investors' Rights Agreement dated April 9, 2019, which had contained an equivalent restriction;
- Amended and Restated Investors' Rights Agreement between Vor and the investor parties named therein, dated June 30, 2020, which terminated as of Vor's initial public offering, except for the registration rights granted thereunder;
- Amended and Restated Registration and Stockholders Rights Agreement dated January 13, 2022 between CPSR and the stockholder parties named therein, the execution of which terminated the Ninth Amended and Restated Stockholders Agreement between Gelesis and the stockholder parties named therein, dated December 5, 2019, which had contained an equivalent restriction; and
- The Backstop Agreement between CPSR and us, among others, dated December 30, 2021, which provides that certain shares acquired thereunder are subject to a 180-day market stand off provision.

Other Shareholder Rights Agreements

We have certain registration rights provisions in agreements with our Founded Entities as follows:

- Third Amended and Restated Investors' Rights Agreement between Akili and the investor parties named therein, dated May 25, 2021, the execution of which replaced and terminated the Second Amended and Restated Investors' Rights Agreement dated May 8, 2018, which had provided us with similar rights;
- Amended and Restated Registration Rights Agreement, by and among Akili and the holders listed therein, dated as of August 19, 2022;
- Fifth Amended and Restated Investors' Rights Agreement between Follica and the investor parties named therein, dated July 19, 2019;
- Amended and Restated Investors' Rights Agreement between Vedanta, as amended, and the investor parties named therein, dated March 1, 2023, the execution of which replaced and terminated the previous Amended and Restated Investors' Rights Agreement dated July 15, 2021, which had provided us with similar rights;
- Investors' Rights Agreement between Entrega and the investor parties named therein, dated December 18, 2017;
- Amended and Restated Investors' Rights Agreement between Sonde and the investor parties named therein, dated May 25, 2022, the execution of which replaced and terminated the previous Investors' Rights Agreement dated April 9, 2019, which had provided us with similar rights ;
- Amended and Restated Registration and Stockholders Rights Agreement dated January 13, 2022 between CPSR and the stockholder parties named therein, the execution of which terminated the Ninth Amended and Restated Stockholders Agreement between Gelesis and the stockholder parties named therein, dated December 5, 2019,which had provided us with similar rights;
- The Backstop Agreement between CPSR and us, among others, dated December 30, 2021;
- Subscription Agreement between CPSR and the investor parties thereto dated July 19, 2021; and
- Amended and Restated Investors' Rights Agreement between Vor and the investor parties named therein, dated June 30, 2020.

We have certain preemptive rights of first refusal with respect to transfers of shares by other holders pursuant to the following agreements:

- Fifth Amended and Restated Right of First Refusal and Co-Sale Agreement, dated July 19, 2019, by and among Follica, Incorporated and the investors and key holders party thereto;
- Amended and Restated Right of First Refusal and Co-Sale Agreement, dated May 25, 2022, by and between Sonde Health, Inc. and the investors and key holders party thereto, the execution of which replaced and terminated the previous Right of First Refusal and Co-Sale Agreement dated April 9, 2019, which had provided us with similar rights; and
- Right of First Refusal and Co-Sale Agreement, dated December 18, 2017, by and between Entrega, Inc. and the investors and key holders party thereto.

D. EXCHANGE CONTROLS

Other than certain economic sanctions which may be in place from time to time, there are currently no UK laws, decrees or other regulations restricting the import or export of capital or affecting the remittance of dividends or other payment to holders of ordinary shares who are non-residents of the United Kingdom. Similarly, other than certain economic sanctions which may be in force from time to time, there are no limitations relating only to nonresidents of the United Kingdom under English law or the Company's articles of association on the right to be a holder of, and to vote in respect of, the ordinary shares.

E. TAXATION

Certain United Kingdom Tax Considerations

The following is a general summary of certain U.K. tax considerations relating to the ownership and disposal of an ordinary share or ADS and does not address all possible tax consequences relating to an investment in an ordinary share or ADS. It is based on U.K. tax law and generally published HM Revenue & Customs, or HMRC, practice (which may not be binding on HMRC) as of the date of this annual report on Form 20-F, both of which are subject to change, possibly with retrospective effect.

Save as provided otherwise, this summary applies only to a person who is the absolute beneficial owner of an ordinary share or ADS and who is resident (and, in the case of an individual, domiciled) in the United Kingdom for tax purposes and who is not resident for tax purposes in any other jurisdiction and does not have a permanent establishment or fixed base in any other jurisdiction with which the holding of an ordinary share or ADS is connected (“U.K. Holders”). A person (a) who is not resident (or, if resident, is not domiciled) in the United Kingdom for tax purposes, including an individual and company who trades in the United Kingdom through a branch, agency or permanent establishment in the United Kingdom to which an ordinary share or ADS is attributable, or (b) who is resident or otherwise subject to tax in a jurisdiction outside the United Kingdom, is recommended to seek the advice of professional advisors in relation to their taxation obligations.

This summary is for general information only and is not intended to be, nor should it be considered to be, legal or tax advice to any particular investor. It does not address all of the tax considerations that may be relevant to specific investors in light of their particular circumstances or to investors subject to special treatment under U.K. tax law. In particular:

- this summary only applies to an absolute beneficial owner of an ordinary share or ADS and any dividend paid in respect of the ordinary share where the dividend is regarded for U.K. tax purposes as that person’s own income (and not the income of some other person);
- this summary: (a) only addresses the principal U.K. tax consequences for an investor who holds an ordinary share or ADS as a capital asset, (b) does not address the tax consequences that may be relevant to certain special classes of investor such as a dealer, broker or trader in shares or securities and any other person who holds an ordinary share or ADS otherwise than as an investment, (c) does not address the tax consequences for a holder that is a financial institution, insurance company, collective investment scheme, pension scheme, charity or tax-exempt organization, (d) assumes that a holder is not an officer or employee of the company (nor of any related company) and has not (and is not deemed to have) acquired the an ordinary share or ADS by virtue of an office or employment, and (e) assumes that a holder does not control or hold (and is not deemed to control or hold), either alone or together with one or more associated or connected persons, directly or indirectly (including through the holding of an ordinary share or ADS), an interest of 10 percent or more in the issued share capital (or in any class thereof), voting power, rights to profits or capital of the company, and is not otherwise connected with the company.

This summary further assumes that a holder of an ordinary share or ADS is the beneficial owner of the underlying ordinary share for U.K. direct tax purposes.

POTENTIAL INVESTORS IN THE ORDINARY SHARES OR ADSs SHOULD SATISFY THEMSELVES PRIOR TO INVESTING AS TO THE OVERALL TAX CONSEQUENCES, INCLUDING, SPECIFICALLY, THE CONSEQUENCES UNDER U.K. TAX LAW AND HMRC PRACTICE OF THE ACQUISITION, OWNERSHIP AND DISPOSAL OF THE ORDINARY SHARES OR ADSs, IN THEIR OWN PARTICULAR CIRCUMSTANCES BY CONSULTING THEIR TAX ADVISERS.

Taxation of Dividends

Withholding Tax

A dividend payment in respect of an ordinary share may be made without withholding or deduction for or on account of U.K. tax.

Income Tax

A dividend received by individual U.K. Holders may, depending on his or her particular circumstances, be subject to U.K. income tax on the gross amount of the dividend paid.

An individual holder of an ordinary share or ADS who is not a U.K. Holder will not be chargeable to U.K. income tax on a dividend paid by the company, unless such holder carries on (whether solely or in partnership) a trade, profession or vocation in the United Kingdom through a permanent establishment in the United Kingdom to which the ordinary share or ADS is

attributable. In these circumstances, such holder may, depending on his or her individual circumstances, be chargeable to U.K. income tax on a dividend received from the company.

All dividends received by a UK Holder from the Company or from other sources will form part of the UK Holder's total income for UK income tax purposes and will constitute the top slice of that income. The rate of U.K. income tax that is chargeable on dividends received in the tax year 2022/2023 by (i) an additional rate taxpayer is 39.35 percent, (ii) a higher rate taxpayer is 33.75 percent, and (iii) a basic rate taxpayer is 8.75 percent. A nil rate of income tax will apply to the first £2,000 of taxable dividend income received by an individual U.K. Holder in a tax year. Note that from April 6, 2023 the dividend allowance will be reduced to £1,000, and that from April 6, 2024 the dividend allowance is expected to be reduced again to £500.

Corporation Tax

A U.K. Holder within the charge to U.K. corporation tax may be entitled to exemption from U.K. corporation tax in respect of dividend payments, provided the dividends qualify for exemption (which is likely) and certain conditions are met (including anti-avoidance conditions). If the conditions for the exemption are not satisfied, or such U.K. Holder elects for an otherwise exempt dividend to be taxable, U.K. corporation tax will be chargeable on the gross amount of a dividend. If potential investors are in any doubt as to their position, they should consult their own professional advisers.

A corporate holder of an ordinary share or ADS that is not a U.K. Holder will not be subject to U.K. corporation tax on a dividend received from the company, unless it carries on a trade in the United Kingdom through a permanent establishment to which the ordinary share or ADS is attributable. In these circumstances, such holder may, depending on its individual circumstances and if the exemption from U.K. corporation tax discussed above does not apply, be chargeable to U.K. corporation tax on dividends received from the company.

Taxation of Disposals

U.K. Holders

A disposal or deemed disposal of an ordinary share or ADS by an individual U.K. Holder may, depending on his or her individual circumstances, give rise to a chargeable gain or to an allowable loss for the purpose of U.K. capital gains tax. The principal factors that will determine the capital gains tax position on a disposal of an ordinary share or ADS are the extent to which the holder realizes any other capital gains in the tax year in which the disposal is made, the extent to which the holder has incurred capital losses in that or any earlier tax year and the level of the annual exemption for tax-free gains in that tax year (the "annual exemption"). The annual exemption for the 2023/2024 tax year is £12,300. Note that from April 6, 2023 the annual exemption will be reduced to £6,000, and that from April 6, 2024 the annual exemption is expected to be reduced again to £3,000. If, after all allowable deductions, an individual U.K. Holder's total taxable income for the year exceeds the basic rate income tax limit, a taxable capital gain accruing on a disposal of an ordinary share or an ADS is taxed at the rate of 20 percent. In other cases, a taxable capital gain accruing on a disposal of an ordinary share or ADS may be taxed at the rate of 10 percent save to the extent that any capital gains exceed the unused basic rate tax band. In that case, the rate currently applicable to the excess would be 20 percent.

An individual U.K. Holder who ceases to be resident in the United Kingdom (or who fails to be regarded as resident in a territory outside the United Kingdom for the purposes of double taxation relief) for a period of five tax years or less than five years and who disposes of an ordinary share or ADS during that period of temporary non-residence may be liable to U.K. capital gains tax on a chargeable gain accruing on such disposal on his or her return to the United Kingdom (or upon ceasing to be regarded as resident outside the United Kingdom for the purposes of double taxation relief) (subject to available exemptions or reliefs).

A disposal (or deemed disposal) of an ordinary share or ADS by a corporate U.K. Holder may give rise to a chargeable gain or an allowable loss for the purpose of U.K. corporation tax. Any gain or loss in respect of currency fluctuations over the period of holding an ordinary share or an ADS are also brought into account on a disposal.

Non-U.K. Holders

An individual holder who is not a U.K. Holder should not normally be liable to U.K. capital gains tax on capital gains realized on the disposal of an ordinary share or ADS unless such holder carries on (whether solely or in partnership) a trade, profession or vocation in the United Kingdom through a permanent establishment in the United Kingdom to which the ordinary share or ADS is attributable. In these circumstances, such holder may, depending on his or her individual circumstances, be chargeable to U.K. capital gains tax on chargeable gains arising from a disposal of his or her ordinary share or ADS.

A corporate holder of an ordinary share or ADS that is not a U.K. Holder will not be liable for U.K. corporation tax on chargeable gains realized on the disposal of an ordinary share or ADS unless: (i) it carries on a trade in the United Kingdom through a permanent establishment to which the ordinary share or ADS is attributable; or (ii) the corporate holder is disposing of an interest in a company and that disposal is of an asset that derives 75 percent or more of its gross asset value from UK land and that holder has a substantial indirect interest in UK land (broadly at least 25 percent at any time during the previous two years). In these circumstances, a disposal (or deemed disposal) of an ordinary share or ADS by such holder may give rise to a chargeable gain or an allowable loss for the purposes of U.K. corporation tax.

Inheritance Tax

If, for the purposes of the Double Taxation Relief (Taxes on Estates of Deceased Persons and on Gifts) Treaty United States of America Order 1979 (S1 1979/1454) between the United States and the United Kingdom, an individual holder is domiciled at the time of their death or at the time of a transfer made during their lifetime in the United States and is not a national of the United Kingdom, any ordinary share or ADS beneficially owned by that holder should not generally be subject to U.K. inheritance tax, provided that any applicable U.S. federal gift or estate tax liability is paid, except where (i) the ordinary share or ADS is part of the business property of a U.K. permanent establishment or pertain to a U.K. fixed base used for the performance of independent personal services; or (ii) the ordinary share or ADS is comprised in a settlement unless, at the time the settlement was made, the settlor was domiciled in the United States and not a national of the U.K. (in which case no charge to U.K. inheritance tax should apply).

Stamp Duty and Stamp Duty Reserve Tax

The stamp duty and stamp duty reserve tax, or SDRT, treatment of the issue, transfer and agreement to transfer an ordinary share outside a depositary receipt system or a clearance service are discussed in the paragraphs under "General" below. The stamp duty and SDRT treatment of such transactions in relation to such systems are discussed in the paragraphs under "Depositary Receipt Systems and Clearance Services" below. The discussion below relates to the holders of our ordinary shares or ADSs wherever resident, however it should be noted that special rules may apply to certain persons such as market makers, brokers, dealers or intermediaries.

General

Issue of Ordinary Shares or ADSs

The issue of an ordinary share or ADS does not give rise to a SDRT liability, according to the HM Revenue & Customs practice and recent case law and is not subject to stamp duty.

Transfer of Ordinary Shares

A transfer of an ordinary share will generally be subject to stamp duty at the rate of 0.5 percent of the consideration given for the transfer (rounded up to the next £5). An exemption from stamp duty is available on an instrument transferring an ordinary share where the amount or value of the consideration is £1,000 or less, and it is certified on the instrument that the transaction effected does not form part of a larger transaction or series of transactions in respect of which the aggregate amount or value of the consideration exceeds £1,000. The purchaser normally pays the stamp duty.

An unconditional agreement to transfer an ordinary share will normally give rise to a charge to SDRT at the rate of 0.5 percent of the amount or value of the consideration payable for the transfer. SDRT is, in general, payable by the purchaser. If a duly stamped transfer completing an agreement to transfer is produced within six years of the date on which the agreement is made (or, if the agreement is conditional, the date on which the agreement becomes unconditional) any SDRT already paid is generally repayable, normally with interest, and any SDRT charge yet to be paid is cancelled.

Transfer of ADSs

No stamp duty will, in practice, be payable on a written instrument transferring an ADS or on an unconditional agreement to transfer an ADS provided the instrument of transfer or the unconditional agreement to transfer is executed and remains at all times outside the UK. Where these conditions are not met, the transfer of, or agreement to transfer, an ADS could, depending on the circumstances, attract a charge to U.K. stamp duty at the rate of 0.5 percent of the value of the consideration. No SDRT will be payable in respect of an agreement to transfer an ADS.

Depositary Receipt Systems and Clearance Services

Based on current HM Revenue & Customs practice and recent case law in respect of the European Council Directives 69/335/EC and 2009/7/EC, or the Capital Duties Directives, no SDRT is generally payable when shares are issued or transferred to a clearance service or depositary receipt system as an integral part of a raising of capital. HM Revenue & Customs has confirmed that it will continue not to apply the 1.5 percent stamp duty and SDRT charge on the issue of shares (and transfers integral to the raising of capital) into overseas clearance systems and depository receipt issuers once the U.K. leaves the European Union. In addition, a recent Court of Justice of the European Union judgment (Air Berlin plc v HM Revenue & Customs (2017)) held on the relevant facts that the Capital Duties Directives preclude the taxation of a transfer of legal title to shares for the sole purpose of listing those shares on a stock exchange which does not impact the beneficial ownership of the shares, but, as yet, the U.K. domestic law and HM Revenue & Customs' published practice remain unchanged and, accordingly, we anticipate that amounts on account of SDRT will continue to be collected by the depositary receipt issuer or clearance service. Holders of ordinary shares should consult their own independent professional advisers before incurring or reimbursing the costs of such a 1.5 percent SDRT charge.

Where an ordinary share or ADS is otherwise transferred (i) to, or to a nominee or an agent for, a person whose business is or includes the provision of clearance services or (ii) to, or to a nominee or an agent for a person whose business is or includes issuing depositary receipts, stamp duty or SDRT will generally be payable at the higher rate of 1.5 percent of the amount or value of the consideration given or, in certain circumstances, the value of the shares.

There is an exception from the 1.5 percent charge on the transfer to, or to a nominee or agent for, a clearance service where the clearance service has made and maintained an election under section 97A(1) of the Finance Act 1986, which has been approved by HM Revenue & Customs. It is understood that HM Revenue & Customs regards the facilities of DTC as a clearance service for these purposes and we are not aware of any section 97A election having been made by the DTC.

Any liability for stamp duty or SDRT in respect of a transfer into a clearance service or depositary receipt system, or in respect of a transfer within such a service, which does arise will strictly be accountable by the clearance service or depositary receipt system operator or their nominee, as the case may be, but will, in practice, be borne by the participants in the clearance service or depositary receipt system.

Repurchase of Ordinary Shares

U.K. stamp duty will generally be due at a rate of 0.5% of the consideration paid (rounded up to the next £5.00) on a repurchase by the company of its ordinary shares.

Taxation in the United States

The following discussion is a summary of the material U.S. federal income tax consequences to U.S. Holders and Non-U.S. Holders, each as defined below, of the acquisition, ownership and disposition of our ordinary shares or ADSs, but does not purport to be a comprehensive discussion of all the tax considerations that may be relevant to a decision to purchase our ordinary shares or ADSs. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws, are not discussed. This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, or the Code, U.S. Treasury Regulations promulgated thereunder, published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or the IRS, and judicial decisions, in each case as available on the date of this annual report on Form 20-F. All of the foregoing are subject to change, which change could apply retroactively and could affect the tax consequences described below. We have not, and will not, seek a ruling from the IRS with regard to the U.S. federal income tax treatment of an investment in our ordinary shares or ADSs, and there can be no assurance the IRS or a court will agree with the discussion below. This discussion is limited to U.S. Holders and Non-U.S. Holders of our ordinary shares or ADSs. This discussion addresses only the U.S. federal income tax considerations for holders that our ordinary shares or ADSs as capital assets within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax matters that may be relevant to a particular holder, including the impact of the Medicare contribution tax on net investment income and the alternative minimum tax. Each prospective investor should consult a professional tax advisor with respect to the tax consequences of the acquisition, ownership or disposition of our ordinary shares or ADSs. In addition, this discussion does not address tax considerations applicable to a holder of our ordinary shares or ADSs that may be subject to special tax rules including, without limitation, the following:

- U.S. expatriates and former citizens or long-term residents of the United States;
- banks or other financial institutions;
- insurance companies;
- dealers or traders in securities, currencies, or notional principal contracts;
- tax-exempt entities, including an “individual retirement account” or “Roth IRA” retirement plan;
- regulated investment companies or real estate investment trusts;
- “qualified foreign pension funds,” or entities wholly owned by a “qualified foreign pension fund”;
- persons who have elected to mark securities to market;
- tax-exempt organizations or governmental organizations;
- persons that hold our ordinary shares as part of a hedge, straddle, conversion, constructive sale or similar transaction involving more than one position;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);
- "controlled foreign corporations," "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;
- persons who acquired our ordinary shares or ADSs as compensation for the performance of services;
- “qualified foreign pension funds” as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds;
- holders that own (or are deemed to own) 10 percent or more of our ordinary shares or ADSs, by vote or value; and
- U.S. Holders that have a “functional currency” other than the U.S. dollar.

If an entity treated as a partnership or other pass-through entity for U.S. federal income tax purposes holds our ordinary shares or ADSs, the tax treatment of a partner in the partnership will generally depend upon the status of the partner, the activities of the partnership and certain determinations made at the partner level. A partner in a partnership or other pass-through entity that hold our ordinary shares or ADSs should consult his, her or its tax advisor regarding the tax consequences of acquiring, holding and disposing of our ordinary shares or ADSs through a partnership or other pass-through entity, as applicable.

For the purposes of this discussion, a “U.S. Holder” is a beneficial owner of our ordinary shares or ADSs that is (or is treated as), for U.S. federal income tax purposes:

- an individual who is either a citizen or resident of the United States;
- a corporation created or organized in or under the laws of the United States, any state of the United States or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust, if (1) a court within the United States is able to exercise primary supervision over its administration and one or more "United States persons" (within the meaning of Section 7701(a)(3) of the Code) have the authority to control all of the substantial decisions of such trust or (2) such trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a United States person for U.S. federal income tax purposes.

For purposes of this discussion, a "Non-U.S. Holder" is a beneficial owner of our ordinary shares or ADSs that is not a U.S. Holder.

THIS DISCUSSION IS NOT TAX ADVICE. PERSONS CONSIDERING AN INVESTMENT IN ORDINARY SHARES OR ADSs SHOULD CONSULT THEIR TAX ADVISORS AS TO THE PARTICULAR TAX CONSEQUENCES APPLICABLE TO THEM RELATING TO THE ACQUISITION, OWNERSHIP AND DISPOSITION OF OUR ORDINARY SHARES OR ADSs, INCLUDING THE APPLICABILITY OF U.S. FEDERAL, STATE AND LOCAL TAX LAWS, ANY NON-U.S. TAX LAWS AND ANY INCOME TAX TREATY.

Ownership of ADSs

For U.S. federal income tax purposes, a holder of ADSs generally will be treated as the owner of the ordinary shares represented by such ADSs. Gain or loss will generally not be recognized on account of exchanges of ordinary shares for ADSs, or of ADSs for ordinary shares. References to ordinary shares in the discussion below are deemed to include ADSs, unless context otherwise requires.

Treatment of the Company as a Domestic Corporation for U.S. Federal Income Tax Purposes

Even though we are incorporated under the laws of England and Wales, due to the circumstances of its formation and the application of Section 7874 of the Code, the Company is treated as a U.S. domestic corporation for U.S. federal income tax purposes. This has implications for all shareholders; we are subject to U.S. federal income tax as if we were a U.S. corporation, and distributions made by us are generally treated as U.S.-source dividends as described below and generally subject to U.S. dividend withholding tax.

U.S. Holders

Distributions

As described in the section entitled "Dividend Distribution Policy," we have never declared or paid any dividends on our ordinary shares, though we may consider doing so in the future depending on the progression of our business. If we do make distributions of cash or property on our ordinary shares or ADSs, such distributions will be treated as U.S.-source dividends includible in the gross income of a U.S. Holder as ordinary income to the extent of the our current and accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent the amount of a distribution exceeds tour current and accumulated earnings and profits, the distribution will be treated first as a non-taxable return of capital to the extent of a U.S. Holder's adjusted tax basis in the ordinary shares or ADSs and thereafter as gain from the sale of such ordinary shares or ADSs. Subject to applicable limitations and requirements, dividends received on the ordinary shares or ADSs generally should be eligible for the "dividends received deduction" available to corporate shareholders. A dividend paid by us to a non-corporate U.S. Holder generally will be eligible for preferential rates if certain holding period requirements are met.

The U.S. dollar value of any distribution made by us in foreign currency will be calculated by reference to the exchange rate in effect on the date of the U.S. Holder's actual or constructive receipt of such distribution, regardless of whether the foreign currency is in fact converted into U.S. dollars. If the foreign currency is converted into U.S. dollars on such date of receipt, the U.S. Holder generally will not recognize foreign currency gain or loss on such conversion. If the foreign currency is not converted into U.S. dollars on the date of receipt, such U.S. Holder will have a basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Any gain or loss on a subsequent conversion or other taxable disposition of the foreign currency generally will be U.S.-source ordinary income or loss to such U.S. Holder.

Sale or Other Taxable Disposition

A U.S. Holder will recognize gain or loss for U.S. federal income tax purposes upon a sale or other taxable disposition of its ordinary shares or ADSs in an amount equal to the difference between the amount realized from such sale or disposition and the U.S. Holder's adjusted tax basis in the ordinary shares or ADSs. A U.S. Holder's adjusted tax basis in the ordinary shares or ADSs generally will be the U.S. Holder's cost for such ordinary shares or ADSs. Any such gain or loss generally will be U.S.-source capital gain or loss and will be long-term capital gain or loss if, on the date of sale or disposition, such U.S. Holder held the ordinary shares or ADSs for more than one year. Long-term capital gains derived by non-corporate U.S. Holders are eligible for taxation at reduced rates. The deductibility of capital losses is subject to significant limitations.

Information Reporting And Backup Withholding

Payments of distributions on or proceeds arising from the sale or other taxable disposition of ordinary shares or ADSs generally will be subject to information reporting, and they may be subject to backup withholding if a U.S. Holder (i) fails to furnish such U.S. Holder's correct U.S. taxpayer identification number (generally on IRS Form W-9), (ii) furnishes an incorrect U.S. taxpayer identification number, (iii) is notified by the IRS that such U.S. Holder has previously failed to properly report items subject to backup withholding, or (iv) fails to certify under penalty of perjury that such U.S. Holder has furnished its correct U.S. taxpayer identification number and that the IRS has not notified such U.S. Holder that it is subject to backup withholding.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Non-U.S. Holders

Distributions

As described in the section entitled "Dividend Distribution Policy," we have never declared or paid any dividends on our ordinary shares, though we may consider doing so in the future depending on the progression of our business. If we do make distributions of cash or property on our ordinary shares or ADSs, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a Non-U.S. Holder's adjusted tax basis in its ordinary shares or ADSs, but not below zero. Any excess will be treated as capital gain and will be treated as described below under "—Sale or Other Taxable Disposition."

Subject to the discussion below on effectively connected income, dividends paid to a Non-U.S. Holder will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided the Non-U.S. Holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). A Non-U.S. Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

If dividends paid to a Non-U.S. Holder are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent

establishment in the United States to which such dividends are attributable), the Non-U.S. Holder will be exempt from the U.S. federal withholding tax described above. To claim the exemption, the Non-U.S. Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI, certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States.

Any such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

Sale or Other Taxable Disposition

A Non-U.S. Holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other taxable disposition of our ordinary shares or ADSs unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such gain is attributable);
- the Non-U.S. Holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our ordinary shares or ADSs constitutes a U.S. real property interest ("USRPI") by reason of our status as a U.S. real property holding corporation ("USRPHC") for U.S. federal income tax purposes.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

A Non-U.S. Holder described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on gain realized upon the sale or other taxable disposition of our ordinary shares or ADSs, which may be offset by U.S. source capital losses of the Non-U.S. Holder (even though the individual is not considered a resident of the United States), provided the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we currently are not, and do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends, however, on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance we currently are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition of our ordinary shares or ADSs by a Non-U.S. Holder will not be subject to U.S. federal income tax if our ordinary shares or ADSs is "regularly traded," as defined by applicable Treasury Regulations, on an established securities market and such Non-U.S. Holder owned, actually and constructively, 5% or less of our ordinary shares or ADSs throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the Non-U.S. Holder's holding period.

Non-U.S. Holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Payments of dividends on our ordinary shares or ADSs will not be subject to backup withholding, provided the applicable withholding agent does not have actual knowledge or reason to know the holder is a United States person and the holder either certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E, or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any distributions on our ordinary shares or ADSs paid to the Non-U.S. Holder, regardless of whether such distributions constitute dividends or whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our ordinary shares or ADSs within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting if the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that such holder is a United States person or the holder otherwise establishes an exemption. Proceeds of a disposition of our ordinary shares or ADSs conducted through a non-U.S. office of a non-U.S. broker generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code (such Sections commonly referred to as the Foreign Account Tax Compliance Act, or FATCA) on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or (subject to the proposed Treasury Regulations discussed below) gross proceeds from the sale or other disposition of, our ordinary shares or ADSs paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States

owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on our ordinary shares or ADSs. While withholding under FATCA would have applied also to payments of gross proceeds from the sale or other disposition of stock on or after January 1, 2019, proposed Treasury Regulations eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers generally may rely on these proposed Treasury Regulations until final Treasury Regulations are issued.

F. DIVIDENDS AND PAYING AGENTS

Not applicable.

G. STATEMENT BY EXPERTS

Not applicable.

H. DOCUMENTS ON DISPLAY

We are required to make certain filings with the SEC. The SEC maintains a website at http://www.sec.gov from which filings may be accessed.

We also make available on our website, free of charge, our annual reports on Form 20-F and the text of our reports on Form 6-K, including any amendments to these reports, as well as certain other SEC filings, as soon as reasonably practicable after they are electronically filed with or furnished to the SEC. Our website address is www.puretechhealth.com. The information contained on our website is not incorporated by reference into this annual report on Form 20-F.

I. SUBSIDIARY INFORMATION

Not applicable.

J. ANNUAL REPORT TO SECURITY HOLDERS

Not applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The information (including graphs and tabular data) set forth under the following headings is incorporated by reference herein: “Quantitative and Qualitative Disclosures about Financial Risks” on pages 63 to 64 of PureTech’s “Annual Report and Accounts 2022” included as exhibit 15.1 to this annual report on Form 20-F and in “Financial Statements—Notes to the Consolidated Financial Statements—Note 22.—Capital and Financial Risk Management” in the audited consolidated financial statements included elsewhere in this annual report on Form 20-F.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

A. DEBT SECURITIES

Not applicable.

B. WARRANTS AND RIGHTS

Not applicable.

C. OTHER SECURITIES

Not applicable.

D. AMERICAN DEPOSITARY SHARES

Our ADSs are registered with Citibank, N.A., as depositary . Each ADS represents ten ordinary shares (or a right to receive ten ordinary shares) deposited with Citibank, N.A. (London), as custodian for the depositary in the United Kingdom. Citibank's depositary offices are located at 388 Greenwich Street, New York, New York, 10013. ADSs represent ownership interests in securities that are on deposit with the depositary bank. ADSs may be represented by certificates that are commonly known as "American Depositary Receipts" or "ADRs." The depositary bank typically appoints a custodian to safekeep the securities on deposit. In this case, the custodian is Citibank, N.A.—London Branch, located at Citigroup Centre Canary Wharf, London E14 5LB D.

A deposit agreement among us, the depositary, ADS holders and beneficial owners of ADSs issued thereunder sets out ADS holder rights as well as the rights and obligations of the depositary. New York law governs the deposit agreement and the ADSs. A copy of the deposit agreement is incorporated by reference as an exhibit to this annual report on Form 20-F.

Fees and Charges

As an ADS holder, you will be required to pay the following fees under the terms of the deposit agreement:

SERVICE	FEES
• Issuance of ADSs (e.g., an issuance of ADS upon a deposit of ordinary shares, upon a change in the ADS(s)-to-ordinary share(s) ratio, or for any other reason), excluding ADS issuances as a result of distributions of ordinary shares)	Up to U.S.$0.05 per ADS issued
• Cancellation of ADSs (e.g., a cancellation of ADSs for delivery of deposited property, upon a change in the ADS(s)-to-ordinary share(s) ratio, or for any other reason)	Up to U.S.$0.05 per ADS cancelled
• Distribution of cash dividends or other cash distributions (e.g., upon a sale of rights and other entitlements)	Up to U.S.$0.05 per ADS held
• Distribution of ADSs pursuant to (i) share dividends or other free share distributions, or (ii) exercise of rights to purchase additional ADSs	Up to U.S.$0.05 per ADS held
• Distribution of securities other than ADSs or rights to purchase additional ADSs (e.g., upon a spin-off)	Up to U.S.$0.05 per ADS held
• ADS Services	Up to U.S.$0.05 per ADS held on the applicable record date(s) established by the depositary bank
• Registration of ADS transfers (e.g., upon a registration of the transfer of registered ownership of ADSs, upon a transfer of ADSs into DTC and vice versa, or for any other reason)	Up to U.S.$0.05 per ADS (or fraction thereof) transferred
• Conversion of ADSs of one series for ADSs of another series (e.g., upon conversion of partial entitlement ADSs for full entitlement ADSs, or upon conversion of restricted ADSs (each as defined in the deposit agreement) into freely transferable ADSs, and vice versa).	Up to U.S.$0.05 per ADS (or fraction thereof) converted

As an ADS holder you will also be responsible to pay certain charges such as:

- taxes (including applicable interest and penalties) and other governmental charges;
- the registration fees as may from time to time be in effect for the registration of ordinary shares on the share register and applicable to transfers of ordinary shares to or from the name of the custodian, the depositary bank or any nominees upon the making of deposits and withdrawals, respectively;
- certain cable, telex and facsimile transmission and delivery expenses;
- the fees, expenses, spreads, taxes and other charges of the depositary bank and/or service providers (which may be a division, branch or affiliate of the depositary bank) in the conversion of foreign currency;
- the reasonable and customary out-of-pocket expenses incurred by the depositary bank in connection with compliance with exchange control regulations and other regulatory requirements applicable to ordinary shares, ADSs and ADRs; and
- the fees, charges, costs and expenses incurred by the depositary bank, the custodian, or any nominee in connection with the ADR program.

ADS fees and charges for (i) the issuance of ADSs, and (ii) the cancellation of ADSs are charged to the person for whom the ADSs are issued (in the case of ADS issuances) and to the person for whom ADSs are cancelled (in the case of ADS cancellations). In the case of ADSs issued by the depositary bank into DTC, the ADS issuance and cancellation fees and charges may be deducted from distributions made through DTC, and may be charged to the DTC participant(s) receiving the ADSs being issued or the DTC participant(s) holding the ADSs being cancelled, as the case may be, on behalf of the beneficial owner(s) and will be charged by the DTC participant(s) to the account of the applicable beneficial owner(s) in accordance with the procedures and practices of the DTC participants as in effect at the time. ADS fees and charges in respect of distributions and the ADS service fee are charged to the holders as of the applicable ADS record date. In the case of distributions of cash, the amount of the applicable ADS fees and charges is deducted from the funds being distributed. In the case of (i) distributions other than cash and (ii) the ADS service fee, holders as of the ADS record date will be invoiced for the amount of the ADS fees and charges and such ADS fees and charges may be deducted from distributions made to holders of ADSs. For ADSs held through DTC, the ADS fees and charges for distributions other than cash and the ADS service fee may be deducted from distributions made through DTC, and may be charged to the DTC participants in accordance with the procedures and practices prescribed by DTC and the DTC participants in turn charge the amount of such ADS fees and charges to the beneficial owners for whom they hold ADSs. In the case of (i) registration of ADS transfers, the ADS transfer fee will be payable by the ADS Holder whose ADSs are being transferred or by the person to whom the ADSs are transferred, and (ii) conversion of ADSs of one series for ADSs of another series, the ADS conversion fee will be payable by the Holder whose ADSs are converted or by the person to whom the converted ADSs are delivered.

In the event of refusal to pay the depositary bank fees, the depositary bank may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set off the amount of the depositary bank fees from any distribution to be made to the ADS holder. Certain depositary fees and charges (such as the ADS services fee) may become payable shortly after the purchase of ADSs. Note that the fees and charges you may be required to pay may vary over time and may be changed by us and by the depositary bank. You will receive prior notice of such changes. The depositary bank may reimburse us for certain expenses incurred by us in respect of the ADR program, by making available a portion of the ADS fees charged in respect of the ADR program or otherwise, upon such terms and conditions as we and the depositary bank agree from time to time.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

Not applicable.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Not applicable.

ITEM 15. CONTROLS AND PROCEDURES

A. Disclosure Controls and Procedures

We maintain "disclosure controls and procedures" as defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are designed to ensure that information required to be disclosed by us in the reports that are filed or submitted under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and is accumulated and communicated to the management of our company, including our Chief Executive Officer and Chief Financial Officer, as appropriately to allow timely decisions regarding required disclosure. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance of achieving their control objectives. Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Exchange Act Rule 13a-15(b) as of December 31, 2022. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2022, our disclosure controls and procedures were effective at the reasonable assurance level.

B. Management's annual report on internal control over financial reporting.

In accordance with the requirements of section 404 of Sarbanes-Oxley, the following report is provided by management in respect of the Company's internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)):

- Management is responsible for establishing and maintaining adequate internal control over financial reporting for the Group. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with UK-adopted International Financial Reporting Standards, which audited consolidated financial statements also fully comply with International Financial Reporting Standards as issued by the International Accounting Standards Board;
- Management, including our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of internal control over financial reporting based on the framework in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission;
- Based on their assessment under these criteria, our management has concluded that as of December 31, 2022, our internal control over financial reporting was effective.

C. Attestation Report of the Registered Public Accounting Firm

KPMG, an independent registered public accounting firm, audited the financial statements included in this annual report on Form 20-F issued an attestation report on the Group's internal control over financial reporting as set forth below.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors

PureTech Health PLC:

Opinion on Internal Control Over Financial Reporting

We have audited PureTech Health PLC's and subsidiaries' (the Group) internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Group maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statements of financial position of PureTech Health PLC and subsidiaries (the Group) as of December 31, 2022 and 2021, the related consolidated statements of comprehensive income / (loss), changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2022 and the related notes (collectively, the consolidated financial statements), and our report dated April 27, 2023 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Group's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's annual report on internal control over financial reporting. Our responsibility is to express an opinion on the Group's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP
KPMG LLP

London, United Kingdom

27 April, 2023

D. Changes in Internal Control Over Financial Reporting

Other than the remediation of a previously disclosed material weaknesses as discussed below, there were no changes in our internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f)) that occurred during the period covered by this annual report on Form 20-F that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Remediation of Prior Material Weakness

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of a company's annual or interim financial statements will not be prevented or detected on a timely basis.

In connection with the audit of our consolidated financial statements as of and for the years ended December 31, 2021 and 2020, we identified a material weakness related to the risk assessment process over the design and implementation of management review controls over the valuation of financial instruments, the completeness and accuracy of related sensitivity disclosures, the valuation of share based payment liabilities and completeness and accuracy of the tax provision. There was insufficient precision in and documentation of the performance of such review controls resulting in controls not being designed in a way to sufficiently address the level of aggregation and criteria for investigation. Additionally, management did not completely identify the information used in the control and did not design sufficient controls to address the relevance and reliability of such information.

In response to this material weakness, the Company took certain steps in its remediation plan, including (i) improving the processes and internal controls related to the valuation of financial instruments and share based payment liabilities, the related sensitivity disclosures, and the tax provision, (ii) disaggregating the management review controls to address the specific risks associated with these items, and (iii) implementing more robust procedures over the documentation of the performance of these management review controls. As of December 31, 2022, we concluded that this material weakness has been remediated.

ITEM 16. RESERVED

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that each of Christopher Viehbacher and Sharon Barber-Lui, independent directors (under the standards set forth in Nasdaq Stock Market Rule 5605(a)(2) and Rule 10A-3 under the Exchange Act) and members of our audit committee, are each an audit committee financial expert.

ITEM 16B. CODE OF ETHICS

Our Board of Directors has adopted a written Code of Business Conduct and Ethics. The Code of Business Conduct and Ethics applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. A current copy of the code is posted on the investor relations section of our website, which is located at www.puretechhealth.com.The information contained on, or that can be accessed through, our website is not and shall not be deemed to be part of this annual report on Form 20-F. Our Code of Business Conduct and Ethics is intended to meet the definition of "code of ethics" under Item 16B of Form 20-F under the Exchange Act. We will disclose on our website any amendment to, or waiver from, a provision of our Code of Business Conduct and Ethics that applies to our directors or executive officers to the extent required under the rules of the SEC or Nasdaq.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the aggregate fees for professional services rendered by KPMG LLP in 2022 and 2021.

For the years ending December 31,	**2022 $000s**	2021 $000s
Audit fees	**3,099**	**3,434**
Audit-related fees	**—**	—
Tax fees	**—**	—
All other fees	**—**	—
Total	**3,099**	3,434

The information set forth or referenced under the heading "Report of the Audit Committee" on pages 83 to 85 of PureTech's "Annual Report and Accounts 2022" included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

The Audit Committee evaluates the qualifications, independence and performance of the independent auditor as well as pre-approves and reviews the audit and non-audit services to be performed by the independent auditor. In accordance with this policy, all services performed by and fees paid to KPMG LLP were approved by the Audit Committee.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Period	Total Number of Shares (or Units) Purchased	Average Price Paid per Share (or Unit)	Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs[1]	Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
January 1, 2022 through January 31, 2022	—	—	—	—
February 1, 2022 through February 28, 2022	—	—	—	—
March 1, 2022 through March 31, 2022	—	—	—	—
April 1, 2022 through April 30, 2022	—	—	—	—
May 1, 2022 through May 31, 2022	743,116	$2.22	743,116	$48,348,408
June 1, 2022 through June 30, 2022	1,267,153	$2.06	1,267,153	$45,733,171
July 1, 2022 through July 31, 2022	2,006,588	$2.26	2,006,588	$41,198,197
August 1, 2022 through August 31, 2022	955,982	$2.79	955,982	$38,527,254
September 1, 2022 through September 30, 2022	1,683,506	$2.70	1,683,506	$33,973,542
October 1, 2022 through October 31, 2022	3,614,342	$2.60	3,614,342	$24,561,054
November 1, 2022 through November 30, 2022	324,660	$2.84	324,660	$23,640,149
December 1, 2022 through December 31, 2022	—	$—	—	$23,640,149
Total	**10,595,347**	**$2.49**	**10,595,347**	**$23,640,149**

1. On May 9, 2022, the Company announced the commencement of a $50 million share repurchase program (the "Program") of its ordinary shares. The Company plans to execute the Program in two equal tranches, the first of which was completed on October 26, 2022. In respect of each of the two tranches, the Company entered into an irrevocable non-discretionary instruction with Jefferies International Limited ("Jefferies") in relation to the purchase by Jefferies of the Company's ordinary shares for an aggregate consideration (excluding expenses) of no greater than $25 million and the simultaneous on-sale of such ordinary shares by Jefferies to the Company. Jefferies makes its trading decisions in relation to the ordinary shares independently of, and uninfluenced by, the Company. Purchases may continue during any close period to which the Company is subject. Any purchase of ordinary shares under the second tranche of the Program are carried out on the London Stock Exchange and any other UK recognized investment exchange which may be agreed, in accordance with pre-set parameters and in accordance with, and subject to limits, including those limits related to daily volume and price, prescribed by the Company's general authority to repurchase ordinary shares granted by its shareholders at its most recent annual general meeting on June 15, 2022, Chapter 12 of the Financial Conduct Authority's UK Listing Rules, Article 5(1) of Regulation (EU) No. 596/2014 (as incorporated into UK domestic law by the European Union (Withdrawal) Act 2018) and Commission Delegated Regulation (EU) 2016/1052 (as incorporated into UK domestic law by the European Union (Withdrawal) Act 2018). All ordinary shares repurchased under the Program will be held in treasury.

ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

KPMG LLP, or KPMG, has been our independent registered public accounting firm since 2015. In 2022, we commenced an audit tender process to select our independent registered public accounting firm for the fiscal year ending December 31, 2023. The tender process evaluated proposals from KPMG and two other firms. As a result of the audit tender process, our audit committee recommended the appointment of PricewaterhouseCoopers LLP, or PwC, as our independent registered public accounting firm in connection with the audit of our consolidated financial statements for the fiscal year ending December 31, 2023, which was subsequently approved by our board of directors. The appointment is subject to shareholder approval at the Company's 2023 Annual General Meeting. PwC will replace KPMG effective as of shareholder approval of PwC's appointment at the 2023 Annual General Meeting.

KPMG's audit reports on our consolidated financial statements as of and for each of the fiscal years ended December 31, 2021 and 2022 did not contain any adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope or accounting principles. The audit reports of KPMG LLP on the effectiveness of internal control over financial reporting as of December 31, 2022 and 2021 did not contain any adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope, or accounting principles, except that KPMG LLP's report dated April 25, 2022 indicates that PureTech Health PLC did not maintain effective internal control over financial reporting as of December 31, 2021 because of the effect of a material weakness on the achievement of the objectives of the control criteria and contains an explanatory paragraph that states, a material weakness related to the risk assessment process over the design and implementation of management review controls over the valuation of financial instruments, completeness and accuracy of related sensitivity disclosures, the valuation of share based payment liabilities and the completeness and accuracy of the tax provision, as well as the complete identification of information used in the control and the design of sufficient controls to address the relevance and reliability of such information. During the fiscal years ended December 31, 2021 and 2022 and the subsequent interim period through April 28, 2023, there were no (i) disagreements, as defined in Item 16F(a)(1)(iv) of Form 20-F and the related instructions, between us and KPMG on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of KPMG, would have caused KPMG to make reference to the subject matter of the disagreements in connection with its reports on our consolidated financial statements, or (ii) reportable events as defined in Item 16F(a)(1)(v) of Form 20-F other than:

- the material weakness reported in our 2021 annual report on Form 20-F filed with the SEC on April 26, 2022 as described in the paragraph above.

Our audit committee discussed the reportable events mentioned above with KPMG. KPMG was authorized to fully respond to the inquiries of PwC on the reportable events.

During our two most recent fiscal years ended December 31, 2021 and 2022 and any subsequent interim period prior to April 28, 2023, neither we nor anyone on our behalf has consulted with PwC on either (i) the application of accounting principles to

a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on our consolidated financial statements or effectiveness of internal control over financial reporting, and neither a written report nor oral advice was provided to us by PwC that PwC concluded was an important factor considered by us in reaching a decision as to any accounting, auditing or financial reporting issue, or (ii) any matter that was the subject of a disagreement, as that term is defined in Item 16F(a)(1)(iv) of Form 20-F (and the related instructions thereto) or a reportable event as set forth in Item 16F(a)(1)(v) of Form 20-F.

We provided a copy of this disclosure in Item 16F to KPMG and requested that KPMG furnish us with a letter addressed to the SEC stating whether it agrees with the above statements, and if not, stating the respects in which it does not agree. A copy of the letter from KPMG addressed to the SEC, dated April 28, 2023, is filed herein as Exhibit 15.2.

ITEM 16G. CORPORATE GOVERNANCE

We qualify as a foreign private issuer. The Listing Rules of the Nasdaq Stock Market include certain accommodations in the corporate governance requirements that allow foreign private issuers to follow "home country" corporate governance practices in lieu of the otherwise applicable corporate governance standards of the Nasdaq Stock Market. We rely on the certain exemptions for foreign private issuers and follow United Kingdom corporate governance practices in lieu of the Nasdaq corporate governance rules.

A summary of the significant ways in which the Company's corporate governance practices differ from those followed by U.S. domestic companies under the Nasdaq corporate governance rules is set forth below.

The information (including tabular data) set forth or referenced under the headings "Directors' Report for the year ended 31 December 2022—Compliance with the UK Corporate Governance Code" (first paragraph only) on page 79 of PureTech's "Annual Report and Accounts 2022" included as exhibit 15.1 to this annual report on Form 20-F is incorporated by reference.

The Sarbanes-Oxley Act of 2002, as well as related rules subsequently implemented by the SEC, requires foreign private issuers, including our company, to comply with various corporate governance practices. In addition, Nasdaq rules provide that foreign private issuers may follow home country practice in lieu of the Nasdaq corporate governance standards, subject to certain exceptions and except to the extent that such exemptions would be contrary to U.S. federal securities laws. The home country practices followed by our company in lieu of Nasdaq rules are described below:

- We do not follow Nasdaq's quorum requirements applicable to meetings of shareholders. Such quorum requirements are not required under U.K. law. In accordance with generally accepted business practice, our articles of association provide alternative quorum requirements that are generally applicable to meetings of shareholders.
- We do not follow Nasdaq's requirements that independent directors have regularly scheduled meetings at which only independent directors are present. Under U.K. law the independent directors may choose to meet in executive session at their discretion.
- We do not follow Nasdaq's requirements to seek shareholder approval for the implementation of certain equity compensation plans, the issuances of ordinary shares under such plans, or in connection with certain private placements of equity securities. In accordance with U.K. law, we are not required to seek shareholder approval to allot ordinary shares in connection with applicable employee equity compensation plans. We will follow U.K. law with respect to any requirement to obtain shareholder approval prior to any private placements of equity securities.
- We do not follow Nasdaq's requirements with respect to review and approval of related party transactions. We will follow U.K. law with respect to any requirements regarding review and approval of related party transactions.

Other than as discussed above, we intend to comply with the rules generally applicable to U.S. domestic companies listed on Nasdaq. We may in the future, however, decide to use other foreign private issuer exemptions with respect to some or all of the other Nasdaq rules. Following our home country governance practices may provide less protection than is accorded to investors under Nasdaq rules applicable to domestic issuers.

We intend to take all actions necessary for us to maintain compliance as a foreign private issuer under the applicable corporate governance requirements of the Sarbanes-Oxley Act of 2002, the rules adopted by the SEC and Nasdaq's listing standards.

Because we are a foreign private issuer, our directors and senior management are not subject to short-swing profit and insider trading reporting obligations under Section 16 of the U.S. Securities Exchange Act of 1934, as amended, or Exchange Act. They are, however, subject to the obligations to report changes in share ownership under Section 13 of the Exchange Act and related SEC rules.

ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

ITEM 16I. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 17. FINANCIAL STATEMENTS

We have elected to furnish financial statements and related information specified in Item 18.

ITEM 18. FINANCIAL STATEMENTS

See pages F-1 through F-56 of this annual report.

Gelesis, Inc. was deemed a significant equity investee under Rule 3-09 of Regulation S-X for the fiscal year ended December 31, 2022. As such, the financial statements and related notes of Gelesis, Inc. required by Rule 3-09 of Regulation S-X are provided as Exhibit 99.1 to this annual report.

ITEM 19. EXHIBITS

The Exhibits listed in the Exhibit Index at the end of this annual report are filed as Exhibits to this annual report.

EXHIBIT NUMBER	DESCRIPTION OF EXHIBIT	INCORPORATION BY REFERENCE			
		Schedule/Form	File Number	Exhibit	File Date
1.1	Articles of Association of the Registrant	20FR12B	001-39670	3.1	10/27/2020
2.1	Deposit Agreement dated as of November 11, 2020, by and among the Registrant, Citibank N.A. and the holders of beneficial holders of American Depository Shares thereunder	20-F	001-39670	2.1	4/15/2021
2.2	Form of American Depository Receipt (included in Exhibit 2.1)				
2.3	Description of Registrant's Securities	20-F	001-39670	2.3	4/26/2022
4.1#	Performance Share Plan	20FR12B	001-39670	10.1	10/27/2020
4.2#	Form of Incentive Stock Option Deed of Agreement under the Performance Share Plan	20FR12B	001-39670	10.2	10/27/2020
4.3#	Form of Nonstatutory Stock Option Deed of Agreement under the Performance Share Plan	20FR12B	001-39670	10.3	10/27/2020
4.4#	Form of Restricted Share Units Agreement under the Performance Share Plan	20FR12B	001-39670	10.4	10/27/2020
4.5	Lease Agreement, dated as of August 10, 2018, by and between the Registrant and RBK I TENANT, LLC	20FR12B	001-39670	10.5	10/27/2020
4.6#	Form of Deed of Indemnity between the Registrant and each of its directors and executive officers	20FR12B	001-39670	10.6	10/27/2020
4.7†	Asset Purchase Agreement, dated July 15, 2019, by and between Auspex Pharmaceuticals, Inc. and PureTech Health LLC	20FR12B	001-39670	10.7	10/27/2020
4.8†	Royalty Agreement, dated as of July 23, 2013, by and between PureTech Ventures LLC and Follica, Incorporated	20FR12B	001-39670	10.8	10/27/2020
4.9	Royalty and Sublicense Income Agreement, dated as of December 18, 2009, as amended on June 28, 2012, by and between PureTech Ventures LLC, Gelesis, Inc. and Gelesis LP	20FR12B	001-39670	10.9	10/27/2020
4.10†	Exclusive Patent License Agreement, dated as of March 4, 2011, as amended on February 1, 2013 and February 25, 2015, by and between PureTech Ventures LLC and Karuna Pharmaceuticals, Inc.	20FR12B	001-39670	10.10	10/27/2020
4.11†	Ninth Amended and Restated Registration Rights Agreement, dated December 5, 2019, between Gelesis, Inc. and the stockholders party thereto	20FR12B	001-39670	10.12	10/27/2020
4.12†	Fifth Amended and Restated Investors' Rights Agreement, dated July 19, 2019, by and among Follica, Incorporated and the investors party thereto	20FR12B	001-39670	10.17	10/27/2020
4.13†	Fifth Amended and Restated Right of First Refusal and Co-Sale Agreement, dated July 19, 2019, by and among Follica, Incorporated and the investors and key holders party thereto	20FR12B	001-39670	10.18	10/27/2020
4.14†	Fifth Amended and Restated Voting Agreement, dated July 19, 2019, between Follica, Incorporated and the stockholders party thereto	20FR12B	001-39670	10.19	10/27/2020
4.15†	Amended and Restated Investors' Rights Agreement, dated June 30, 2020, by and between Vor Biopharma Inc. and the investors party thereto	20FR12B	001-39670	10.21	10/27/2020
4.16*†	Amended and Restated Voting Agreement, dated May 25, 2022, by and among Sonde Health, Inc. and the stockholders party thereto				
4.17*†	Amended and Restated Investors' Rights Agreement, dated May 25, 2022, by and among Sonde Health, Inc. and the investors party thereto				

EXHIBIT NUMBER	DESCRIPTION OF EXHIBIT	INCORPORATION BY REFERENCE			
		Schedule/Form	File Number	Exhibit	File Date
4.18*†	Amended and Restated Right of First Refusal and Co-Sale Agreement, dated May 25, 2022, by and among Sonde Health, Inc. and the investors and key holders party thereto				
4.19†	Voting Agreement, dated December 18, 2017, between Entrega, Inc. and the stockholders party thereto	20FR12B	001-39670	10.26	10/27/2020
4.20†	Investors' Rights Agreement, dated December 18, 2017, by and between Entrega, Inc. and the investors party thereto	20FR12B	001-39670	10.27	10/27/2020
4.21†	Right of First Refusal and Co-Sale Agreement, dated December 18, 2017, by and between Entrega, Inc. and the investors and key holders party thereto	20FR12B	001-39670	10.28	10/27/2020
4.22†	Research and License Agreement, dated March 6, 2017, as amended on April 23, 2018, August 6, 2018, May 31, 2019, and July 22, 2020 between PureTech LYT, Inc. and New York University	20FR12B	001-39670	10.29	10/27/2020
4.23+	Amended and Restated Registration and Stockholder Rights Agreement, dated January 13, 2022, by and among Gelesis Holdings, Inc. and the stockholders party thereto	8-K	001-39362	10.2	1/20//2022
4.24*†	Third Amended and Restated Investors' Rights Agreement, dated May 25, 2021, by and among Akili Interactive Labs, Inc. and the investors party thereto				
4.25*†	Amended and Restated First Refusal and Co-Sale Agreement, dated May 25, 2021, by and among Akili Interactive Labs, Inc. and the investors party thereto				
4.26*†	Amended and Restated Investors' Rights Agreement, dated March 1, 2023 by and among Vedanta Biosciences, Inc. and the investors and noteholders party thereto				
4.27+	Business Combination Agreement, dated as of July 19, 2021, by and among Gelesis, Inc., Capstar Special Purpose Acquisition Corp., and CPSR Gelesis Merger Sub, Inc.	S-4/A	333-258693	2.1	12/23/2021
4.28	Amendment to Business Combination Agreement, dated as of November 18, 2021, by and among Gelesis, Inc., Capstar Special Purpose Acquisition Corp., and CPSR Gelesis Merger Sub, Inc.	S-4/A	333-258693	2.2	12/23/2021
4.29	Second Amendment to Business Combination Agreement, dated as of December 30, 2021, by and among Gelesis, Inc., Capstar Special Purpose Acquisition Corp., and CPSR Gelesis Merger Sub, Inc.	8-K	001-39362	2.1	1/3/2022
4.30	Form of Subscription Agreement	S-4	333-258693	10.2	8/10/2021
4.31	Backstop Agreement, dated as of December 30, 2021, by and among Capstar Special Purpose Acquisition Corp. and the other parties listed as Purchasers party thereto	8-K	001-39362	10.1	1/3/2022
4.32+	Agreement and Plan of Merger, dated January 26, 2022, between Akili Interative Labs, Inc., Social Capital Suvretta Holdings Corp. I, and Karibu Merger Sub, Inc.	8-K/A	001-40558	2.1	1/27/2022

EXHIBIT NUMBER	DESCRIPTION OF EXHIBIT	INCORPORATION BY REFERENCE			
		Schedule/Form	File Number	Exhibit	File Date
4.33	Form of Promissory Note of Gelesis Holdings, Inc.	8-K	001-39362	10.1	07/29/2022
4.34+	Note and Warrant Purchase Agreement, dated as of February 21, 2023, by and among Gelesis Holdings, Inc., Gelesis, Inc., Gelesis 2012, Inc., Gelesis LLC and PureTech Health LLC	8-K	001-39362	10.1	2/23/2023
4.35+	Amended and Restated Registration Rights Agreement, dated as of August 19, 2022, by and among Akili, Inc. and the other parties thereto	8-K	001-40558	10.6	8/23/2022
4.36+	Lock-Up Agreement, dated as of August 19, 2022, by and among Akili, Inc. and the other parties thereto.	8-K	001-40558	10.7	8/23/2022
4.37*†+	Royalty Purchase Agreement, dated as of March 22, 2023, by and between PureTech Health LLC and Royalty Pharma Investments 2019 ICAV				
4.38*	Form of Secured Subordinated Convertible Promissory Note of Vedanta Biosciences, Inc.				
8.1	Subsidiaries of PureTech Health plc	20FR12B	001-39670	21.1	10/27/2020
11.1	Code of Business Conduct and Ethics	20-F	001-39670	11.1	4/15/2021
12.1*	Certification by the Principal Executive Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
12.2*	Certification of Principal Financial Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
13.1***	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
13.2***	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
15.1**	Annual Report and Accounts 2022				
15.2*	Letter from KPMG LLP to the Securities and Exchange Commission				
99.1*	Gelesis, Inc. and subsidiaries Consolidated Financial Statements as of and for the years ended December 31, 2022 and 2021				
101.INS*	XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.				
101.SCH*	Inline XBRL Taxonomy Extension Schema Document				
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document				

EXHIBIT NUMBER	DESCRIPTION OF EXHIBIT	INCORPORATION BY REFERENCE			
		Schedule/Form	File Number	Exhibit	File Date
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document				
104*	Cover Page Interactive Data File - the cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.				

* Filed herewith.

** Certain of the information included within Exhibit 15.1, which is provided pursuant to Rule 12b-23(a) of the Securities Exchange Act of 1934, as amended, is incorporated by reference in this annual report on Form 20-F, as specified elsewhere in this annual report on Form 20-F. With the exception of the items and pages so specified, the "Annual Report and Accounts 2022" is not deemed to be filed as part of this annual report on Form 20-F.

*** Furnished herewith.

# Indicates a management contract or any compensatory plan, contract or arrangement.

† Portions of this exhibit (indicated by asterisks) have been omitted because either (A) they are both (i) not material and (ii) would likely cause competitive harm if publicly disclosed., or (B) they are both (i) not material and (ii) the type of information that the Registrant customarily and actually treats as private or confidential, as applicable. The Registrant agrees to furnish an unredacted copy of this exhibit to the Securities and Exchange Commission upon request.

+ Schedules and exhibits to this exhibit omitted. The Registrant agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Date: April 27, 2023

PURETECH HEALTH PLC

By: /s/ Daphne Zohar
Name: Daphne Zohar
Title: Chief Executive Officer

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors

PureTech Health PLC

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial position of PureTech Health PLC and subsidiaries (the Group) as of December 31, 2022 and 2021, the related consolidated statements of

comprehensive income / (loss), changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2022 and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Group as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2022, in conformity with International Financial Reporting Standards (IFRSs) as issued by the International Accounting Standards Board and international accounting standards in conformity with the requirements of the UK-adopted IFRSs.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Group's internal control over financial reporting as of December 31, 2021 based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission , and our report dated April 27, 2023 expressed an unqualified opinion on the effectiveness of the Group's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Group's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relate.

Valuation of certain Level 3 financial assets and liabilities

As discussed in Notes 1 and 16 to the consolidated financial statements, the Group's preferred share financial liability was recorded at a fair value of $27.3 million at December 31, 2022. The Group estimates the fair value of the preferred share financial liability by utilising an option pricing model with one or more significant unobservable inputs.

We identified the valuation of the Vedanta preferred share financial liability as a critical audit matter. Subjective and complex auditor judgement was required to assess the enterprise value which includes significant assumptions, including the probability of future financing events and exit scenarios. In addition, evaluating the option pricing model required specialised skills and knowledge.

The following are the primary procedures we performed to address this critical audit matter.

We evaluated the design and implementation of certain internal controls related to the valuation of Vedanta preferred share financial liability.

We evaluated the reasonableness of the probability of exit scenarios by inspecting strategic plans and comparing against previous year assumptions and assessing if any changes were reasonable in the context of recent developments at the company.

We evaluated the reasonableness of the probability of future financing events by inspecting strategic plans and inspecting the terms of recent financing agreements secured and comparing to assumptions used in the option pricing model.

We also involved valuation professionals with specialized skills and knowledge who assisted us in evaluating the option pricing model by re-performing the simulations used to determine the enterprise value for each of the probable financing events and exit scenarios assumed by the management.

/s/ KPMG LLP
KPMG LLP

We have served as the Group's auditor since 2015.

London, United Kingdom
27 April, 2023

Consolidated Statements of Comprehensive Income/(Loss)

For the years ended December 31

	Note	**2022 $000s**	2021 $000s	2020 $000s
Contract revenue	3	**2,090**	9,979	8,341
Grant revenue	3	**13,528**	7,409	3,427
Total revenue		**15,618**	17,388	11,768
Operating expenses:				
General and administrative expenses	7	**(60,991)**	(57,199)	(49,440)
Research and development expenses	7	**(152,433)**	(110,471)	(81,859)
Operating income/(loss)		**(197,807)**	(150,282)	(119,531)
Other income/(expense):				
Gain on deconsolidation of subsidiary	5	**27,251**	—	—
Gain/(loss) on investment held at fair value	5	**(32,060)**	179,316	232,674
Realized loss on sale of investments	5	**(29,303)**	(20,925)	(54,976)
Other income/(expense)	6, 16	**8,131**	1,592	1,035
Other income/(expense)		**(25,981)**	159,983	178,732
Finance income/(costs):				
Finance income	9	**5,799**	214	1,183
Finance costs – contractual	9	**(3,939)**	(4,771)	(2,946)
Finance income/(costs) – fair value accounting	9	**137,063**	9,606	(4,351)
Net finance income/(costs)		**138,924**	5,050	(6,115)
Share of net loss of associates accounted for using the equity method	6	**(27,749)**	(73,703)	(34,117)
Gain on dilution of ownership interest in associate	6	**28,220**	—	—
Impairment of investment in associate	6	**(8,390)**	—	—
Income/(loss) before taxes		**(92,783)**	(58,953)	18,969
Taxation	25	**55,719**	(3,756)	(14,401)
Income/(Loss) for the year		**(37,065)**	(62,709)	4,568
Other comprehensive income/(loss):				
Items that are or may be reclassified as profit or loss				
Equity-accounted associate – share of other comprehensive income (loss)		**(166)**	—	469
Reclassification of foreign currency differences on dilution of interest		**(213)**	—	—
Total other comprehensive income/(loss)		**(379)**	—	469
Total comprehensive income/(loss) for the year		**(37,444)**	(62,709)	5,037
Income/(loss) attributable to:				
Owners of the Company		**(50,354)**	(60,558)	5,985
Non-controlling interests	18	**13,290**	(2,151)	(1,417)
		(37,065)	(62,709)	4,568
Comprehensive income/(loss) attributable to:				
Owners of the Company		**(50,733)**	(60,558)	6,454
Non-controlling interests	18	**13,290**	(2,151)	(1,417)
		(37,444)	(62,709)	5,037
		$	$	$
Earnings/(loss) per share:				
Basic earnings/(loss) per share	10	**(0.18)**	(0.21)	0.02
Diluted earnings/(loss) per share	10	**(0.18)**	(0.21)	0.02

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Financial Position

As of December 31,

	Note	**2022 $000s**	2021 $000s
Assets			
Non-current assets			
Property and equipment, net	11	**22,957**	26,771
Right of use asset, net	21	**14,281**	17,166
Intangible assets, net	12	**831**	987
Investments held at fair value	5, 16	**251,892**	397,179
Investment in associates - equity method	6	**9,147**	—
Note from associate	16	**16,501**	—
Lease receivable – long-term	21	**835**	1,285
Other non-current assets		**10**	810
Total non-current assets		**316,454**	444,197
Current assets			
Trade and other receivables	22	**11,867**	3,174
Income tax receivable	25	**10,040**	4,514
Prepaid expenses		**11,617**	10,755
Lease receivable – short-term	21	**450**	415
Other financial assets	13, 22	**2,124**	2,124
Short-term note from associate		**—**	15,120
Short-term investments	22	**200,229**	—
Cash and cash equivalents	22	**149,866**	465,708
Total current assets		**386,192**	501,809
Total assets		**702,647**	946,006
Equity and liabilities			
Equity			
Share capital		**5,455**	5,444
Share premium		**289,624**	289,303
Treasury stock		**(26,492)**	—
Merger reserve		**138,506**	138,506
Translation reserve		**89**	469
Other reserve		**(14,478)**	(40,077)
Retained earnings/(accumulated deficit)		**149,516**	199,871
Equity attributable to the owners of the Company	14	**542,220**	593,515
Non-controlling interests	18	**5,369**	(9,368)
Total equity		**547,589**	584,147
Non-current liabilities			
Deferred tax liability	25	**19,645**	89,765
Lease liability, non-current	21	**24,155**	29,040
Long-term loan	20	**10,244**	14,261
Liability for share based awards	8	**4,128**	2,659
Total non-current liabilities		**58,172**	135,725
Current liabilities			
Deferred revenue	3	**2,185**	65
Lease liability, current	21	**4,972**	3,950
Trade and other payables	19	**54,840**	35,817
Subsidiary:			
Notes payable	16, 17	**2,345**	4,641
Warrant liability	16	**47**	6,787
Preferred shares	15, 16	**27,339**	174,017
Current portion of long-term loan	20	**5,156**	857
Total current liabilities		**96,885**	226,135
Total liabilities		**155,057**	361,859
Total equity and liabilities		**702,647**	946,006

Please refer to the accompanying Notes to the consolidated financial information. Registered number: 09582467.
The Consolidated Financial Statements were approved by the Board of Directors and authorized for issuance on April 27, 2023 and signed on its behalf by:

Daphne Zohar
Chief Executive Officer
April 27, 2023

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Changes in Equity

For the years ended December 31

	Share Capital			Treasury Shares								
	Shares	Amount $000s	Share premium $000s	Shares	Amount $000s	Merger reserve $000s	Translation reserve $000s	Other reserve $000s	Retained earnings/ (accumulated deficit) $000s	Total Parent equity $000s	Non-controlling interests $000s	Total Equity $000s
Balance January 1, 2020	285,370,619	5,408	287,962	—	—	138,506	—	(18,282)	254,444	668,037	(17,639)	650,398
Net income/(loss)	—	—	—	—	—	—	—	—	5,985	5,985	(1,417)	4,568
Other comprehensive income/(loss), net	—	—	—	—	—	—	469	—	—	469	—	469
Total comprehensive income/(loss) for the year	**—**	**—**	**—**	**—**	**—**	**—**	**469**	**—**	**5,985**	**6,454**	**(1,417)**	**5,037**
Exercise of share-based awards	514,406	9	1,016	—	—	—	—	—	—	1,025	11	1,036
Revaluation of deferred tax assets related to share-based awards	—	—	—	—	—	—	—	(684)	—	(684)	—	(684)
Equity settled share-based awards	—	—	—	—	—	—	—	7,805	—	7,805	2,822	10,627
Settlement of restricted stock units (RSU)	—	—	—	—	—	—	—	(12,888)	—	(12,888)	—	(12,888)
Other	—	—	—	—	—	—	—	—	—	—	13	13
Balance December 31, 2020	**285,885,025**	**5,417**	**288,978**	**—**	**—**	**138,506**	**469**	**(24,050)**	**260,429**	**669,748**	**(16,209)**	**653,539**
Net income/(loss)	—	—	—	—	—	—	—	—	(60,558)	(60,558)	(2,151)	(62,709)
Total comprehensive income/(loss) for the year	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**(60,558)**	**(60,558)**	**(2,151)**	**(62,709)**
Exercise of share-based awards	1,911,560	27	326	—	—	—	—	—	—	352	—	352
Revaluation of deferred tax assets related to share-based awards	—	—	—	—	—	—	—	615	—	615	—	615
Equity settled share-based awards	—	—	—	—	—	—	—	7,109	—	7,109	6,252	13,361
Settlement of restricted stock units	—	—	—	—	—	—	—	(10,749)	—	(10,749)	—	(10,749)
Reclassification of equity settled awards to liability awards	—	—	—	—	—	—	—	(6,773)	—	(6,773)	—	(6,773)
Vesting of share-based awards and net share exercise	—	—	—	—	—	—	—	(2,582)	—	(2,582)	—	(2,582)
Acquisition of subsidiary non-controlling interest	—	—	—	—	—	—	—	(9,636)	—	(9,636)	8,668	(968)
NCI exercise of share options in subsidiaries	—	—	—	—	—	—	—	5,988	—	5,988	(5,922)	66
Distributions	—	—	—	—	—	—	—	—	—	—	(6)	(6)
Balance December 31, 2021	**287,796,585**	**5,444**	**289,303**	**—**	**—**	**138,506**	**469**	**(40,077)**	**199,871**	**593,515**	**(9,368)**	**584,147**
Net income/(loss)	—	—	—	—	—	—	—	—	(50,354)	(50,354)	13,290	(37,065)
Other comprehensive income/(loss), net	—	—	—	—	—	—	(379)	—	—	(379)	—	(379)
Total comprehensive income/(loss) for the year	**—**	**—**	**—**	**—**	**—**	**—**	**(379)**	**—**	**(50,354)**	**(50,733)**	**13,290**	**(37,444)**
Deconsolidation of Subsidiary	—	—	—	—	—	—	—	—	—	—	11,904	11,904
Exercise of share-based awards	577,022	11	321	—	—	—	—	—	—	332	—	332
Revaluation of deferred tax assets related to share-based awards	—	—	—	—	—	—	—	45	—	45	—	45
Purchase of Treasury stock	—	—	—	(10,595,347)	(26,492)	—	—	—	—	(26,492)	—	(26,492)
Equity settled share-based awards	—	—	—	—	—	—	—	8,856	—	8,856	4,711	13,567
Partial settlement of share based liability awards and settlement of equity based RSUs	788,046	—	—	—	—	—	—	1,528	—	1,528	—	1,528
NCI exercise of share options in subsidiaries	—	—	—	—	—	—	—	15,171	—	15,171	(15,164)	7

	Share Capital			Treasury Shares								
	Shares	Amount $000s	Share premium $000s	Shares	Amount $000s	Merger reserve $000s	Translation reserve $000s	Other reserve $000s	Retained earnings/ (accumulated deficit) $000s	Total Parent equity $000s	Non-controlling interests $000s	Total Equity $000s
Other	—	—	—	—	—	—	—	—	—	—	(4)	(4)
Balance December 31, 2022	**289,161,653**	**5,455**	**289,624**	**(10,595,347)**	**(26,492)**	**138,506**	**89**	**(14,478)**	**149,516**	**542,220**	**5,369**	**547,589**

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Cash Flows

For the years ended December 31

	Note	2022 $000s	2021 $000s	2020 $000s
Cash flows from operating activities				
Income/(loss)		**(37,065)**	(62,709)	4,568
Adjustments to reconcile net income/(loss) to net cash used in operating activities:				
Non-cash items:				
Depreciation and amortization	11, 21	**8,893**	7,287	6,645
Share-based compensation expense	8	**14,698**	13,950	10,718
(Gain)/loss on investment held at fair value	5	**32,060**	(179,316)	(232,674)
Realized loss on sale of investments	5	**29,303**	20,925	54,976
Gain on dilution of ownership interest in associate	6	**(28,220)**	—	—
Impairment of investment in associate	6	**8,390**	—	—
Gain on deconsolidation of subsidiary	5	**(27,251)**	—	—
Share of net loss of associates accounted for using the equity method	6	**27,749**	73,703	34,117
Fair value gain on other financial instruments	6, 16	**(8,163)**	(800)	—
Loss on disposal of assets	11	**138**	53	66
Income taxes, net	25	**(55,719)**	3,756	14,402
Finance (income)/costs, net	9	**(138,924)**	(5,050)	6,114
Changes in operating assets and liabilities:				
Trade and other receivables		**(7,734)**	(617)	(529)
Prepaid expenses		**(862)**	(5,350)	(3,371)
Deferred revenue	3	**2,123**	(1,407)	(5,223)
Trade and other payables	19	**22,033**	8,338	605
Other		**359**	(103)	(7)
Income taxes paid		**(20,696)**	(27,766)	(20,737)
Interest received		**3,460**	214	1,155
Interest paid	20, 21	**(3,366)**	(3,382)	(2,651)
Net cash used in operating activities		**(178,792)**	(158,274)	(131,827)
Cash flows from investing activities:				
Purchase of property and equipment	11	**(2,176)**	(5,571)	(5,170)
Proceeds from sale of property and equipment		**—**	30	—
Purchases of intangible assets	12	**—**	(90)	(254)
Investment in associates	6	**(19,961)**	—	—
Purchase of associate preferred shares held at fair value	5	**—**	—	(10,000)
Purchase of investments held at fair value	5	**(5,000)**	(500)	(1,150)
Sale of investments held at fair value	5	**118,710**	218,125	350,586
Purchase of short-term note from associate	16	**—**	(15,000)	—
Repayment of short-term Note from associate	16	**15,000**	—	—
Purchase of Convertible Note from associate	16	**(15,000)**	—	—
Cash derecognized upon loss of control over subsidiary (see table below)		**(479)**	—	—
Purchases of short-term investments	22	**(248,733)**	—	—
Proceeds from maturity of short-term investments	22	**50,000**	—	30,116
Receipt of payment of sublease	21	**415**	381	350
Net cash provided by (used in) investing activities		**(107,223)**	197,375	364,478
Cash flows from financing activities:				
Receipt of PPP loan		**—**	—	68
Issuance of long term loan	20	**—**	—	14,720
Issuance of subsidiary preferred Shares	15	**—**	37,610	13,750
Issuance of Subsidiary Convertible Note	17	**393**	2,215	25,000
Payment of lease liability	21	**(4,025)**	(3,375)	(2,908)
Exercise of stock options		**332**	352	1,036
Settlement of restricted stock unit equity awards		**—**	(10,749)	(12,888)
Vesting of restricted stock units and net share exercise		**—**	(2,582)	—
NCI exercise of stock options in subsidiary	15	**7**	66	—
Issuance of warrants in subsidiary		**—**	—	92
Purchase of treasury stock	14	**(26,492)**	—	—
Acquisition of a non-controlling Interest of a subsidiary		**—**	(806)	—
Other		**(41)**	(5)	—
Net cash provided by (used in) financing activities		**(29,827)**	22,727	38,869
Net increase (decrease) in cash and cash equivalents		**(315,842)**	61,827	271,520
Cash and cash equivalents at beginning of year		**465,708**	403,881	132,360
Cash and cash equivalents at end of year		**149,866**	465,708	403,881
Supplemental disclosure of non-cash investment and financing activities:				
Partial settlement of share based liability award through issuance of equity		**1,528**	—	—
Purchase of property, plant and equipment against trade and other payables	11	**—**	1,841	—
Leasehold improvements purchased through lease incentives (deducted from Right of Use Asset)	11	**—**	1,010	—
Conversion of subsidiary convertible note into preferred share liabilities	17	**—**	25,797	—

Assets, Liabilities and non controlling interests other than cash in deconsolidated subsidiary

	2022 $000s
Trade and other payables	**1,407**
Subsidiary notes payable	**3,403**
Subsidiary preferred shares	**15,853**
Other assets and liabilities, net	**123**
Non-controlling interest	**(11,904)**
	8,882
Investment retained in deconsolidated subsidiary	**18,848**
Gain on deconsolidation	**(27,251)**
Cash in deconsolidated subsidiary	**479**

The accompanying notes are an integral part of these financial statements.

Notes to the Consolidated Financial Statements

1. Accounting policies

Description of Business

PureTech Health plc ("PureTech," the "Parent" or the "Company") is a public company incorporated, domiciled and registered in the United Kingdom ("UK"). The registered number is 09582467 and the registered address is 8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom.

PureTech's group financial statements consolidate those of the Company and its subsidiaries (together referred to as the "Group"). The Parent company financial statements present financial information about the Company as a separate entity and not about its Group.

The accounting policies set out below have, unless otherwise stated, been applied consistently to all periods presented in these group financial statements.

Basis of Presentation

The consolidated financial statements of the Group are presented as of December 31, 2022 and 2021, and for the years ended December 31, 2022, 2021 and 2020. The Group financial statements have been approved by the Directors on April 27, 2023, and are prepared in accordance with UK-adopted International Financial Reporting Standards (IFRSs). The Consolidated Financial Statements also comply fully with IFRSs as issued by the International Accounting Standards Board (IASB). UK-adopted IFRSs differs in certain respects from IFRS as issued by the IASB. However, the differences have no impact for the periods presented.

For presentation of the Consolidated Statements of Comprehensive Income/(Loss), the Company uses a classification based on the function of expenses, rather than based on their nature, as it is more representative of the format used for internal reporting and management purposes and is consistent with international practice.

Certain amounts in the Consolidated Financial Statements and accompanying notes may not add due to rounding. All percentages have been calculated using unrounded amounts.

Basis of Measurement

The consolidated financial statements are prepared on the historical cost basis except that the following assets and liabilities are stated at their fair value: investments held at fair value, short-term and convertible note from associate and liabilities classified as fair value through the profit or loss.

Use of Judgments and Estimates

In preparing these consolidated financial statements, management has made judgements, estimates and assumptions that affect the application of the Group's accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an on-going basis.

Significant estimation is applied in determining the following:

- Financial instruments valuations (Note 16): when estimating the fair value of subsidiary preferred shares, subsidiary warrants, and subsidiary convertible notes carried at fair value through profit and loss (FVTPL) as well as investments held at fair value, at initial recognition and upon subsequent measurement. Valuation of the aforementioned financial instruments (assets and liabilities) includes making significant estimates, specifically determining the appropriate valuation methodology and making certain estimates such as the future expected returns on the financial instrument in different scenarios, earnings potential of the subsidiary businesses, appropriate discount rate, appropriate volatility, appropriate term to exit and other industry and company specific risk factors.

Significant judgement is also applied in determining the following:

- Subsidiary preferred shares liability classification (Note 15): when determining the classification of financial instruments in terms of liability or equity. These judgements include an assessment of whether the financial instruments include any embedded derivative features, whether they include contractual obligations of the Group to deliver cash or other financial assets or to exchange financial assets or financial liabilities with another party, and whether that obligation will be settled by the Company exchanging a fixed amount of cash or other financial assets for a fixed number of its own equity instruments. Further information about these critical judgements and estimates is included below under Financial Instruments.
- When the power to control the subsidiaries exists (please refer to Notes 5 and 6 and accounting policy below Subsidiaries). This judgement includes an assessment of whether the Company has (i) power over the investee; (ii) exposure, or rights, to variable returns from its involvement with the investee; and (iii) the ability to use its power over the investee to affect the amount of the investor's returns. The Company considers among others its voting shares, shareholder agreements, ability to appoint board members, representation on the board, rights to appoint management, de facto control, investee dependence on the Company etc. If the power to control investees exists we consolidate the financial statements of such investee in the consolidated financial statements of the Group. Upon issuance of new shares in a subsidiary and/or a change in any shareholders or governance agreements, the Group reassesses its ability to control the investee based on the revised voting interest and board composition and revised subsidiary governance and management structure. When such new circumstances result in the Group losing its power to control the investee, the investee is deconsolidated.
- Whether the Company has significant influence over financial and operating policies of investees in order to determine if the Company should account for its investment as an associate based on IAS 28 or based on IFRS 9, Financial Instruments (please refer to Note 5). This judgement includes, among others, an assessment whether the Company has representation on the Board of Directors of the investee, whether the Company participates in the policy making processes of the investee, whether there is any interchange of managerial personnel, whether there is any essential technical information provided to the investee and if there are any transactions between the Company and the investee.

- Upon determining that the Company does have significant influence over the financial and operating policies of an investee, if the Company holds more than a single instrument issued by its equity-accounted investee, judgement is required to determine whether the additional instrument forms part of the investment in the associate, which is accounted for under IAS 28 and scoped out of IFRS 9, or it is a separate financial instrument that falls in the scope of IFRS 9 (please refer to Notes 5 and 6). This judgement includes an assessment of the characteristics of the financial instrument of the investee held by the Company and whether such financial instrument provides access to returns underlying an ownership interest.
- Where the company has other investments in an equity accounted investee that are not accounted for under IAS 28, judgement is required in determining if such investments constitute Long-Term Interests for the purposes of IAS 28 (please refer to Notes 5 and 6). This determination is based on the individual facts and circumstances and characteristics of each investment, but is driven, among other factors, by the intention and likelihood to settle the instrument through redemption or repayment in the foreseeable future, and whether or not the investment is likely to be converted to common stock or other equity instruments (please also refer to accounting policy with regard to Investments in Associates below). When the Group considered the individual facts and circumstances of the Group's investment in its associate's preferred stock in the manner described above, including the long-term nature of such investment, the ability of the Group to convert its preferred stock investment to an investment in common shares and the likelihood of such conversion, we concluded that such investment was considered a Long Term Interest.

As of December 31, 2022, the Group had cash and cash equivalents of $149.9 million and short-term investments of $200.2 million. Considering the Group's and the Company's financial position as of December 31, 2022, and its principal risks and opportunities, a going concern analysis has been prepared for at least the twelve-month period from the date of signing the Consolidated Financial Statements ("the going concern period") utilizing realistic scenarios and applying a severe but plausible downside scenario. Even under the downside scenario, the analysis demonstrates the Group and the Company continue to maintain sufficient liquidity headroom and continue to comply with all financial obligations. The Directors believe the Group and the Company is adequately resourced to continue in operational existence for at least the twelve-month period from the date of signing the Consolidated Financial Statements. Accordingly, the Directors considered it appropriate to adopt the going concern basis of accounting in preparing the Consolidated Financial Statements and the PureTech Health plc Financial Statements.

Basis of consolidation

The consolidated financial information as of December 31, 2022 and 2021, and for each of the years ended December 31, 2022, 2021 and 2020, comprises an aggregation of financial information of the Company and the consolidated financial information of PureTech Health LLC ("PureTech LLC"). Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated.

Subsidiaries

As used in these financial statements, the term subsidiaries refers to entities that are controlled by the Group. Financial results of subsidiaries of the Group as of December 31, 2022, are reported within the Internal segment, Controlled Founded Entities segment or the Parent Company and Other section (please refer to Note 4). Under applicable accounting rules, the Group controls an entity when it is exposed to, or has the rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. In assessing control, the Group takes into consideration potential voting rights, board representation, shareholders' agreements, ability to appoint Directors and management, de facto control and other related factors. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so causes the non-controlling interests to have a deficit balance.

A list of all current and former subsidiaries organized with respect to classification as of December 31, 2022, and the Group's total voting percentage, based on outstanding voting common and preferred shares as of December 31, 2022, 2021 and 2020, is outlined below. All current subsidiaries are domiciled within the United States and conduct business activities solely within the United States.

	Voting percentage at December 31, through the holdings in					
	2022		2021		2020	
Subsidiary	**Common**	**Preferred**	Common	Preferred	Common	Preferred
Subsidiary operating companies						
Alivio Therapeutics, Inc.[1,2]	**—**	**100.0**	—	100.0	—	91.9
Entrega, Inc. (indirectly held through Enlight)[1,2]	**—**	**77.3**	—	77.3	—	83.1
Follica, Incorporated[1,2]	**28.7**	**56.7**	28.7	56.7	28.7	56.7
PureTech LYT (formerly Ariya Therapeutics, Inc.)	**—**	**100.0**	—	100.0	—	100.0
PureTech LYT-100	**—**	**100.0**	—	100.0	—	100.0
PureTech Management, Inc.[3]	**100.0**	**—**	100.0	—	100.0	—
PureTech Health LLC[3]	**100.0**	**—**	100.0	—	100.0	—
Vedanta Biosciences, Inc.[1,2]	**—**	**47.0**	—	48.6	—	59.3
Vedanta Biosciences Securities Corp. (indirectly held through Vedanta)[1,2]	**—**	**47.0**	—	48.6	—	59.3
Deconsolidated former subsidiary operating companies						
Sonde Health, Inc.[1,2,5]	**—**	**40.2**	—	51.8	—	51.8
Akili Interactive Labs, Inc.[6]	**14.7**	**—**	—	26.7	—	41.9
Gelesis, Inc.[1,2,6]	**22.8**	**—**	4.8	19.7	4.9	20.2
Karuna Therapeutics, Inc.[1,2]	**3.1**	**—**	5.6	—	12.6	—
Vor Biopharma Inc.1,2	**4.1**	**—**	8.6	—	—	16.4
Nontrading holding companies						
Endra Holdings, LLC (held indirectly through Enlight)[2]	**86.0**	**—**	86.0	—	86.0	—
Ensof Holdings, LLC (held indirectly through Enlight)[2]	**86.0**	**—**	86.0	—	86.0	—
PureTech Securities Corp.[2]	**100.0**	**—**	100.0	—	100.0	—
PureTech Securities II Corp.[2]	**100.0**	**—**	100.0	—	100.0	—
Inactive subsidiaries						
Appeering, Inc.[2]	**—**	**100.0**	—	100.0	—	100.0
Commense Inc.[2]	**—**	**99.1**	—	99.1	—	99.1
Enlight Biosciences, LLC[2]	**86.0**	**—**	86.0	—	86.0	—
Ensof Biosystems, Inc. (held indirectly through Enlight)[1,2]	**57.7**	**28.3**	57.7	28.3	57.7	28.3
Knode Inc. (indirectly held through Enlight)[2]	**—**	**86.0**	—	86.0	—	86.0
Libra Biosciences, Inc.[2]	**—**	**100.0**	—	100.0	—	100.0
Mandara Sciences, LLC[2]	**98.3**	**—**	98.3	—	98.3	—
Tal Medical, Inc.[1,2]	**—**	**100.0**	—	100.0	—	100.0

1 The voting percentage is impacted by preferred shares that are classified as liabilities, which results in the ownership percentage not being the same as the ownership percentage used in allocations to non-controlling interests disclosed in Note 18. The allocation of losses/profits to the noncontrolling interest is based on the holdings of subordinated stock that provide ownership rights in the subsidiaries. The ownership of liability classified preferred shares are quantified in Note 15.

2 Registered address is Corporation Trust Center, 1209 Orange St., Wilmington, DE 19801, USA.

3 Registered address is 2711 Centerville Rd., Suite 400, Wilmington, DE 19808, USA.

4 The Company's interests in its subsidiaries are predominantly in the form of preferred shares, which have a liquidation preference over the common stock, are convertible into common stock at the holder's discretion or upon certain liquidity events, are entitled to one vote per share on all matters submitted to shareholders for a vote and entitled to receive dividends when and if declared. In the case of Enlight, Mandara and PureTech Health LLC, the holdings are membership interests in an LLC. The holders of common stock are entitled to one vote per share on all matters submitted to shareholders for a vote and entitled to receive dividends when and if declared.

5 On May 25, 2022 PureTech lost control over Sonde and Sonde was deconsolidated from the Group's financial statements, resulting in only the profits and losses generated by Sonde through the deconsolidation date being included in the Group's Consolidated Statement of Comprehensive Income/(Loss). See Notes 5 and 6 for further details about the accounting for the investments in Sonde subsequent to deconsolidation.

6 See Notes 5 and 6 for the Gelesis and Akili SPAC merger and for the exchange of the Group's preferred stock investments for common stock of those entities.

Change in subsidiary ownership and loss of control

Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

Where the Group loses control of a subsidiary, the assets and liabilities are derecognized along with any related non-controlling interest ("NCI"). Any interest retained in the former subsidiary is measured at fair value when control is lost. Any resulting gain or loss is recognized as profit or loss in the Consolidated Statements of Comprehensive Income/(Loss).

Associates

As used in these financial statements, the term associates are those entities in which the Group has no control but maintains significant influence over the financial and operating policies. Significant influence is presumed to exist when the Group holds between 20 and 50 percent of the voting power of an entity, unless it can be clearly demonstrated that this is not the case. The Group evaluates if it maintains significant influence over associates by assessing if the Group has lost the power to participate in the financial and operating policy decisions of the associate.

Application of the equity method to associates

Associates are accounted for using the equity method (equity accounted investees) and are initially recognized at cost, or if recognized upon deconsolidation they are initially recorded at fair value at the date of deconsolidation. The consolidated financial statements include the Group's share of the total comprehensive income and equity movements of equity accounted investees, from the date that significant influence commences until the date that significant influence ceases.

To the extent the Group holds interests in associates that are not providing access to returns underlying ownership interests, the instrument held by PureTech is accounted for in accordance with IFRS 9 as investments held at fair value.

When the Group's share of losses exceeds its equity method investment in the investee, losses are applied against Long-Term Interests, which are investments accounted for under IFRS 9. Investments are determined to be Long-Term Interests when they are long-term in nature and in substance they form part of the Group's net investment in that associate. This determination is impacted by many factors, among others, whether settlement by the investee through redemption or repayment is planned or likely in the foreseeable future, whether the investment can be converted and/or is likely to be converted to common stock or other equity instrument and other factors regarding the nature of the investment. Whilst this assessment is dependent on many specific facts and circumstances of each investment, typically conversion features whereby the investment is likely to convert to common stock or other equity instruments would point to the investment being a Long-Term Interest. Similarly, where the investment is not planned or likely to be settled through redemption or repayment in the foreseeable future, this would indicate that the investment is a Long-Term Interest. When the net investment in the associate, which includes the Group's investments in other long-term interests, is reduced to nil, recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of an investee.

The Group has also adopted the amendments to IAS 28 Investments in Associates that addresses the dual application of IAS 28 and IFRS 9 (see below) when equity method losses are applied against Long-Term Interests (LTI). The amendments provide the annual sequence in which both standards are to be applied in such a case. The Group has applied the equity method losses to the LTIs presented as part of Investments held at fair value subsequent to remeasuring such investments to their fair value at balance sheet date.

Financial Instruments

Classification

The Group classifies its financial assets in the following measurement categories:

- Those to be measured subsequently at fair value (either through other comprehensive income, or through profit or loss), and
- Those to be measured at amortized cost.

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses are recorded in profit or loss. For investments in equity instruments that are not held for trading, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at FVOCI. As of balance sheet dates, none of the Company's financial assets are accounted for as FVOCI.

Measurement

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at FVTPL, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets that are carried at FVTPL are expensed.

Impairment

The Group assesses on a forward-looking basis the expected credit losses associated with its debt instruments carried at amortized cost. For trade receivables, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognized from initial recognition of the receivables.

Financial Assets

The Group's financial assets consist of cash and cash equivalents, investments in debt securities, trade and other receivables, notes, restricted cash deposits and investments in equity securities. The Group's financial assets are virtually all classified into the following categories: investments held at fair value, notes, trade and other receivables, short-term investments and cash and cash equivalents. The Group determines the classification of financial assets at initial recognition depending on the purpose for which the financial assets were acquired.

Investments held at fair value are investments in equity instruments that are not held for trading. Such investments consist of the Group's minority interest holdings where the Group has no significant influence or preferred share investments in the Group's associates that are not providing access to returns underlying ownership interests. These financial assets are initially measured at fair value and subsequently re-measured at fair value at each reporting date. The Company elects if the gain or loss will be recognized in Other Comprehensive Income/(Loss) or through profit and loss on an instrument by instrument basis. The Company has elected to record the changes in fair values for the financial assets falling under this category through profit and loss. Please refer to Note 5.

Changes in the fair value of financial assets at FVTPL are recognized in other income/(expense) in the Consolidated Statements of Comprehensive Income/(Loss) as applicable.

The notes from an associate, since their contractual terms do not consist solely of cash flow payments of principal and interest on the principal amount outstanding, such notes are initially and subsequently measured at fair value, with changes in fair value recognized through profit and loss.

Short term investments consist of short-term US treasury bills that are held to maturity. The contractual terms consist solely of payment of the principal and the Group's business model is to hold the treasury bills to maturity. As such, such short term

investments are recorded at amortized cost. As of balance sheet date amortized cost approximated the fair value of such short-term investments.

Trade and other receivables are non-derivative financial assets with fixed and determinable payments that are not quoted on active markets. These financial assets are carried at the amounts expected to be received less any expected lifetime losses. Such losses are determined taking into account previous experience, credit rating and economic stability of counterparty and economic conditions. When a trade receivable is determined to be uncollectible, it is written off against the available provision. As of balance sheet date, The Group did not incur or record any such expected lifetime losses. Trade and other receivables are included in current assets, unless maturities are greater than 12 months after the end of the reporting period.

Financial Liabilities

The Group's financial liabilities consist of trade and other payables, subsidiary notes payable, long-term loan, preferred shares, and warrant liability.

Warrant liabilities are initially recognized at fair value. After initial recognition, these financial liabilities are re-measured at FVTPL using an appropriate valuation technique.

Subsidiary notes payable without embedded derivatives and the long-term loan are accounted for at amortized cost.

The majority of the Group's subsidiaries have preferred shares and certain notes payable with embedded derivatives, which are classified as current liabilities. When the Group has preferred shares and notes with embedded derivatives that qualify for bifurcation, the Group has elected to account for the entire instrument as FVTPL after determining under IFRS 9 that the instrument qualifies to be accounted for under such FVTPL method.

The Group derecognizes a financial liability when its contractual obligations are discharged, cancelled or expire.

Equity Instruments Issued by the Group

Financial instruments issued by the Group are treated as equity only to the extent that they meet the following two conditions, in accordance with IAS 32:

1. They include no contractual obligations upon the Group to deliver cash or other financial assets or to exchange financial assets or financial liabilities with another party under conditions that are potentially unfavorable to the Group; and
2. Where the instrument will or may be settled in the Group's own equity instruments, it is either a non-derivative that includes no obligation to deliver a variable number of the Group's own equity instruments or is a derivative that will be settled by the Group exchanging a fixed amount of cash or other financial assets for a fixed number of its own equity instruments.

To the extent that this definition is not met, the financial instrument is classified as a financial liability. Where the instrument so classified takes the legal form of the Group's own shares, the amounts presented in the Group's shareholders' equity exclude amounts in relation to those shares.

Changes in the fair value of liabilities at FVTPL are recognized in Net finance income (costs) in the Consolidated Statements of Comprehensive Income/(Loss) as applicable.

IFRS 15, Revenue from Contracts with Customers

The standard establishes a five-step principle-based approach for revenue recognition and is based on the concept of recognizing an amount that reflects the consideration for performance obligations only when they are satisfied and the control of goods or services is transferred.

The majority of the Group's contract revenue is generated from licenses and services, some of which are part of collaboration arrangements.

Management reviewed contracts where the Group received consideration in order to determine whether or not they should be accounted for in accordance with IFRS 15. To date, PureTech has entered into transactions that generate revenue and meet the scope of either IFRS 15 or IAS 20 Accounting for Government Grants. Contract revenue is recognized at either a point-in-time or over time, depending on the nature of the performance obligations.

The Group accounts for agreements that meet the definition of IFRS 15 by applying the following five step model:

- Identify the contract(s) with a customer – A contract with a customer exists when (i) the Group enters into an enforceable contract with a customer that defines each party's rights regarding the goods or services to be transferred and identifies the payment terms related to those goods or services, (ii) the contract has commercial substance and, (iii) the Group determines that collection of substantially all consideration for goods or services that are transferred is probable based on the customer's intent and ability to pay the promised consideration.
- Identify the performance obligations in the contract – Performance obligations promised in a contract are identified based on the goods or services that will be transferred to the customer that are both capable of being distinct, whereby the customer can benefit from the good or service either on its own or together with other resources that are readily available from third parties or from the Group, and are distinct in the context of the contract, whereby the transfer of the goods or services is separately identifiable from other promises in the contract.
- Determine the transaction price – The transaction price is determined based on the consideration to which the Group will be entitled in exchange for transferring goods or services to the customer. To the extent the transaction price includes variable consideration, the Group estimates the amount of variable consideration that should be included in the transaction price utilizing either the expected value method or the most likely amount method depending on the nature of the variable consideration. Variable consideration is included in the transaction price if, in the Group's judgement, it is probable that a significant future reversal of cumulative revenue under the contract will not occur.
- Allocate the transaction price to the performance obligations in the contract – If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price basis.

- Recognize revenue when (or as) the Group satisfies a performance obligation – The Group satisfies performance obligations either over time or at a point in time as discussed in further detail below. Revenue is recognized at the time the related performance obligation is satisfied by transferring a promised good or service to a customer.

Revenue generated from services agreements (typically where licenses and related services were combined into one performance obligation) is determined to be recognized over time when it can be determined that the services meet one of the following: (a) the customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs; (b) the entity's performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or (c) the entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

It was determined that the Group has contracts that meet criteria (a), since the customer simultaneously receives and consumes the benefits provided by the Company's performance as the Company performs. Therefore revenue is recognized over time using the input method based on costs incurred to date as compared to total contract costs. The Company believes that in research and development service type agreements using costs incurred to date represents the most faithful depiction of the entity's performance towards complete satisfaction of a performance obligation.

Revenue from licenses that are not part of a combined performance obligation are recognized at a point in time due to the licenses relating to intellectual property that has significant stand-alone functionality and as such represent a right to use the entity's intellectual property as it exists at the point in time at which the license is granted.

Royalty income received in respect of licensing agreements is recognized as the related third party sales in the licensee occur.

Amounts that are receivable or have been received per contractual terms but have not been recognized as revenue since performance has not yet occurred or has not yet been completed are recorded as deferred revenue. The Company classifies as non-current deferred revenue amounts received for which performance is expected to occur beyond one year or one operating cycle.

Grant Income

The Company recognizes grants from governmental agencies as grant income in the Consolidated Statement of Comprehensive Income/(Loss), gross of the expenditures that were related to obtaining the grant, when there is reasonable assurance that the Company will comply with the conditions within the grant agreement and there is reasonable assurance that payments under the grants will be received. The Company evaluates the conditions of each grant as of each reporting date to ensure that the Company has reasonable assurance of meeting the conditions of each grant arrangement and that it is expected that the grant payment will be received as a result of meeting the necessary conditions.

The Company submits qualifying expenses for reimbursement after the Company has incurred the research and development expense. The Company records an unbilled receivable upon incurring such expenses. In cases were grant income is received prior to the expenses being incurred or recognized, the amounts received are deferred until the related expense is incurred and/or recognized. Grant income is recognized in the Consolidated Statements of Comprehensive Income/(Loss) at the time in which the Company recognizes the related reimbursable expense for which the grant is intended to compensate.

Functional and Presentation Currency

These consolidated financial statements are presented in United States dollars ("US dollars"). The functional currency of all members of the Group is the U.S. dollar. The Group's share in foreign exchange differences in associates were reported in Other Comprehensive Income/(Loss).

Foreign Currency

Transactions in foreign currencies are translated to the respective functional currencies of Group entities at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are retranslated to the functional currency at the foreign exchange rate ruling at that date. Foreign exchange differences arising on remeasurement are recognized in the Consolidated Statement of Comprehensive Income/(Loss). Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

Cash and Cash Equivalents

Cash and cash equivalents include all highly liquid instruments with original maturities of three months or less.

Share Capital

Ordinary shares are classified as equity. The Group's equity is comprised of share capital, share premium, merger reserve, other reserve, translation reserve, and retained earnings/accumulated deficit.

Treasury Shares

Treasury shares are recognized at cost and are deducted from shareholders' equity. No gain or loss is recognized in profit and loss for the purchase, sale, re-issue or cancellation of the Company's own equity shares

Property and Equipment

Property and equipment is stated at cost less accumulated depreciation and any accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. Assets under construction represent leasehold improvements and machinery and equipment to be used in operations or research and development activities. When parts of an item of property and equipment have different useful lives, they are accounted for as separate items (major components) of property and equipment. Depreciation is calculated using the straight-line method over the estimated useful life of the related asset:

Laboratory and manufacturing equipment	2-8 years
Furniture and fixtures	7 years
Computer equipment and software	1-5 years
Leasehold improvements	5-10 years, or the remaining term of the lease, if shorter

Depreciation methods, useful lives and residual values are reviewed at each balance sheet date.

Intangible Assets

Intangible assets, which include purchased patents and licenses with finite useful lives, are carried at historical cost less accumulated amortization, if amortization has commenced. Intangible assets with finite lives are amortized from the time they are available for their intended use. Amortization is calculated using the straight-line method to allocate the costs of patents and licenses over their estimated useful lives.

Research and development intangible assets, which are still under development and have accordingly not yet obtained marketing approval, are presented as In-Process Research and Development (IPR&D). IPR&D is not amortized since it is not yet available for its intended use, but it is evaluated for potential impairment on an annual basis or more frequently when facts and circumstances warrant.

Impairment

Impairment of Non-Financial Assets

The Group reviews the carrying amounts of its property and equipment and intangible assets at each reporting date to determine whether there are indicators of impairment. If any such indicators of impairment exist, then an asset's recoverable amount is estimated. The recoverable amount is the higher of an asset's fair value less cost of disposal and value in use.

The Company's IPR&D intangible assets are not yet available for their intended use. As such, they are tested for impairment at least annually.

An impairment loss is recognized when an asset's carrying amount exceeds its recoverable amount. For the purposes of impairment testing, assets are grouped at the lowest levels for which there are largely independent cash flows. If a non- financial asset instrument is impaired, an impairment loss is recognized in the Consolidated Statements of Comprehensive Income/(Loss).

Investments in associates are considered impaired if, and only if, objective evidence indicates that one or more events, which occurred after the initial recognition, have had an impact on the future cash flows from the net investment and that impact can be reliably estimated. If an impairment exists the Company measures an impairment by comparing the carrying value of the net investment in the associate to its recoverable amount and recording any excess as an impairment loss. See Note 6 for impairment recorded in respect of an investment in associate during the year ended December 31, 2022.

Employee Benefits

Short-Term Employee Benefits

Short-term employee benefit obligations are measured on an undiscounted basis and expensed as the related service is provided. A liability is recognized for the amount expected to be paid if the Group has a present legal or constructive obligation due to past service provided by the employee, and the obligation can be estimated reliably.

Defined Contribution Plans

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and has no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution plans are recognized as an employee benefit expense in the periods during which related services are rendered by employees. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

Share-based Payments

Share-based payment arrangements, in which the Group receives goods or services as consideration for its own equity instruments, are accounted for as equity-settled share-based payment transactions (except certain restricted stock units - see below) in accordance with IFRS 2, regardless of how the equity instruments are obtained by the Group. The grant date fair value of employee share-based payment awards is recognized as an expense with a corresponding increase in equity over the requisite service period related to the awards. The amount recognized as an expense is adjusted to reflect the actual number of awards for which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that do meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with market conditions, the grant date fair value is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

Certain restricted stock units are treated as liability settled awards starting in 2021. Such awards are remeasured at every reporting date until settlement date and are recognized as compensation expense over the requisite service period. Differences in remeasurement are recognized in profit and loss. The cumulative cost that will ultimately be recognized in respect of these awards will equal to the amount at settlement.

The fair value of the awards is measured using option pricing models and other appropriate models, which take into account the terms and conditions of the awards granted. See further details in Note 8.

Development Costs

Expenditures on research activities are recognized as incurred in the Consolidated Statements of Comprehensive Income/(Loss). In accordance with IAS 38 development costs are capitalized only if the expenditure can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, the Group can demonstrate its ability to use or sell the intangible asset, the Group intends to and has sufficient resources to complete development and to use or sell the asset, and it is able to measure reliably the expenditure attributable to the intangible asset during its development. The point at which technical feasibility is determined to have been reached is, generally, when regulatory approval has been received where applicable. Management determines that commercial viability has been reached

when a clear market and pricing point have been identified, which may coincide with achieving meaningful recurring sales. Otherwise, the development expenditure is recognized as incurred in the Consolidated Statements of Comprehensive Income/(Loss). As of balance sheet date the Group has not capitalized any development costs.

Provisions

A provision is recognized in the Consolidated Statements of Financial Position when the Group has a present legal or constructive obligation due to a past event that can be reliably measured, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects risks specific to the liability.

Leases

The Group leases real estate (and some minor equipment) for use in operations. These leases generally have lease terms of 1 to 10 years. The Group includes options that are reasonably certain to be exercised as part of the determination of the lease term. The group determines if an arrangement is a lease at inception of the contract in accordance with guidance detailed in IFRS 16. ROU assets represent the Group's right to use an underlying asset for the lease term and lease liabilities represent the Group's obligation to make lease payments arising from the lease. Operating lease ROU assets and lease liabilities are recognized at commencement date based on the present value of the lease payments over the lease term. As most of the Group's leases do not provide an implicit rate, The Group used its estimated incremental borrowing rate, based on information available at commencement date, in determining the present value of future payments.

The Group's leases are virtually all leases of real estate.

The Group has elected to account for lease payments as an expense on a straight-line basis over the life of the lease for:

- Leases with a term of 12 months or less and containing no purchase options; and
- Leases where the underlying asset has a value of less than $5,000.

The right-of-use asset is depreciated on a straight-line basis and the lease liability gives rise to an interest charge.

Further information regarding the subleases, right of use asset and lease liability can be found in Note 21.

Finance Income and Finance Costs

Finance income is comprised of income on funds invested in U.S. treasuries, income on money market funds and income on a finance lease. Financing income is recognized as it is earned. Finance costs comprise mainly of loan, notes and lease liability interest expenses and the changes in the fair value of financial liabilities carried at FVTPL (such changes can consist of finance income when the fair value of such financial liabilities decreases).

Taxation

Tax on the profit or loss for the year comprises current and deferred income tax. In accordance with IAS 12, tax is recognized in the Consolidated Statements of Comprehensive Income/(Loss) except to the extent that it relates to items recognized directly in equity.

Current income tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantially enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognized due to temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax assets are recognized for unused tax losses, unused tax credits and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be used. Deferred tax assets with respect to investments in associates are recognized only to the extent that it is probable the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

Fair Value Measurements

The Group's accounting policies require that certain financial assets and certain financial liabilities be measured at their fair value.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The Group recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

The carrying amount of cash and cash equivalents, accounts receivable, restricted cash, deposits, accounts payable, accrued expenses and other current liabilities in the Group's Consolidated Statements of Financial Position approximates their fair value because of the short maturities of these instruments.

Operating Segments

Operating segments are reported in a manner that is consistent with the internal reporting provided to the chief operating decision maker ("CODM"). The CODM reviews discrete financial information for the operating segments in order to assess their performance and is responsible for making decisions about resources allocated to the segments. The CODM has been identified as the Group's Directors.

2. New Standards and Interpretations Not Yet Adopted

A number of new standards, interpretations, and amendments to existing standards are effective for annual periods commencing on or after January 1, 2023 and have not been applied in preparing the consolidated financial information. The Company's assessment of the impact of these new standards and interpretations is set out below.

Effective January 1, 2023, the definition of accounting estimates has been amended as an amendment to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. The amendments clarify how companies should distinguish changes in accounting policies from changes in accounting estimates. The distinction is important because changes in accounting estimates are applied prospectively only to future transactions and future events, but changes in accounting policies are generally also applied retrospectively to past transactions and other past events. This amendment is not expected to have an impact on the Group's financial statements.

Effective January 1, 2023, IAS 1 has been amended to clarify that liabilities are classified as either current or non-current, depending on the rights that exist at the end of the reporting period. Classification is unaffected by the expectations of the entity or events after the reporting date. The Company does not expect this amendment will have a material impact on its financial statements.

Effective January 1, 2023, IAS 12 is amended to narrow the scope of the initial recognition exemption (IRE) so that it does not apply to transactions that give rise to equal and offsetting temporary differences. As a result, companies will need to recognise a deferred tax asset and a deferred tax liability for temporary differences arising on initial recognition of a lease and a decommissioning provision. The amendment is not expected to have an impact on the Group's financial statements as the Group has already recognized a deferred tax asset and deferred tax liability that arose on initial recognition of its leases (the Group does not have decommissioning provisions).

None of the other new standards, interpretations, and amendments are applicable to the Company's financial statements and therefore will not have an impact on the Company.

3. Revenue

Revenue recorded in the Consolidated Statement of Comprehensive Income/(Loss) consists of the following:

For the years ended December 31,	**2022 $000s**	2021 $000s	2020 $000s
Contract revenue	**2,090**	9,979	8,341
Grant income	**13,528**	7,409	3,427
Total revenue	**15,618**	17,388	11,768

All amounts recorded in contract revenue were generated in the United States. For the years ended December 31, 2022, 2021 and 2020 contract revenue includes royalties received from an associate in the amount of $509 thousand, $231 thousand, and $54 thousand, respectively.

Primarily all of the Company's other contracts for the years ended December 31, 2022, 2021 and 2020 were determined to have a single performance obligation which consists of a combined deliverable of license to intellectual property and research and development services (not including the license acquired by Imbrium upon option exercise – see below). Therefore, for such contracts, revenue is recognized over time based on the input method which the Company believes is a faithful depiction of the transfer of goods and services. Progress is measured based on costs incurred to date as compared to total projected costs. Payments for such contracts are primarily made up front on a periodic basis.

During the year ended December 31, 2021, the company received a $6.5 million payment from Imbrium Therapeutics, Inc. following the exercise of the option to acquire an exclusive license for the Initial Product Candidate, as defined in the agreement. Since the license transferred was a functional license, revenue from the option exercise was recognized at a point in time upon transfer of the license, which occurred during the year ended December 31, 2021.

During the year ended December 31, 2020, the Company received a $2.0 million milestone payment from Karuna Therapeutics, Inc. following initiation of its KarXT Phase 3 clinical study pursuant to the Exclusive Patent License Agreement between PureTech and Karuna. This milestone was recognized as revenue during the year ended December 31, 2020.

Disaggregated Revenue

The Group disaggregates contract revenue in a manner that depicts how the nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factors. The Group disaggregates revenue based on contract revenue or grant revenue, and further disaggregates contract revenue based on the transfer of control of the underlying performance obligations.

Timing of contract revenue recognition For the years ended December 31,	**2022 $000s**	2021 $000s	2020 $000s
Transferred at a point in time – Licensing Income[1]	**527**	6,809	2,054
Transferred over time[2]	**1,563**	3,171	6,286
	2,090	9,979	8,341

1 2022 – Attributed to Non-Controlled Founded Entities segment ($19 thousand) and to Parent Company and Other ($509 thousand); 2021 – Attributed to the Internal segment ($6,500 thousand), Non-Controlled Founded Entities segment ($74 thousand), and to Parent Company and Other ($235 thousand); 2020 – Attributed to Parent Company and Other. See note 4, Segment information.

2 2022 – Attributed to Controlled Founded Entities segment ($1,500 thousand) and to Non-Controlled Founded Entities segment ($63 thousand); 2021 – Attributed to Internal segment ($1,629 thousand), Non-Controlled Founded Entities segment ($41 thousand), and to Controlled Founded Entities segment ($1,500 thousand). 2020 – Attributed to Internal segment ($5,297 thousand), Controlled Founded Entities segment ($896 thousand), and to Non-Controlled Founded Entities segment ($93 thousand). See Note 4, Segment Information.

Customers over 10% of revenue	**2022 $000s**	2021 $000s	2020 $000s
Customer A	**—**	—	1,518
Customer B	**1,500**	1,500	896
Customer C	**—**	—	2,043
Customer D	**—**	7,250	1,736
Customer E	**—**	—	2,000
Customer F	**509**	—	—
	2,009	8,750	8,193

Accounts receivables represent rights to consideration in exchange for products or services that have been transferred by the Group, when payment is unconditional and only the passage of time is required before payment is due. Accounts receivables do not bear interest and are recorded at the invoiced amount. Accounts receivable are included within Trade and other receivables on the Consolidated Statement of Financial Position.

Contract liabilities represent the Group's obligation to transfer products or services to a customer for which consideration has been received, or for which an amount of consideration is due from the customer. Contract liabilities are included within deferred revenue on the Consolidated Statement of Financial Position.

Contract Balances	**2022 $000s**	2021 $000s
Accounts receivable	**606**	704
Deferred revenue – short term	**—**	65

During the year ended December 31, 2022, $65 thousand of revenue was recognized from deferred revenue outstanding at December 31, 2021.

Remaining performance obligations represent the transaction price of unsatisfied or partially satisfied performance obligations within contracts with an original expected contract term that is greater than one year and for which fulfillment of the contract has started as of the end of the reporting period. The aggregate amount of transaction consideration allocated to remaining performance obligations as of December 31, 2022, was nil.

As of December 31, 2022 the deferred revenue balance related entirely to deferred grant income.

4. Segment Information

Basis for Segmentation

The Directors are the Group's strategic decision-makers. The Group's operating segments are reported based on the financial information provided to the Directors periodically for the purposes of allocating resources and assessing performance. The Group has determined that each entity is representative of a single operating segment as the Directors monitor the financial results at this level. When identifying the reportable segments the Group has determined that it is appropriate to aggregate multiple operating segments into a single reportable segment given the high level of operational and financial similarities across the entities.

The Group has identified multiple reportable segments as presented below. There was no change to reportable segments in 2022, except for the transfer of Sonde Health, Inc. to the Non-Controlled Founded Entities segment due to the deconsolidation of Sonde Health, Inc (Sonde) on May 25, 2022.

The Non-Controlled Founded Entities segment includes Sonde Health, Inc. which was deconsolidated on May 25, 2022. Segment results incorporate the operational results of Sonde Health, Inc. to the date of deconsolidation. Following the date of deconsolidation, the Company accounts for its investment in Sonde Health, Inc. at the parent level, and therefore the results associated with investment activity following the date of deconsolidation (including the Group's share in Sonde losses) is included in the Parent Company and Other section.

The Company has revised in these financial statements the prior year financial information to conform to the presentation as of and for the year ending December 31, 2022 to include Sonde in the Non-Controlled Founded Entities segment. The change in segments reflects how the Company's Board of Directors reviews the Group's results, allocates resources and assesses performance of the Group at this time.

Virtually all of the revenue and profit generating activities of the Group are generated within the United States and accordingly, no geographical disclosures are provided.

Internal

The Internal segment (the "Internal segment"), is advancing Wholly Owned Programs which are focused on treatments for patients with devastating diseases. The Internal segment is comprised of the technologies that are wholly owned and will be advanced through either PureTech Health funding or non-dilutive sources of financing in the near-term. The operational management of the Internal segment is conducted by the PureTech Health team, which is responsible for the strategy, business development, and research and development. As of December 31, 2022, this segment included PureTech LYT, PureTech LYT-100 and Alivio Therapeutics, Inc.

Controlled Founded Entities

The Controlled Founded Entity segment (the "Controlled Founded Entity segment") is comprised of the Group's subsidiaries that are currently consolidated operational subsidiaries that either have, or have plans to hire, independent management teams and currently have already raised third-party dilutive capital. These subsidiaries have active research and development programs and either have entered into or plan to seek an equity or debt investment partner, who will provide additional industry knowledge and access to networks, as well as additional funding to continue the pursued growth of the company. As of December 31, 2022, this segment included Entrega Inc., Follica Incorporated, and Vedanta Biosciences, Inc.

Non-Controlled Founded Entities

The Non-Controlled Founded Entities segment (the "Non-Controlled Founded Entities segment") is comprised of the entities in respect of which PureTech Health no longer has control over the entity. Upon deconsolidation of an entity the segment disclosure is restated to reflect the change on a retrospective basis, as this constitutes a change in the composition of its reportable segments. The Non-Controlled Founded Entities segment includes Sonde Health Inc. which was deconsolidated on May 25, 2022.

The Non-Controlled Founded Entities segment incorporates the operational results of the aforementioned entity to the date of deconsolidation. Following the date of deconsolidation, the Company accounts for its investment in each entity at the parent level, and therefore the results associated with investment activity (including the recognition of equity method income/ (losses)) following the date of deconsolidation is included in the Parent Company and Other section.

Parent Company and Other

Parent Company and Other includes activities that are not directly attributable to the operating segments, such as the activities of the Parent, corporate support functions and certain research and development support functions that are not directly attributable to a strategic business segment as well as the elimination of intercompany transactions. Intercompany transactions between segments consist primarily of management fees charged from the Parent Company to the other segments. This section also captures the accounting for the Company's holdings in entities for which control has been lost, which is inclusive of the following items: gain on deconsolidation, gain or loss on investments held at fair value, realized loss on sale of investments, the share of net income/ (loss) of associates accounted for using the equity method, gain on dilution of ownership interest in associate, impairment of investment in associate. As of December 31, 2022, this segment included PureTech Health plc, PureTech Health LLC, PureTech Management, Inc., PureTech Securities Corp. and PureTech Securities II Corp., as well as certain other dormant, inactive and shell entities.

Information About Reportable Segments:

	2022				
	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Consolidated $000s
Consolidated Statements of Comprehensive Income/(Loss)					
Contract revenue	**—**	**1,500**	**81**	**509**	**2,090**
Grant revenue	**2,826**	**10,702**	**—**	**—**	**13,528**
Total revenue	**2,826**	**12,202**	**81**	**509**	**15,618**
General and administrative expenses	**(8,301)**	**(16,462)**	**(1,296)**	**(34,933)**	**(60,991)**
Research and development expenses	**(116,054)**	**(34,668)**	**(826)**	**(885)**	**(152,433)**
Total operating expense	**(124,355)**	**(51,130)**	**(2,122)**	**(35,817)**	**(213,425)**
Other income/(expense):					
Gain on deconsolidation of subsidiary	**—**	**—**	**—**	**27,251**	**27,251**
Gain/(loss) on investment held at fair value	**—**	**—**	**—**	**(32,060)**	**(32,060)**
Realized loss on sale of investments	**—**	**—**	**—**	**(29,303)**	**(29,303)**
Other income/(expense)	**(204)**	**(3)**	**—**	**8,338**	**8,131**
Total other income/(expense)	**(204)**	**(3)**	**—**	**(25,775)**	**(25,981)**
Net finance income/(costs)	**615**	**138,006**	**(3,045)**	**3,348**	**138,924**
Share of net income/(loss) of associates accounted for using the equity method	**—**	**—**	**—**	**(27,749)**	**(27,749)**
Gain on dilution of ownership interest in associate	**—**	**—**	**—**	**28,220**	**28,220**
Impairment of investment in associate	**—**	**—**	**—**	**(8,390)**	**(8,390)**
Income/(loss) before taxes	**(121,118)**	**99,075**	**(5,085)**	**(65,655)**	**(92,783)**
Income/(loss) before taxes pre IFRS 9 fair value accounting, share-based payment expense, depreciation of tangible assets and amortization of intangible assets	**(114,255)**	**(32,468)**	**(2,079)**	**(57,452)**	**(206,254)**
Finance income/(costs) – IFRS 9 fair value accounting	**—**	**140,056**	**(2,993)**	**—**	**137,063**
Share-based payment expense	**(5,136)**	**(4,703)**	**(8)**	**(4,852)**	**(14,699)**
Depreciation of tangible assets	**(1,727)**	**(2,526)**	**(4)**	**(1,588)**	**(5,845)**
Amortization of ROU assets	**—**	**(1,283)**	**—**	**(1,764)**	**(3,047)**
Amortization of intangible assets	**—**	**—**	**(1)**	**—**	**(1)**
Taxation	**—**	**—**	**—**	**55,719**	**55,719**
Income/(loss) for the year	**(121,118)**	**99,075**	**(5,085)**	**(9,936)**	**(37,065)**
Other comprehensive income/(loss)	**—**	**—**	**—**	**(379)**	**(379)**
Total comprehensive income/(loss) for the year	**(121,118)**	**99,075**	**(5,085)**	**(10,316)**	**(37,444)**
Total comprehensive income/(loss) attributable to:					
Owners of the Company	**(121,118)**	**85,471**	**(4,755)**	**(10,331)**	**(50,733)**
Non-controlling interests	**—**	**13,604**	**(330)**	**15**	**13,290**
			December 31, 2022 $000s		
Consolidated Statements of Financial Position:					
Total assets	**51,599**	**35,341**	**—**	**615,707**	**702,647**
Total liabilities[1]	**271,186**	**76,635**	**—**	**(192,763)**	**155,057**
Net assets/(liabilities)	**(219,587)**	**(41,294)**	**—**	**808,470**	**547,589**

1 Parent Company and Other Includes eliminations of intercompany liabilities between the Parent Company and the reportable segments in the amount of $255.5 million.

	2021				
	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Consolidated $000s
Consolidated Statements of Comprehensive Income/(Loss)					
Contract revenue	8,129	1,500	115	235	9,979
Grant revenue	1,253	6,156	—	—	7,409
Total revenue	9,382	7,656	115	235	17,388
General and administrative expenses	(8,673)	(17,504)	(3,225)	(27,797)	(57,199)
Research and development expenses	(65,444)	(40,667)	(3,116)	(1,244)	(110,471)
Total Operating expenses	(74,118)	(58,171)	(6,341)	(29,041)	(167,671)
Other income/(expense):					
Gain/(loss) on investment held at fair value	—	—	—	179,316	179,316
Realized loss on sale of investments	—	—	—	(20,925)	(20,925)
Other income/(expense)	—	70	—	1,523	1,593
Total other income/(expense)	(1)	70	—	159,914	159,983
Net finance income/(costs)	(16)	7,528	(784)	(1,679)	5,050
Share of net income/(loss) of associate accounted for using the equity method	—	—	—	(73,703)	(73,703)
Income/(loss) before taxes	(64,753)	(42,917)	(7,010)	55,727	(58,953)
(Loss)/income before taxes pre IFRS 9 fair value accounting, finance costs – subsidiary preferred shares, share-based payment expense, depreciation of tangible assets and amortization of intangible assets	(60,368)	(44,335)	(6,248)	63,628	(47,323)
Finance income/(costs) – IFRS 9 fair value accounting	—	10,322	(716)	—	9,606
Share-based payment expense	(3,066)	(6,224)	(32)	(4,628)	(13,950)
Depreciation of tangible assets	(1,319)	(1,506)	(12)	(1,510)	(4,347)
Amortization of ROU assets	—	(1,174)	—	(1,764)	(2,938)
Amortization of intangible assets	—	—	(2)	—	(2)
Taxation	—	—	—	(3,756)	(3,756)
Income/(loss) for the year	(64,753)	(42,917)	(7,010)	51,971	(62,709)
Other comprehensive income/(loss)	—	—	—	—	—
Total comprehensive income/(loss) for the year	(64,753)	(42,917)	(7,010)	51,971	(62,709)
Total comprehensive income/(loss) attributable to:					
Owners of the Company	(64,657)	(41,283)	(6,574)	51,956	(60,558)
Non-controlling interests	(96)	(1,634)	(436)	15	(2,151)
	December 31, 2021 $000s				
Consolidated Statements of Financial Position:					
Total assets	125,726	64,508	1,765	754,007	946,006
Total liabilities[1]	228,789	209,212	19,645	(95,787)	361,859
Net (liabilities)/assets	(103,063)	(144,704)	(17,880)	849,794	584,147

1 Parent Company and Other Includes eliminations of intercompany liabilities between the Parent Company and the reportable segments in the amount of $233.3 million.

The proportion of net assets shown above that is attributable to non-controlling interest is disclosed in Note 18.

	2020				
	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Consolidated $000s
Consolidated Statements of Comprehensive Loss					
Contract revenue	5,297	896	93	2,054	8,341
Grant revenue	1,563	1,864	—	—	3,427
Total revenue	6,860	2,760	93	2,054	11,768
General and administrative expenses	(3,482)	(10,752)	(2,939)	(32,267)	(49,440)
Research and development expenses	(45,346)	(33,152)	(3,128)	(234)	(81,859)
Total operating expense	(48,828)	(43,904)	(6,067)	(32,500)	(131,299)
Other income/(expense):					
Gain/(loss) on investment held at fair value	—	—	—	232,674	232,674
Realized loss on sale of investments	—	—	—	(54,976)	(54,976)
Gain/(loss) on disposal of assets	(15)	(15)	—	—	(30)
Other income/(expense)	—	100	—	965	1,065
Other income/(expense)	(15)	85	—	178,662	178,732
Net finance income/(costs)	19	(4,352)	(852)	(930)	(6,115)
Share of net income/(loss) of associate accounted for using the equity method	—	—	—	(34,117)	(34,117)
Income/(loss) before taxes	(41,964)	(45,410)	(6,826)	113,170	18,969
(Loss)/income before taxes pre IAS 39 fair value accounting, finance costs – subsidiary preferred shares, share-based payment expense, depreciation of tangible assets and amortization of intangible assets	(38,349)	(36,736)	(5,866)	121,644	40,694
Finance income/(costs) – IFRS 9 fair value accounting	—	(3,492)	(859)	—	(4,351)
Share-based payment expense	(2,762)	(2,469)	(83)	(5,405)	(10,718)
Depreciation of tangible assets	(854)	(1,528)	(17)	(1,547)	(3,945)
Amortization of ROU assets	—	(1,186)	—	(1,523)	(2,709)
Amortization of intangible assets	—	—	(1)	—	(1)
Taxation	—	(1)	—	(14,400)	(14,401)
Income/(loss) for the year	(41,964)	(45,411)	(6,826)	98,769	4,568
Other comprehensive income/(loss)	—	—	—	469	469
Total comprehensive income/(loss) for the year	(41,964)	(45,411)	(6,826)	99,238	5,037
Total comprehensive income/(loss) attributable to:					
Owners of the Company	(41,773)	(44,506)	(6,519)	99,253	6,454
Non-controlling interests	(191)	(905)	(306)	(15)	(1,417)

5. Investments held at fair value

Investments held at fair value include both unlisted and listed securities held by PureTech. These investments, which include interests in Akili, Vor, Karuna, Gelesis (preferred shares until exchanged for common stock, accounted for under the equity method, and Earn-out shares following exchange), Sonde and other insignificant investments, are initially measured at fair value and are subsequently re-measured at fair value at each reporting date with changes in the fair value recorded through profit and loss. Interests in these investments were accounted for as shown below:

Investments held at fair value	$000's
Balance as of January 1, 2021	553,167
Sale of Karuna shares	(218,125)
Loss realised on sale of investments	(20,925)
Cash purchase of Vor preferred shares	500
Gain – change in fair value through profit and loss	179,271
Balance as of December 31, 2021 and January 1, 2022 before allocation of share in associate loss to long-term interest (*)	493,888
Investment in Sonde Preferred shares – Sonde deconsolidation	11,168
Sale of Karuna and Vor shares	(118,710)
Loss realised on sale of investments as a result of written call option	(29,303)
Cash Investment (Akili)	5,000
Gelesis Earn out shares received in SPAC exchange	14,214
Exchange of Gelesis preferred shares to Gelesis common shares	(92,303)
Loss – change in fair value through profit and loss	(32,060)
Balance as of December 31, 2022	**251,892**

(*) Share in associate losses allocated to long-term interest amounted to $96.7 million as of December 31, 2021 and January 1, 2022

Vor

Vor was deconsolidated in February 2019. As PureTech did not hold common shares in Vor upon deconsolidation and the preferred shares it held did not have equity-like features, PureTech had no basis to account for its investment in Vor under IAS 28. The preferred shares held by PureTech fell under the guidance of IFRS 9 and were treated as a financial asset held at fair value with changes in fair value recorded in the Consolidated Statement of Comprehensive Income/(Loss).

2020

On February 12, 2020, PureTech participated in the second closing of Vor's Series A-2 Preferred Share financing. For consideration of $0.7 million, PureTech received 1,625,000 A-2 shares. On June 30, 2020, PureTech participated in the first closing of Vor's Series B Preferred Share financing. For consideration of $0.5 million, PureTech received 961,538 shares. Upon the conclusion of such Vor financings PureTech no longer had significant influence over Vor.

2021

On January 8, 2021, PureTech participated in the second closing of Vor's Series B Preferred Share financing. For consideration of $0.5 million, PureTech received an additional 961,538 B Preferred shares.

On February 9, 2021, Vor closed its initial public offering (IPO) of 9,828,017 shares of its common stock at a price to the public of $18.00 per share. Subsequent to the closing, PureTech held 3,207,200 shares of Vor common stock, representing 8.6 percent of Vor common stock. Following its IPO, the valuation of Vor common stock is based on level 1 inputs in the fair value hierarchy. See Note 16.

2022

In August and December 2022, PureTech sold an aggregate of 535,400 shares of Vor common shares for aggregate proceeds of $3.3 million .

During the years ended December 31, 2022, 2021 and 2020, the Company recognized a loss of $16.2 million, a gain of $3.9 million, and a gain of $19.1 million, respectively for the changes in the fair value of the investment that were recorded in the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss). Please refer to Note 16 for information regarding the valuation of these instruments.

Gelesis

Gelesis was deconsolidated in July 2019. The common stock held in Gelesis is accounted for under the equity method, while the preferred shares and warrants held by PureTech fell under the guidance of IFRS 9 and were treated as financial assets held at fair value, where changes to the fair value of the preferred shares and warrant were recorded through the Consolidated Statement of Income/(Loss). Please refer to Note 6 for information regarding the Company's investment in Gelesis as an associate.

2020

On April 1, 2020, PureTech participated in the 2nd closing of Gelesis's Series 3 Growth Preferred Share financing. For consideration of $10.0 million, PureTech received 579,038 Series 3 Growth shares.

2020 and 2021

During the years ended December 31, 2021 and 2020, due to the equity method based investment in Gelesis being reduced to zero, the Group allocated a portion of its share in the net loss in Gelesis in the years ended December 31, 2021 and 2020, totaling $73.7 million, and $23.0 million, respectively, to its preferred share and warrant investments in Gelesis, which were considered to be long-term interests in Gelesis.

2022

On January 13, 2022, Gelesis completed its business combination with Capstar Special Purpose Acquisition Corp ("Capstar"). As part of the business combination, all shares in Gelesis, common and preferred, including the shares held by PureTech, were exchanged for common shares of the merged entity and unvested common shares that will vest upon the stock price of the new combined entity reaching certain target prices (hereinafter "Earn-out shares"). In addition, PureTech invested $15.0 million in the class A common shares of Capstar as part of the Private Investment in Public Equity ("PIPE") transaction that took place immediately prior to the closing of the business combination and an additional approximately $5.0 million, as part of the Backstop agreement signed with Capstar on December 30, 2021 (See Note 6). Pursuant to the business combination, Gelesis became a wholly-owned subsidiary of Capstar and Capstar changed its name to Gelesis Holdings, Inc., which began trading on the New York Stock Exchange under the ticker symbol "GLS" on January 14, 2022. The exchange of the preferred stock (including warrants) for common stock (including common stock warrants) represents an additional investment in Gelesis equity investment. The Group recorded the changes in fair value of the preferred stock (including warrant) through the date of the exchange upon which the preferred stock were derecognized and recorded as an additional investment in Gelesis equity interest – See Note 6 for the net gain on the dilution of the equity interest in Gelesis, resulting from the exchange of all preferred stock in Gelesis to common stock of Gelesis Holdings Inc, the PIPE transaction and the closing of the merger. All equity method losses allocated in prior periods against the investment in Gelesis held at fair value are now included within the equity method investment in Gelesis and were offset against the gain on dilution of interest – see Note 6.

As part of the aforementioned exchange PureTech received 4,526,622 Earn-out shares, which were valued on the date of the exchange at $14.2 million. The Group accounts for such Earn-out shares under IFRS 9 as investments held at fair value with changes in fair value recorded through profit and loss.

During the years ended December 31, 2022, 2021 and 2020, the Company recognized a loss of $4.4 million, a gain of $34.6 million, and a gain of $7.1 million, respectively related to the change in the fair value of the preferred shares and warrants that was recorded in the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss).

In addition, the Company recognized a loss of $14.1 million during the year ended December 31, 2022 in respect of the Earn-out shares, for the change in the fair value related to such investment during the period. As of December 31, 2022 the value of such earn-out shares amounted to $0.1 million.

Karuna

Karuna was deconsolidated in March 2019. During 2019 Karuna completed its IPO and PureTech lost its significant influence in Karuna. The shares held in Karuna are accounted for as an investment held at fair value.

2020

On January 22, 2020, PureTech sold 2,100,000 shares of Karuna common shares for aggregate proceeds of $200.9 million. On May 26, 2020, PureTech sold an additional 555,500 Karuna common shares for aggregate proceeds of $45.0 million. On August 26, 2020, PureTech sold 1,333,333 common shares of Karuna for aggregate proceeds of $101.6 million. As a result of the sales, Puretech recorded a loss of $54.8 million attributable to blockage discount included in the sales price, to the line item Loss Realized on Sale of Investment within the Consolidated Statement of Comprehensive Income/(Loss). See below for gain recorded in respect of the change in fair value of the Karuna investment.

2021

On February 9, 2021, the Group sold 1,000,000 common shares of Karuna for $118.0 million. Following the sale the Group held 2,406,564 common shares of Karuna, which represented 8.2 percent of Karuna common stock at the time of sale. On November 9, 2021, the group sold an additional 750,000 common shares of Karuna for $100.1 million. Following the sale the group holds 1,656,564 common shares of Karuna, which represented 5.6 percent at time of sale. As a result of the aforementioned sales, the Company recorded a loss of $20.9 million, attributable to blockage discount included in the sales price, to the line item Loss Realised on Sale of Investment within the Consolidated Statement of Comprehensive Income/ (Loss). See below for gain recorded in respect of the change in fair value of the Karuna investment.

2022

On August 8, 2022, the Company sold 125,000 shares of Karuna common stock. In addition, the Company wrote a series of call options entitling the holders thereof to purchase up to 477,100 Karuna common stock at a set price, which were exercised in full in August and September 2022. Aggregate proceeds to the Company from all aforementioned transactions amounted to $115.5 million, net of transaction fees. As a result of the aforementioned sales, the Company recorded a loss of $29.3 million, attributable to the exercise of the aforementioned call options, to the line item Realized Loss on Sale of Investment within the Consolidated Statement of Comprehensive Income/ (Loss).See below for gain recorded in respect of the change in fair value of the Karuna investment.

During the years ended December 31, 2022, 2021, and 2020 the Company recognized gains of $135.0 million, $110.0 million and $191.2 million, respectively for the changes in the fair value of the Karuna investment that were recorded in the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss). As of December 31, 2022, PureTech continued to hold Karuna common shares or 3.1 percent of total outstanding Karuna common shares. Please refer to Note 16 for information regarding the valuation of these instruments.

Akili

Akili was deconsolidated in 2018. As PureTech did not hold common shares in Akili and the preferred shares it held did not have equity-like features, PureTech had no basis to account for its investment in Akili under IAS 28. The preferred shares held by PureTech Health fell under the guidance of IFRS 9 and were treated as a financial asset held at fair value and all movements to the value of the preferred shares were recorded through the Consolidated Statements of Comprehensive Income/(Loss), in accordance with IFRS 9.

2021

On May 25, 2021, Akili completed its Series D financing for gross proceeds of $110.0 million in which Akili issued 13,053,508 Series D preferred shares. The Group did not participate in this round of financing and as a result, the Group's interest in Akili was reduced from 41.9 percent to 27.5 percent.

2022

On January 26, 2022, Akili Interactive and Social Capital Suvretta Holdings Corp. I, a special purpose acquisition company, announced they had entered into a definitive business combination agreement. The transaction closed on August 19, 2022 and the combined company's securities began trading on August 22, 2022 on the Nasdaq Stock Market under the ticker symbol "AKLI". As part of this transaction the Akili Interactive shares held by the Company were exchanged for the common stock of the combined company's securities as well as unvested common stock ("Akili Earnout Shares") that will vest when the share price exceeds certain thresholds. In addition, as part of a PIPE transaction that took place concurrently with the closing of the transaction, the Company purchased 500,000 shares in consideration for $5.0 million. Following the closing of the aforementioned transactions, the Company holds 12,527,477 shares of the combined entity (excluding the Akili Earnout Shares), which represents 14.7 percent of its outstanding common stock. The Company also holds 1,433,914 Akili Earn-out Shares, which fair value amounted to $1.0 million as of December 31, 2022.

During the years ended December 31, 2022, 2021 and 2020, the Company recognized a loss of $131.4 million, a gain of $32.2 million, and a gain of $14.4 million, respectively for the changes in the fair value of the investment in Akili that was recorded on the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss). Please refer to Note 16 for information regarding the valuation of these instruments.

resTORbio

On April 30, 2020, PureTech sold its remaining 2,119,696 resTORbio common shares, for aggregate proceeds of $3.0 million. As a result of the sale, the Company recorded a loss of $0.2 million attributable to blockage discount included in the sales price, to the line item Loss realized on sale of investments within the Consolidated Statement of Comprehensive Income/(Loss). Additionally, during the year ended December 31, 2020, the Company recognized a gain of $0.1 million that was recorded on the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss).

Sonde – Investment and gain on deconsolidation

On May 25, 2022, Sonde completed a Series B Preferred Share financing. As part of the financing a new investor invested $3.5 million in cash in exchange for 1,125,401 shares and all convertible notes, including the convertible notes held by PureTech, converted into Preferred B shares at the price per share paid by the investor minus a 20% discount. As a result of the aforementioned financing, the Group's voting interest was reduced below 50% and the Group no longer controls Sonde's Board of Directors, which is the governance body that has the power to direct the relevant activities of Sonde. Consequently, the Group concluded it lost control over Sonde and as such it should cease to consolidate Sonde on the date the round of financing was completed. Therefore, the results of operations of Sonde are included in the consolidated financial statements through the date of deconsolidation.

Following deconsolidation, the Group still has significant influence in Sonde through its voting interest in Sonde and its remaining representation on Sonde's Board of Directors. The Group holds Preferred A-1, A-2 and B shares. The Preferred A-1 shares, in substance, have the same terms as common stock and as such provide their shareholders with access to returns associated with a residual equity ownership in Sonde. Consequently, the investment in Preferred A-1 shares is accounted for under the equity method. The Preferred A-2 and B shares, however, do not provide their shareholders with access to returns associated with a residual equity interest and as such are accounted for under IFRS 9, as investments held at fair value with changes in fair value recorded in profit and loss.

Upon deconsolidation, the Group derecognized its assets and liabilities and non controlling interest in respect of Sonde and recorded its aforementioned investments in Sonde at fair value. The deconsolidation resulted in a gain of $27.3 million. As of the date of deconsolidation, the investment in Sonde preferred shares held at fair value amounted to $11.2 million.

During the year ended December 31, 2022, the Company recognized a gain of $0.2 million for the changes in the fair value of the investment in Sonde that was recorded on the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss). Please refer to Note 16 for information regarding the valuation of these instruments.

6. Investments in Associates

Gelesis

Gelesis was founded by PureTech and raised funding through preferred shares financings as well as issuances of warrants and loans. As of July 1, 2019, Gelesis was deconsolidated from the Group's financial statements. While the Group no longer controls Gelesis, it was concluded that PureTech still has significant influence over Gelesis and as such Gelesis is accounted for as an associate under IAS 28 in the consolidated financial statements.

Upon the date of deconsolidation, PureTech held preferred shares and common shares of Gelesis and warrants issued by Gelesis to PureTech. PureTech's investment in common shares of Gelesis is subject to equity method accounting. See table below for the Group's share in the profits and losses of Gelesis for the periods presented.

The preferred shares and warrants held by PureTech fell under the guidance of IFRS 9 and were treated as financial assets held at fair value, where changes to the fair value of the preferred shares and warrants were recorded through the Consolidated Statement of Comprehensive Income/(Loss). See Note 5 above.

Years ended December 31, 2020 and 2021

During the years ended December 31, 2021 and 2020, the Group recorded its share in the losses of Gelesis. In 2020 the Group's investment in associates accounted for under the equity method was reduced to zero. Since the Group had investments in Gelesis warrants and preferred shares that were deemed to be Long-term interests, the Company continued recognizing its share in Gelesis losses while applying such losses to its preferred share and warrant investment in Gelesis accounted for as an investment held at fair value. In 2021, the total investment in Gelesis, including the Long-term interests, was reduced to zero. Since the Group did not incur legal or constructive obligations or made payments on behalf of Gelesis, the Group discontinued recognizing equity method losses in 2021. As of December 31, 2021, unrecognized equity method losses amounted to $38.1 million, which included $0.7 million of unrecognized other comprehensive loss.

During 2021, due to exercise of stock options into common shares in Gelesis the Group's equity interest in Gelesis was reduced from 47.9 percent at December 31, 2020 to 42.0 percent as of December 31, 2021. The gain resulting from the issuance of shares to third parties and the resulting reduction in the Group's share in the accumulated deficit of Gelesis under the equity method was fully offset by the unrecognized equity method losses.

Backstop agreement – 2022 and 2021

On December 30, 2021, PureTech signed a Backstop agreement with Capstar according to which PureTech had committed to acquire Capstar class A common shares immediately prior to the closing of the business combination between Gelesis and Capstar, in case subsequent to the redemptions of Capstar shares being completed, the Available Funds, as defined in the agreement, were less than$15.0 million. PureTech had committed to acquire two thirds of the necessary shares at $10 per share so that the Available Funds increase to $15.0 million. According to the Backstop agreement, in case PureTech were required to acquire any shares under the agreement, PureTech would receive an additional 1,322,500 class A common shares of Capstar (immediately prior to the closing of the business combination) at no additional consideration.

The Company determined that such agreement meets the definition of a derivative under IFRS 9 and as such should be recorded at fair value with changes in fair value recorded through profit and loss. The derivative was initially recorded at fair value adjusted to defer the day 1 gain equal to the difference between the fair value of $11.2 million and transaction price of zero on the effective date and as such was initially recorded at zero. The deferred gain was amortized to Other income (expense) in the Consolidated Statement of Income (loss) over the period from the effective date until settlement date, January 13, 2022. During the years ended December 31, 2022 and 2021, the Group recognized income of $10.4 million and $0.8 million, respectively for the amortization of the deferred gain. During the year ended December 31, 2022 the Group recognized a loss of $2.8 million in respect of the decrease in the fair value of the derivative until date of settlement, resulting in a net gain of $7.6 million recorded during the year ended December 31, 2022 in respect of the Backstop agreement. The gain was recorded in the line item Other Income/(expense) in the Consolidated Statements of Comprehensive Income/(Loss). The fair value of the derivative on the date of settlement in the amount of $8.4 million represents an additional investment in Gelesis as part of the SPAC transaction described below.

On January 13, 2022, as part of the conclusion of the aforementioned Backstop agreement, the Group acquired 496,145 class A common shares of Capstar for $5.0 million and received an additional 1,322,500 common A shares of Capstar for no additional consideration.

2022

Share exchange – Capstar

On January 13, 2022, Gelesis completed its business combination with Capstar Special Purpose Acquisition Corp ("Capstar"). As part of the business combination, all shares in Gelesis, common and preferred, including the shares held by PureTech, were exchanged for common shares of the merged entity and unvested common shares that will vest upon the stock price of the new combined entity reaching certain target prices (hereinafter "Earn-out shares"). In addition, PureTech invested $15.0 million in the class A common shares of Capstar as part of the PIPE transaction that took place immediately prior to the closing of the business combination and an additional $5.0 million, as part of the Backstop agreement described above. Pursuant to the business combination, Gelesis became a wholly-owned subsidiary of Capstar and Capstar changed its name to Gelesis Holdings, Inc., which began trading on the New York Stock Exchange under the ticker symbol "GLS" on January 14, 2022. Following the closing of the business combination, the PIPE transaction, the settlement of the aforementioned Backstop agreement with Capstar, and the exchange of all preferred shares in Gelesis to common shares in the new combined entity, PureTech holds 16,727,582 common shares of Gelesis Holdings Inc., which was equal to approximately 23.2% of Gelesis Holdings Inc's outstanding common shares at the time of the exchange. Due to PureTech's significant equity holding and voting interest in Gelesis, PureTech continues to maintain significant influence in Gelesis and as such continues to account for its Gelesis equity investment under the equity method.

Gelesis was deemed to be the acquirer in Gelesis Holdings Inc. and the financial assets and financial liabilities in Capstar were deemed to be acquired by Gelesis in consideration for the shares held by Capstar legacy shareholders. As such, the Group did

not revalue the retained investment in Gelesis but rather treated the exchange as a dilution of its equity interest in Gelesis from 42.0 percent as of December 31, 2021 to 22.8 percent as of January 13, 2022 (including warrants that provide its holders access to returns associated with equity holders). After considering the aforementioned additional investments, the exchange of the preferred stock, previously accounted for as an investment held at fair value, to common stock (and representing an additional equity investment in Gelesis – See Note 5), the Earn-out shares received in Gelesis (see Note 5) and the offset of previously unrecognized equity method losses, the net gain recorded on the dilution of interest amounted to $28.3 million.

Impairment

Following Gelesis's decline in its market price in 2022 and its lack of liquidity, the Group recorded an impairment loss of $8.4 million as of December 31, 2022 in respect of its investment in Gelesis. The recoverable amount of the investment in Gelesis was $4.9 million as of December 31, 2022, which was determined based on fair value less costs to sell (costs to sell were estimated to be insignificant). Fair value was determined based on level 1 of the fair value hierarchy as Gelesis shares were traded on an active market as of December 31, 2022.

The impairment loss was presented separately in the Consolidated Statement of Comprehensive Income/ (loss) for the year ended December 31, 2022 in the line item Impairment of investment in associate.

Sonde

On May 25, 2022, Sonde completed a Series B Preferred Share financing. As a result of the aforementioned financing, the Group's voting interest was reduced below 50% and the Group lost its control over Sonde and as such ceased to consolidate Sonde on the date the round of financing was completed. See Note 5 above for further details.

Following deconsolidation, the Group has significant influence in Sonde through its voting interest in Sonde and its remaining representation on Sonde's Board of Directors. The Group's voting interest at date of deconsolidation and as of December 31, 2022 was 48.2% and 40.17%, respectively. The Group holds Preferred A-1, A-2 and B shares. The Preferred A-1 shares, in substance, have the same terms as common stock and as such provide their shareholders with access to returns associated with a residual equity ownership in Sonde. Consequently, the investment in Preferred A-1 shares is accounted for under the equity method. The Preferred A-2 and B shares, however, do not provide their shareholders with access to returns associated with a residual equity interest and as such are accounted for under IFRS 9, as investments held at fair value. See Note 5.

The fair value of the Preferred A-1 shares on the date of deconsolidation amounted to $7.7 million, which is the initial value of the equity method investment in Sonde. When applying the equity method, the Group records its share of the losses in Sonde based on its equity interest in Sonde. Since only the common shares and Preferred A-1 shares in Sonde represent a residual equity interest and PureTech is the sole holder of the Preferred A-1 shares, the Group's share in Sonde's equity is 93.6%.

During the year ended December 31, 2022 the Company recorded $3.4 million of equity method losses in respect of Sonde.

The following table summarizes the activity related to the investment in associates balance for the years ended December 31, 2022 and 2021.

Investment in Associates	$000's
As of January 1, 2021	—
Share of net loss in Gelesis - limited to net investment amount	(73,703)
Share of losses recorded against Long Term Interests (LTIs)	73,703
As of December 31, 2021 and January 1, 2022	—
Cash investment in associate	19,961
Additional investment as a result of backstop settlement (see above)	8,424
Gain on dilution of interest in associate (*)	13,793
Investment in Sonde - deconsolidation	7,680
Share in net loss of associates	(27,749)
Reversal of equity method losses recorded against LTIs (due to decrease in LTI fair value)	(4,406)
Share in other comprehensive loss of associates	(166)
Impairment	(8,390)
As of December 31, 2022	**9,147**

* Gain on dilution of interest was further increased due to the receipt of Gelesis earn out shares accounted for as investments held at fair value (see above).

Summarized financial information

The following table summarizes the financial information of Gelesis as included in its own financial statements, adjusted for fair value adjustments at deconsolidation and differences in accounting policies. The table also reconciles the summarized financial information to the carrying amount of the Company's interest in Gelesis.

As of and for the year ended December 31,	2022 $000s	2021 $000s
Percentage ownership interest	**22.5 %**	42.0 %
Non-current assets	**333,040**	357,508
Current assets	**23,495**	66,092
Non-current liabilities	**(99,053)**	(120,786)
Current liabilities	**(80,010)**	(537,432)
Non controlling interests and options issued to third parties	**(46,204)**	(14,216)
Net assets (deficit) attributable to shareholders of Gelesis Inc.	**131,268**	(248,834)
Group's share of net assets (net deficit)	**29,504**	(104,527)
Goodwill	**3,858**	7,211
Impairment	**(28,452)**	(37,495)
Equity method losses recorded against Long-term Interests	**—**	96,709
Unrecognized equity method losses (*)	**—**	38,101
Investment in associate	**4,910**	—

	2022 $000s	2021 $000s	2020 $000s
Revenue	**25,767**	11,185	21,442
Loss from continuing operations (100%)	**(111,567)**	(271,430)	(71,157)
Total comprehensive loss (100%)	**(112,285)**	(273,005)	(70,178)
Group's share in net losses - limited to net investment amount (**)	**(24,306)**	(73,703)	(34,117)
Group's share of total comprehensive loss - limited to net investment amount	**(24,472)**	(73,703)	(33,648)

* Unrecognized equity method losses includes unrecognized other comprehensive loss of $0.7 million for the year ended December 31, 2021.
** For the year ended December 31, 2022 includes $4.4 million reversal of equity method losses recorded against Long-Term Interest (LTI) due to the decrease in fair value of such LTI.

Subsequent to balance sheet date, on April 10, 2023, the NYSE commenced proceedings to delist the common stock of Gelesis from the NYSE due to Gelesis ceasing to meet certain conditions to trade on such stock exchange. Trading in Gelesis's common stock was suspended immediately, and it was subsequently delisted from the NYSE. The common stock of Gelesis is currently available for trading in the over-the-counter ("OTC") market under the symbol GLSH.

In addition, in April 2023 (subsequent to balance sheet date) PureTech submitted a non-binding proposal to acquire all of the outstanding equity of Gelesis. Negotiations related to the proposal and any potential deal remain ongoing and are subject to, among other things, approval of any definitive transaction by independent committees of the boards of both Gelesis and PureTech.

See note 16 for the note issued to the Group by Gelesis and see Note 26 for additional details, including information related to an additional note issued by Gelesis to the Group subsequent to balance sheet date.

7. Operating Expenses

Total operating expenses were as follows:

For the years ending December 31,	2022 $000s	2021 $000s	2020 $000s
General and administrative	**60,991**	57,199	49,440
Research and development	**152,433**	110,471	81,859
Total operating expenses	**213,425**	167,671	131,299

The average number of persons employed by the Group during the year, analyzed by category, was as follows:

For the years ending December 31,	2022	2021	2020
General and administrative	**57**	52	43
Research and development	**144**	119	95
Total	**201**	171	138

The aggregate payroll costs of these persons were as follows:

For the years ending December 31,	2022 $000s	2021 $000s	2020 $000s
General and administrative	**25,322**	26,438	22,943
Research and development	**36,321**	28,950	20,674
Total	**61,643**	55,388	43,616

Detailed operating expenses were as follows:

For the years ending December 31,	2022 $000s	2021 $000s	2020 $000s
Salaries and wages	**41,750**	36,792	29,403
Healthcare benefits	**2,908**	2,563	1,866
Payroll taxes	**2,286**	2,084	1,629
Share-based payments	**14,699**	13,950	10,718
Total payroll costs	**61,643**	55,388	43,616
Other general and administrative expenses	**35,669**	30,761	26,497
Other research and development expenses	**116,113**	81,521	61,186
Total other operating expenses	**151,782**	112,282	87,683
Total operating expenses	**213,425**	167,671	131,299

Auditor's remuneration:

For the years ending December 31,	2022 $000s	2021 $000s	2020 $000s
Audit of these financial statements	**1,716**	1,183	1,145
Audit of the financial statements of subsidiaries	**132**	312	291
Audit of the financial statements of associate**	**814**	571	350
Audit-related assurance services*	**1,157**	1,868	490
Non-audit related services	**—**	—	173
Total	**3,819**	3,934	2,449

* 2021 – $468.2 thousand represents prepaid expenses related to an expected initial public offering of a subsidiary.

** Audit fees of $720.0 thousand, $500.0 thousand and $350.0 thousand in respect of financial statements of associates for the years ended December 31, 2022, 2021, and 2020 respectively, are not included within the consolidated financial statements. Fees related to the audit of the financial statements of associates have been disclosed in respect of 2022, 2021, and 2020 as these fees went towards supporting the audit opinion on the Group accounts. Such amounts were not previously disclosed in the 2020 financial statements.

Please refer to Note 8 for further disclosures related to share-based payments and Note 24 for management's remuneration disclosures.

8. Share-based Payments

Share-based payments includes stock options, restricted stock units ("RSUs") and performance-based RSUs in which the expense is recognized based on the grant date fair value of these awards, except for performance based RSUs to executives that are treated as liability awards where expense is recognized based on reporting date fair value up until settlement date.

Share-based Payment Expense

The Group share-based payment expense for the years ended December 31, 2022, 2021 and 2020, were comprised of charges related to the PureTech Health plc incentive stock and stock option issuances and subsidiary stock plans.

The following table provides the classification of the Group's consolidated share-based payment expense as reflected in the Consolidated Statement of Income/(Loss):

Year ended December 31,	**2022 $000s**	2021 $000s	2020 $000s
General and administrative	**8,862**	9,310	7,650
Research and development	**5,837**	4,640	3,068
Total	**14,699**	13,950	10,718

The Performance Share Plan

In June 2015, the Group adopted the Performance Stock Plan ("PSP"). Under the PSP and subsequent amendments, awards of ordinary shares may be made to the Directors, senior managers and employees of, and other individuals providing services to the Company and its subsidiaries up to a maximum authorized amount of 10.0 percent of the total ordinary shares outstanding. The shares have various vesting terms over a period of service between two and four years, provided the recipient remains continuously engaged as a service provider.

The share-based awards granted under the PSP are generally equity settled (see cash settlements below) and expire 10 years from the grant date. As of December 31, 2022, the Company had issued share-based awards to purchase an aggregate of 24,889,462 shares under this plan.

RSUs

RSU activity for the years ended December 31, 2022, 2021 and 2020 is detailed as follows:

	Number of Shares/Units	Wtd Avg Grant Date Fair Value (GBP) (*)
Outstanding (Non-vested) at January 1, 2020	**4,636,347**	**2.08**
RSUs Granted in Period	1,759,011	1.80
Vested	(2,781,687)	1.54
Forfeited	(191,089)	2.37
Outstanding (Non-vested) at December 31, 2020 and January 1, 2021	**3,422,582**	**2.46**
RSUs Granted in Period	2,195,133	2.15
Vested	(1,176,695)	2.93
Forfeited	(808,305)	2.25
Outstanding (Non-vested) at December 31, 2021 and January 1, 2022	**3,632,715**	**1.91**
RSUs Granted in Period	4,309,883	1.76
Vested	(696,398)	2.80
Forfeited	(1,155,420)	2.67
Outstanding (Non-vested) at December 31, 2022	**6,090,780**	**1.74**

* 2021 – for liability awards based on fair value at reporting date.

Each RSU entitles the holder to one ordinary share on vesting and the RSU awards are generally based on a cliff vesting schedule over a one to three-year requisite service period in which the Company recognizes compensation expense for the RSUs. Following vesting, each recipient will be required to make a payment of one pence per ordinary share on settlement of the RSUs. Vesting of the majority of the RSUs is subject to the satisfaction of performance and market conditions. The grant date fair value of market condition awards that were treated as equity settled awards were measured to reflect such conditions and there was no true-up for differences between expected and actual outcomes. For liability settled awards, see below.

The Company recognizes the estimated fair value of performance-based awards as share-based compensation expense over the performance period based upon its determination of whether it is probable that the performance targets will be achieved. The Company assesses the probability of achieving the performance targets at each reporting period. Cumulative adjustments, if any, are recorded to reflect subsequent changes in the estimated outcome of performance-related conditions.

The fair value of the market and performance-based awards is based on the Monte Carlo simulation analysis utilizing a Geometric Brownian Motion process with 100,000 simulations to value those shares. The model considers share price volatility, risk-free rate and other covariance of comparable public companies and other market data to predict distribution of relative share performance.

The performance and market conditions attached to the RSU awards are based on the achievement of total shareholder return ("TSR"), based on the achievement of absolute TSR targets, and to a lesser extent based on TSR as compared to the FTSE 250 Index, and the MSCI Europe Health Care Index. The remaining portion is based on the achievement of strategic targets. The RSU award performance criteria have changed over time as the criteria is continually evaluated by the Group's Remuneration Committee.

In 2017, the Company granted certain executives RSUs that vested based on the service, market and performance conditions, as described above. The vesting of all RSUs was achieved by December 31, 2019 where all service, market and performance conditions were met. The remuneration committee of PureTech's Board of Directors approved the achievement of the vesting conditions as of December 31, 2019 and reached the decision during the year ended December 31, 2020 to cash settle the 2017 RSUs. The settlement value was determined based on the 3 day average closing price of the shares. The settlement value was $12.5 million (which after deducting tax withheld on behalf of recipients amounted to $7.2 million). The settlement value did not exceed the fair value at settlement date and as such the cash settlement was treated as an equity transaction in the financial statements for the year ended December 31, 2020, whereby the full repurchase cash settlement amount was charged to equity in Other reserves.

Similarly in 2018, the Company granted certain executives RSUs that vested based on service, market and performance conditions, as described above. The vesting of all RSUs was achieved by December 31, 2020 where all service, market and performance conditions were met. In February 2021 the remuneration committee of PureTech's board of directors approved the achievement of the vesting conditions as of December 31, 2020 and on May 28, 2021 reached the decision to cash settle RSUs to certain employees while others were issued shares. The settlement value was determined based on the three day average closing price of the shares. The settlement value was $10.7 million (which after deducting tax withheld on behalf of recipients amounted to $6.4 million). The settlement value did not exceed the fair value at settlement date and as such the cash settlement was treated as an equity transaction, whereby the full repurchase cash settlement amount was charged to equity in Other reserves in the financial statements as of and for the year ended December 31, 2021.

Following the different cash settlements, the Company concluded that although the remaining RSUs are to be settled by shares according to their respective agreements, and any cash settlement is at the Company's discretion, due to past practice of cash settlement to multiple employees, some for multiple years, these RSUs to the company executives should be treated as liability awards and as such adjusted to fair value at every reporting date with changes in fair value recorded in earnings as stock based compensation expense.

Consequently, the Company reclassified during the year ended December 31, 2021 $1.9 million from equity to other non-current liabilities and $4.8 million from equity to other payables equal to the fair value of the awards at the date of reclassification. The Company treated the excess of the fair value at the reclassification date over the grant date fair value of the RSUs (for the portion of the vesting period that has already elapsed) in the amount of $2.9 million as an equity transaction. Therefore the full amount of the liability at reclassification was recorded as a charge to equity. The changes in fair value of the liability from reclassification date to balance sheet date or settlement date are recorded as stock-based compensation expense in the Consolidated Statement of Comprehensive Income (loss).

The Company incurred share-based payment expenses for performance, market and service based RSUs of $1.6 million (including $1.1 million expense in respect of RSU liability awards), $1.5 million (including $0.6 million expense in respect of RSU liability awards), and $5.7 million for the years ended December 31, 2022, 2021 and 2020, respectively. The decrease in the share based compensation expense in respect of the RSUs for the year ended December 31, 2021, as compared to the year ended December 31, 2020 is due to reduction in the fair value of the liability awards as compared to their value at the date the awards were reclassified from equity awards to liability awards, as well as forfeitures of certain awards due to unexpected terminations of RSU holders.

As of December 31, 2022, the carrying amount of the RSU liability awards was $5.9 million, $1.8 million current; $4.1 million non current, out of which $1.8 million related to awards that have met all their performance and market conditions.

Stock Options

Stock option activity for the years ended December 31, 2022, 2021 and 2020, is detailed as follows:

	Number of Options	Wtd Average Exercise Price (GBP)	Wtd Average of remaining contractual term (in years)	Wtd Average Stock Price at Exercise (GBP)
Outstanding at January 1, 2020	**8,472,827**	**1.16**	**8.55**	
Granted	4,076,982	3.14		
Exercised	(514,410)	1.52		2.88
Forfeited and expired	(1,119,313)	1.88		
Options Exercisable at December 31, 2020 and January 1, 2021	**5,447,405**	**0.98**	**7.46**	
Outstanding at December 31, 2020 and January 1, 2021	**10,916,086**	**1.81**	**8.38**	
Granted	5,424,000	3.34		
Exercised	(2,238,187)	0.70		3.63
Forfeited and expired	(687,781)	2.53		
Options Exercisable at December 31, 2021 and January 1, 2022	**4,773,873**	**1.42**	**6.50**	
Outstanding at December 31, 2021 and January 1, 2022	**13,414,118**	**2.58**	**8.29**	
Granted	8,881,000	2.04		
Exercised	(577,022)	0.50		2.43
Forfeited and expired	(3,924,215)	2.89		
Options Exercisable at December 31, 2022	**6,185,216**	**2.03**	**6.21**	
Outstanding at December 31, 2022	**17,793,881**	**2.31**	**8.03**	

The fair value of the stock options awarded by the Company was estimated at the grant date using the Black-Scholes option valuation model, considering the terms and conditions upon which options were granted, with the following weighted-average assumptions:

At December 31,	**2022**	2021	2020
Expected volatility	**41.70 %**	41.05 %	41.25 %
Expected terms (in years)	**6.11**	6.16	6.11
Risk-free interest rate	**2.13 %**	1.06 %	0.53 %
Expected dividend yield	**—**	—	—
Grant date fair value	**$1.15**	$1.87	$1.72

The Company incurred share-based payment expense for the stock options of $8.4 million, $6.2 million and $2.1 million for the years ended December 31, 2022, 2021 and 2020, respectively. The increase in expense for the year ended December 31, 2022, as compared to the year ended December 31, 2021, is due to the new grants granted in 2022. The increase in expense for the year ended December 31, 2021, as compared to the year ended December 31, 2020, is due to new grants granted in 2021.

For shares outstanding as of December 31, 2022, the range of exercise prices is detailed as follows:

Range of Exercise Prices (GBP)	Options Outstanding	Wtd Average Exercise Price (GBP)	Wtd Average of remaining contractual term (in years)
0.01	439,490	—	6.76
1.00 to 2.00	6,276,391	1.58	7.00
2.00 to 3.00	5,375,750	2.26	8.92
3.00 to 4.00	5,702,250	3.34	8.40
Total	**17,793,881**	**2.31**	**8.03**

Subsidiary Plans

Certain subsidiaries of the Group have adopted stock option plans. A summary of stock option activity by number of shares in these subsidiaries is presented in the following table:

	Outstanding as of January 1, 2022	**Granted During the Year**	**Exercised During the Year**	**Expired During the Year**	**Forfeited During the Year**	**Deconsolidation During the Year**	**Outstanding as of December 31, 2022**
Entrega	**349,500**	**45,000**	**—**	**(50,000)**	**—**	**—**	**344,500**
Follica	**2,686,120**	**90,000**	**—**	**—**	**—**	**—**	**2,776,120**
Sonde	**2,049,004**	**—**	**—**	**—**	**—**	**(2,049,004)**	**—**
Vedanta	**1,991,637**	**490,506**	**(400,000)**	**(65,235)**	**(192,332)**	**—**	**1,824,576**

	Outstanding as of January 1, 2021	Granted During the Year	Exercised During the Year	Expired During the Year	Forfeited During the Year	Deconsolidation During the Year	Outstanding as of December 31, 2021
Alivio	3,888,168	197,398	(2,373,750)	(506,260)	(1,205,556)	—	—
Entrega	962,000	—	(525,000)	(87,500)	—	—	349,500
Follica	1,309,040	1,383,080	—	(6,000)	—	—	2,686,120
Sonde	2,192,834	—	—	(51,507)	(92,323)	—	2,049,004
Vedanta	1,741,888	451,532	(52,938)	(76,491)	(72,354)	—	1,991,637

	Outstanding as of January 1, 2020	Granted During the Year	Exercised During the Year	Expired During the Year	Forfeited During the Year	Deconsolidation During the Year	Outstanding as of December 31, 2020
Alivio	3,698,244	189,924	—	—	—	—	3,888,168
Entrega	972,000	—	—	—	(10,000)	—	962,000
Follica	1,309,040	—	—	—	—	—	1,309,040
Sonde	1,829,004	363,830	—	—	—	—	2,192,834
Vedanta	1,450,100	493,951	(813)	—	(201,350)	—	1,741,888

The weighted-average exercise prices and remaining contractual life for the options outstanding as of December 31, 2022, were as follows:

Outstanding at December 31, 2022	Number of options	Weighted-average exercise price $	Weighted-average contractual life outstanding
Entrega	**344,500**	**1.91**	**4.92**
Follica	**2,776,120**	**1.41**	**6.38**
Vedanta	**1,824,576**	**15.89**	**6.88**

The weighted average exercise prices for the options granted for the years ended December 31, 2022, 2021 and 2020, were as follows:

For the years ended December 31,	2022 $	2021 $	2020 $
Alivio	**—**	—	0.47
Entrega	**0.02**	—	—
Follica	**1.86**	1.86	—
Sonde	**—**	—	0.18
Vedanta	**14.94**	19.69	19.59

The weighted average exercise prices for options forfeited during the year ended December 31, 2022, were as follows:

Forfeited during the year ended December 31, 2022	Number of options	Weighted-average exercise price $
Vedanta	**192,332**	**19.64**

The weighted average exercise prices for options exercised during the year ended December 31, 2022, were as follows:

Exercised during the year ended December 31, 2022	Number of options	Weighted-average exercise price $
Vedanta	**400,000**	**0.02**

The weighted average exercise prices for options exercisable as of December 31, 2022, were as follows:

Exercisable at December 31, 2022	Number of Options	Weighted-average exercise price $	Exercise Price Range $
Entrega	**344,500**	**1.91**	**0.02-2.36**
Follica	**2,776,120**	**1.41**	**0.03-1.86**
Vedanta	**1,824,576**	**15.89**	**0.02-21.35**

Significant Subsidiary Plans

Vedanta 2020 Stock Incentive Plan

On June 2, 2020, the Company's Board of Directors approved the 2020 Stock Incentive Plan, or 2020 Plan, which replaced the 2010 Stock Incentive Plan, or 2010 Plan, which was set to expire in December 2020. All authorized and issued shares under the 2010 Plan were transferred to the 2020 Plan. The 2020 Plan provides for the grant of incentive stock options, nonqualified stock options, and restricted stock to employees, directors, and nonemployees of the Company up to an aggregate of 2,145,867 shares of the Company's common stock. In March 2021, the Company's Board of Directors approved an increase in

the authorized shares of 151,188 for a total of 2,297,055. In July 2021, the Company's Board of Directors approved an increase in the authorized shares of 500,000 for a total of 2,797,055. Under the 2020 Plan, 914,331 shares remained available for issuance as of December 31, 2022.

The options granted under the 2020 Plan are equity settled and expire 10 years from the grant date. Typically, the awards vest in four years but vesting conditions can vary based on the discretion of Vedanta's Board of Directors.

Options granted under the 2020 Plan are exercisable at a price per share not less than the fair market value of the underlying ordinary shares on the date of grant. The estimated fair value of options, including the effect of estimated forfeitures, is recognized over the options' vesting period.

The fair value of the stock option grants has been estimated at the date of grant using the Black-Scholes option pricing model with the following range of assumptions:

Assumption/Input	**2022**	2021	2020
Expected award life (in years)	**6.00-8.33**	6.00-7.11	6.00-10.00
Expected award price volatility	**88.22%-89.68%**	88.05%-88.59%	89.24%-95.46%
Risk free interest rate	**1.67%-3.13%**	0.96%-1.32%	0.32%-0.87%
Expected dividend yield	**—**	—	—
Grant date fair value	**$10.51-$15.14**	$13.84-$16.23	$13.09-$16.54
Share price at grant date	**$14.00-$18.84**	$19.00-$21.35	$19.59

Vedanta incurred share-based compensation expense of $4.3 million, $5.4 million and $2.4 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Other Plans

The stock compensation expense under plans at other subsidiaries of the Group not including Vedanta amounted to $0.4 million, $0.8 million and $0.4 million for the years ended December 31, 2022, 2021 and 2020, respectively.

9. Finance Cost, net

The following table shows the breakdown of finance income and costs:

For the years ended December 31,	**2022 $000s**	2021 $000s	2020 $000s
Finance income			
Interest income from financial assets	**5,799**	214	1,183
Total finance income	**5,799**	214	1,183
Finance costs			
Contractual interest expense on notes payable	**(212)**	(1,031)	(96)
Interest expense on other borrowings	**(1,759)**	(1,502)	(496)
Interest expense on lease liability	**(1,982)**	(2,181)	(2,354)
Gain/(loss) on foreign currency exchange	**14**	(56)	—
Total finance cost – contractual	**(3,939)**	(4,771)	(2,946)
Gain/(loss) from change in fair value of warrant liability	**6,740**	1,419	(117)
Gain/(loss) from change in fair value of preferred shares	**130,825**	8,362	(4,234)
Gain/(loss) from change in fair value of convertible debt	**(502)**	(175)	—
Total finance income/(costs) – fair value accounting	**137,063**	9,606	(4,351)
Finance income/(costs), net	**138,924**	5,050	(6,115)

10. Earnings/(Loss) per Share

The basic and diluted income/(loss) per share has been calculated by dividing the income/(loss) for the year attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the years ended December 31, 2022, 2021 and 2020, respectively. During the years ended December 31, 2022 and 2021 the Company incurred a net loss and therefore all outstanding potential securities were considered anti-dilutive. The amount of potential securities that were excluded from the calculation amounted to 3,134,131 and 6,553,905 shares, respectively.

Earnings/(Loss) Attributable to Owners of the Company:

	2022		2021		2020	
	Basic $000s	**Diluted $000s**	Basic $000s	Diluted $000s	Basic $000s	Diluted $000s
Income/(loss) for the year, attributable to the owners of the Company	**(50,354)**	**(50,354)**	(60,558)	(60,558)	5,985	5,985
Income/(loss) attributable to ordinary shareholders	**(50,354)**	**(50,354)**	(60,558)	(60,558)	5,985	5,985

Weighted-Average Number of Ordinary Shares:

	2022		2021		2020	
	Basic	**Diluted**	Basic	Diluted	Basic	Diluted
Issued ordinary shares at January 1,	**287,796,585**	**287,796,585**	285,885,025	285,885,025	285,370,619	285,370,619
Effect of shares issued	**690,772**	**690,772**	705,958	705,958	233,048	233,048
Effect of dilutive shares (please refer to Note 8)	**—**	**—**	—	—	—	7,252,246
Effect of treasury shares purchased	**(3,727,922)**	**(3,727,922)**	—	—	—	—
Weighted average number of ordinary shares at December 31,	**284,759,435**	**284,759,435**	286,590,983	286,590,983	285,603,667	292,855,913

Earnings/(Loss) per Share:

	2022		2021		2020	
	Basic $	**Diluted $**	Basic $	Diluted $	Basic $	Diluted $
Basic and diluted earnings/(loss) per share	**(0.18)**	**(0.18)**	(0.21)	(0.21)	0.02	0.02

11. Property and Equipment

Cost	Laboratory and Manufacturing Equipment $000s	Furniture and Fixtures $000s	Computer Equipment and Software $000s	Leasehold Improvements $000s	Construction in process $000s	Total $000s
Balance as of January 1, 2021	8,420	1,452	1,519	18,054	3,852	33,297
Additions, net of transfers	1,424	—	92	183	6,723	8,422
Disposals	(323)	—	(282)	—	—	(605)
Reclassifications	2,211	—	—	248	(2,459)	—
Balance as of December 31, 2021	11,733	1,452	1,329	18,485	8,116	41,115
Additions, net of transfers	390	—	11	412	1,362	2,176
Disposals	(118)	—	—	—	(77)	(195)
Deconsolidation of subsidiaries	—	—	(58)	—	—	(58)
Reclassifications	1,336	58	137	5,067	(6,598)	—
Balance as of December 31, 2022	**13,341**	**1,510**	**1,419**	**23,964**	**2,803**	**43,037**

Accumulated depreciation and impairment loss	Laboratory and Manufacturing Equipment $000s	Furniture and Fixtures $000s	Computer Equipment and Software $000s	Leasehold Improvements $000s	Construction in process $000s	Total $000s
Balance as of January 1, 2021	(3,965)	(454)	(1,287)	(4,815)	—	(10,520)
Depreciation	(1,973)	(208)	(174)	(1,991)	—	(4,346)
Disposals	251	—	271	—	—	522
Balance as of December 31, 2021	(5,686)	(663)	(1,190)	(6,806)	—	(14,344)
Depreciation	(2,082)	(212)	(107)	(3,444)	—	(5,845)
Disposals	57	—	—	—	—	57
Deconsolidation of subsidiaries	—	—	53	—	—	53
Balance as of December 31, 2022	**(7,711)**	**(875)**	**(1,244)**	**(10,250)**	**—**	**(20,080)**

Property and Equipment, net	Laboratory and Manufacturing Equipment $000s	Furniture and Fixtures $000s	Computer Equipment and Software $000s	Leasehold Improvements $000s	Construction in process $000s	Total $000s
Balance as of December 31, 2021	6,047	790	139	11,679	8,116	26,771
Balance as of December 31, 2022	**5,630**	**635**	**174**	**13,714**	**2,803**	**22,957**

Depreciation of property and equipment is included in the General and administrative expenses and Research and development expenses line items in the Consolidated Statements of Comprehensive Income/(Loss). The Company recorded depreciation expense of $5.8 million, $4.3 million and $3.9 million for the years ended December 31, 2022, 2021 and 2020, respectively.

12. Intangible Assets

Intangible assets consist of licenses of intellectual property acquired by the Group through various agreements with third parties and are recorded at the value of the consideration transferred. Information regarding the cost and accumulated amortization of intangible assets is as follows:

Cost	Licenses $000s
Balance as of January 1, 2021	900
Additions	90
Balance as of December 31, 2021	990
Additions	25
Write-off	(163)
Deconsolidation of subsidiaries	(21)
Balance as of December 31, 2022	**831**

Accumulated amortization	Licenses $000s
Balance as of January 1, 2021	(1)
Amortization	(2)
Balance as of December 31, 2021	(3)
Amortization	(1)
Deconsolidation of subsidiary	4
Balance as of December 31, 2022	**—**

Intangible assets, net	Licenses $000s
Balance as of December 31, 2021	987
Balance as of December 31, 2022	**831**

Substantially all the intangible asset licenses represent in-process-research-and-development assets since they are still being developed and are not ready for their intended use. As such, these assets are not yet amortized but tested for impairment annually.

During 2022, the company wrote off one of its research intangible assets for which research was ceased in the amount of $162.5 thousand.

The Company tested all other such intangible assets for impairment as of balance sheet date and concluded that none of such assets were impaired.

During the year ended December 31, 2022, Sonde Health, Inc. was deconsolidated and as such $17.5 thousand in net assets were derecognised.

The company had negligible Amortization expense for the years ended December 31, 2022 2021 and 2020.

13. Other Financial Assets

Other financial assets consist of restricted cash held, which represents amounts that are reserved as collateral against letters of credit with a bank that are issued for the benefit of a landlord in lieu of a security deposit for office space leased by the Group. Information regarding restricted cash was as follows:

As of December 31,	**2022 $000s**	2021 $000s
Restricted cash	**2,124**	2,124
Total other financial assets	**2,124**	2,124

14. Equity

Total equity for PureTech as of December 31, 2022, and 2021, was as follows:

Equity	December 31, 2022 $000s	December 31, 2021 $000s
Share capital, £0.01 par value, issued and paid 278,566,306 and 287,796,585 as of December 31, 2022 and 2021, respectively	**5,455**	5,444
Merger Reserve	**138,506**	138,506
Share premium	**289,624**	289,303
Treasury shares, 10,595,347 and zero as of December 31, 2022 and 2021, respectively	**(26,492)**	—
Translation reserve	**89**	469
Other reserves	**(14,478)**	(40,077)
Retained earnings/(accumulated deficit)	**149,516**	199,871
Equity attributable to owners of the Group	**542,220**	593,515
Non-controlling interests	**5,369**	(9,368)
Total equity	**547,589**	584,147

Changes in share capital and share premium relate primarily to incentive options exercises during the period.

Shareholders are entitled to vote on all matters submitted to shareholders for a vote. Each ordinary share is entitled to one vote. Each ordinary share is entitled to receive dividends when and if declared by the Company's Directors. The Company has not declared any dividends in the past.

On June 18, 2015, the Company acquired the entire issued share capital of PureTech LLC in return for 159,648,387 Ordinary Shares. This was accounted for as a common control transaction at cost. It was deemed that the share capital was issued in line with movements in share capital as shown prior to the transaction taking place. In addition, the merger reserve records amounts previously recorded as share premium.

Other reserves comprise the cumulative credit to share-based payment reserves corresponding to share-based payment expenses recognized through Consolidated Statements of Comprehensive Income/(Loss), settlements of vested share based payment awards as well as other additions that flow directly through equity such as the excess or deficit from changes in ownership of subsidiaries while control is maintained by the Group.

On May 9, 2022, the Company announced the commencement of a $50.0 million share repurchase program the ("Program") of its ordinary shares of one pence each ("Ordinary Shares"). The Company is executing the Program in two equal tranches. In respect of the two tranches, PureTech entered into an irrevocable (see below) non-discretionary instruction with Jefferies International Limited ("Jefferies") in relation to the purchase by Jefferies of Ordinary Shares for an aggregate consideration (excluding expenses) of no greater than $25.0 million for each tranche and the simultaneous on-sale of such Ordinary Shares by Jefferies to PureTech, subject to certain volume and price restrictions. Jefferies makes its trading decisions in relation to the Ordinary Shares independently of, and uninfluenced by, the Company. Purchases may continue during any close period to which the Company is subject. The instruction to Jeffries may be amended or withdrawn so long as the Company is not in a close period or otherwise in possession of inside information.

Any purchases of Ordinary Shares under the Program were carried out on the London Stock Exchange and could be carried out on any other UK recognized investment exchange which may be agreed, in accordance with pre-set parameters and in accordance with, and subject to limits, including those limits related to daily volume and price, prescribed by the Company's general authority to repurchase Ordinary Shares granted by its shareholders at its annual general meeting on May 27, 2021, and relevant Rules and Regulations. All Ordinary Shares repurchased under the Program are held in treasury.

As of December 31, 2022, the Company's issued share capital was 278,566,306 shares, including 10,595,347 shares, which had been repurchased under the Program and were held by the Company in treasury.

15. Subsidiary Preferred Shares

Preferred shares issued by subsidiaries often contain redemption and conversion features that are assessed under IFRS 9 in conjunction with the host preferred share instrument. This balance represents subsidiary preferred shares issued to third parties.

The subsidiary preferred shares are redeemable upon the occurrence of a contingent event, other than full liquidation of the Company, that is not considered to be within the control of the Company. Therefore these subsidiary preferred shares are classified as liabilities. These liabilities are measured at fair value through profit and loss. The preferred shares are convertible into ordinary shares of the subsidiaries at the option of the holder and mandatorily convertible into ordinary shares upon a subsidiary listing in a public market at a price above that specified in the subsidiary's charter or upon the vote of the holders of subsidiary preferred shares specified in the charter. Under certain scenarios the number of ordinary shares receivable on conversion will change and therefore, the number of shares that will be issued is not fixed. As such the conversion feature is considered to be an embedded derivative that normally would require bifurcation. However, since the preferred share liabilities are measured at fair value through profit and loss, as mentioned above, no bifurcation is required.

The preferred shares are entitled to vote with holders of common shares on an as converted basis.

The Group recognized the preferred share balance upon the receipt of cash financing or upon the conversion of notes into preferred shares at the amount received or carrying balance of any notes converted into preferred shares.

The balance as of December 31, 2022 and December 31, 2021, represents the fair value of the instruments for all subsidiary preferred shares. The following summarizes the subsidiary preferred share balance:

As of December 31,	**2022 $000s**	2021 $000s
Entrega	**169**	669
Follica	**350**	11,191
Sonde	**—**	13,362
Vedanta Biosciences	**26,820**	148,796
Total subsidiary preferred share balance	**27,339**	174,017

As is customary, in the event of any voluntary or involuntary liquidation, dissolution or winding up of a subsidiary, the holders of subsidiary preferred shares which are outstanding shall be entitled to be paid out of the assets of the subsidiary available for distribution to shareholders and before any payment shall be made to holders of ordinary shares. A merger, acquisition, sale of voting control or other transaction of a subsidiary in which the shareholders of the subsidiary immediately before the transaction do not own a majority of the outstanding shares of the surviving company shall be deemed to be a liquidation event. Additionally, a sale, lease, transfer or other disposition of all or substantially all of the assets of the subsidiary shall also be deemed a liquidation event.

As of December 31, 2022 and December 31, 2021, the minimum liquidation preference reflects the amounts that would be payable to the subsidiary preferred holders upon a liquidation event of the subsidiaries, which is as follows:

As of December 31,	**2022 $000s**	2021 $000s
Entrega	**2,216**	2,216
Follica	**6,405**	6,405
Sonde	**—**	12,000
Vedanta Biosciences	**149,568**	149,568
Total minimum liquidation preference	**158,189**	170,189

For the years ended December 31, 2022 and 2021, the Group recognized the following changes in the value of subsidiary preferred shares:

	$000s
Balance as of January 1, 2021	118,972
Issuance of new preferred shares – financing cash flow	37,610
Conversion of convertible notes	25,797
Decrease in value of preferred shares measured at fair value – finance costs (income)	(8,362)
Balance as of January 1, 2022	174,017
Decrease in value of preferred shares measured at fair value – finance costs (income)	(130,825)
Deconsolidation of subsidiary – (Sonde)	(15,853)
Balance as of December 31, 2022	**27,339**

2022

During the year ended December 31, 2022 there were no issuances of new preferred shares.

2021

On July 21, 2021 Vedanta closed a Series D financing in which Vedanta issued 2,387,675 Preferred D shares for consideration of $68.4 million. From such consideration of $68.4 million, $25.8 million was received from Pfizer through conversion of its convertible note (see Note 17) and $5.0 million was received from PureTech in exchange for 174,520 Preferred D shares. The amount received from PureTech was eliminated in the consolidated financial statements.

16. Financial Instruments

The Group's financial instruments consist of financial liabilities, including preferred shares, convertible notes, warrants and loans payable, as well as financial assets. Many of these financial instruments are presented at fair value with fair value changes recorded through profit and loss.

Fair Value Process

For financial instruments measured at fair value under IFRS 9, the change in the fair value is reflected through profit and loss. Using the guidance in IFRS 13, the total business enterprise value and allocable equity of each entity being valued was determined using a market backsolve approach through a recent arm's length financing round (or a future probable arm's length transaction), market PWERM approach, discounted cash flow income approach, or hybrid approaches. The approaches, in order of strongest fair value evidence, are detailed as follows:

Valuation Method	Description
Market – Backsolve	The market backsolve approach benchmarks the original issue price (OIP) of the company's latest funding transaction as current value.
Market/Asset – PWERM	Under a PWERM, the company value is based upon the probability-weighted present value of expected future investment returns, considering each of the possible future outcomes available to the enterprise. An asset approach may be included as an expected future outcome within the PWERM method. Possible future outcomes can include IPO scenarios, potential SPAC transactions, merger and acquisition transactions as well as other similar exit transactions of the investee.
Income Based – DCF	The income approach is used to estimate fair value based on the income streams, such as cash flows or earnings, that an asset or business can be expected to generate.

As of December 31, 2022 and 2021, at each measurement date, the fair value of preferred shares and warrant liabilities, including embedded conversion rights that are not bifurcated, as well as investments held at fair value (that are not publicly traded), were determined using the following allocation methods: option pricing model ("OPM"), Probability-Weighted Expected Return Method ("PWERM"), or Hybrid allocation framework. The methods are detailed as follows:

Allocation Method	Description
OPM	The OPM model treats preferred stock as call options on the enterprise's equity value, with exercise prices based on the liquidation preferences of the preferred stock.
PWERM	Under a PWERM, share value is based upon the probability-weighted present value of expected future investment returns, considering each of the possible future outcomes available to the enterprise, as well as the rights of each share class.
Hybrid	The hybrid method ("HM") is a combination of the PWERM and OPM. Under the hybrid method, multiple liquidity scenarios are weighted based on the probability of the scenarios occurrence, similar to the PWERM, while also utilizing the OPM to estimate the allocation of value in one or more of the scenarios.

Valuation policies and procedures are regularly monitored by the Company's finance group. Fair value measurements, including those categorized within Level 3, are prepared and reviewed on their issuance date and then on an annual basis for reasonableness and compliance with the fair value measurements guidance under IFRS. The Group measures fair values using the following fair value hierarchy that reflects the significance of the inputs used in making the measurements:

Fair Value Hierarchy Level	Description
Level 1	Inputs that are quoted market prices (unadjusted) in active markets for identical instruments.
Level 2	Inputs other than quoted prices included within Level 1 that are observable either directly (i.e. as prices) or indirectly (i.e. derived from prices).
Level 3	Inputs that are unobservable. This category includes all instruments for which the valuation technique includes inputs not based on observable data and the unobservable inputs have a significant effect on the instrument's valuation.

Whilst the Group considers the methodologies and assumptions adopted in fair value measurements as supportable, reasonable and robust, because of the inherent uncertainty of valuation, those estimated values may differ significantly from the values that would have been used had a ready market for the investment existed.

Subsidiary Preferred Shares Liability and Subsidiary Convertible Notes

The following table summarizes the changes in the Group's subsidiary preferred shares and convertible note liabilities measured at fair value, which were categorized as Level 3 in the fair value hierarchy:

	Subsidiary Preferred Shares $000s	Subsidiary Convertible Notes $000s
Balance at January 1, 2020	100,989	—
Value at issuance	13,750	25,000
Change in fair value	4,233	—
Balance at December 31, 2020 and January 1, 2021	118,972	25,000
Value at issuance	37,610	2,215
Conversion to subsidiary preferred shares	25,797	(25,797)
Accrued interest - contractual	—	867
Change in fair value	(8,362)	175
Balance at December 31, 2021 and January 1, 2022	174,017	2,461
Value at issuance	—	393
Accrued interest – contractual	—	48
Change in fair value	(130,825)	502
Deconsolidation - Sonde	(15,853)	(3,403)
Balance at December 31, 2022	**27,339**	**—**

The change in fair value of preferred shares and convertible notes are recorded in Finance income/(costs) – fair value accounting in the Consolidated Statements of Comprehensive Income/(Loss).

The table below sets out information about the significant unobservable inputs used at December 31, 2022, in the fair value measurement of the Group's material subsidiary preferred shares liabilities categorized as Level 3 in the fair value hierarchy:

Fair Value at December 31, 2022	Valuation Technique	Unobservable Inputs	Weighted Average	Sensitivity to Decrease in Input
26,820	PWERM based on pro forma backsolve approach that leverages a Monte Carlo simulation	Estimated Time to Exit	2.14	Fair value decrease
		Equity Discount Rate	30%	Fair value increase
		Debt Discount Rate	15%	Fair value decrease
		Volatility	95%	Fair value decrease

Subsidiary Preferred Shares Sensitivity

The following summarizes the sensitivity from the assumptions made by the Company with respect to the significant unobservable inputs which are categorized as Level 3 in the fair value hierarchy and used in the fair value measurement of the Group's subsidiary preferred shares liabilities (Please refer to Note 15):

Input	Subsidiary Preferred Share Liability	
As of December 31, 2022	Sensitivity Range	Financial Liability Increase/(Decrease) $000s
Time to Liquidity	- 6 Months	(1,322)
	+ 6 Months	856
Volatility	(10)%	(1,133)
	+10%	1,200
Discount Rate	(5)%	(2,035)
	+5%	1,922

Financial Assets Held at Fair Value

Karuna, Vor and Akili Valuation

Karuna (Nasdaq: KRTX), Vor (Nasdaq: VOR), Akili (Nasdaq: AKLI) and additional immaterial investments are listed entities on an active exchange and as such the fair value as of December 31, 2022, was calculated utilizing the quoted common share price. Please refer to Note 5 for further details.

Akili, Gelesis and Sonde

In accordance with IFRS 9, the Company accounted for its preferred share investments in Akili (until the exchange of such shares to common stock traded on Nasdaq) and Gelesis (until the exchange of such shares to common stock) and accounts for its investment in Sonde (investment in Preferred A-2 and B shares, subsequent to the date of deconsolidation) as financial assets held at fair value through the profit and loss. In addition, the Company accounts for its investment in Gelesis Earn-out shares and Akili Earn-out shares (see Note 5) as investments held at fair value. All the valuations of the aforementioned investments are categorized as Level 3 in the fair value hierarchy due to the use of significant unobservable inputs to value such assets. During the year ended December 31, 2022, the Company recorded such investments at fair value and recognized the change in fair value of the investments as a loss of $30.0 million that was recorded to the Consolidated Statements of Comprehensive Income/(Loss) in the line item Gain/(loss) on investments held at fair value.

The following table summarizes the changes in all the Group's investments held at fair value, which were categorized as Level 3 in the fair value hierarchy:

	$'000s
Balance at January 1, 2020	154,445
Cash purchase of Gelesis preferred shares (please refer to Note 6)	10,000
Cash purchase of Vor preferred shares	1,150
Gain/(Loss) on changes in fair value	41,297
Balance at December 31, 2020 and January 1, 2021	206,892
Cash purchase of Vor preferred shares	500
Reclassification of Vor from level 3 to level 1	(33,365)
Gain/(Loss) on changes in fair value	65,505
Balance at January 1, 2022 before allocation of associate loss to long-term interest	239,533
Deconsolidation of Sonde	11,168
Gelesis – New Investment – Earn out Shares	14,214
Exchange of Gelesis preferred shares to Gelesis common shares	(92,303)
Reclassification of Akili to level 1 investment	(128,764)
Change in fair value	(31,253)
Balance as of December 31, 2022	**12,593**

The change in fair value of investments held at fair value are recorded in Gain/(loss) on investments held at fair value in the Consolidated Statements of Comprehensive Income/(Loss).

The table below sets out information about the significant unobservable inputs used at December 31, 2022, in the fair value measurement of the Group's material preferred share investments held at fair value categorized as Level 3 in the fair value hierarchy:

Fair Value at December 31, 2022	Valuation Technique	Unobservable Inputs	Weighted Average	Sensitivity to Decrease in Input
11,403	Market Backsolve & OPM	Estimated time to exit	2.00	Fair value decrease
		Volatility	55%	Fair value decrease

As the material investments held at fair value categorized as level 3 in the fair value hierarchy are based on a market backsolve approach using a recent arm's length transaction the change in unobservable inputs in reasonably possible scenarios has an immaterial impact on the financial statements.

Warrants

Warrants issued by subsidiaries within the Group are classified as liabilities, as they will be settled in a variable number of preferred shares. The following table summarizes the changes in the Group's subsidiary warrant liabilities, which were categorized as Level 3 in the fair value hierarchy:

	Subsidiary Warrant Liability $000s
Balance at January 1, 2020	7,997
Warrant Issuance	92
Change in fair value - finance costs (income)	117
Balance at December 31, 2020 and January 1, 2021	8,206
Change in fair value - finance costs (income)	(1,419)
Balance at December 31, 2021 and January 1, 2022	6,787
Change in fair value - finance costs (income)	(6,740)
Balance at December 31, 2022	**47**

The change in fair value of warrants are recorded in Finance income/(costs) – fair value accounting in the Consolidated Statements of Comprehensive Income/(Loss).

In connection with various amendments to its 2010 Loan and Security Agreement, Follica issued Series A-1 preferred share warrants at various dates in 2013 and 2014. In 2017, in conjunction with the issuance of convertible notes, the exercise price of the warrants was adjusted to $0.07 per share.

In connection with the September 2, 2021 Oxford Finance LLC loan issuance, Vedanta also issued Oxford Finance LLC 12,886 Series C-2 preferred share warrants with an exercise price of $23.28 per share, expiring September 2030.

The fair value of the warrant liabilities was immaterial as of December 31, 2022 due to the decline in the fair value of the underlying preferred shares in the Follica warrant. See also Note 15 for the fair value of Follica preferred share liabilities.

Short-term Note from Associate

On December 7, 2021, Gelesis issued PureTech a $15.0 million note to be repaid the earlier of three business days after the closing of the business combination of Gelesis with Capstar Special Acquisition Corp ("Capstar"), or 30 days following the termination of such business combination. In the event of the business combination termination, the Company, who represented the majority of the note holders, could have elected to convert the note at the next equity financing at a discount of 25% from the financing price. The note bore interest at a rate of 10% per annum.

The note was repaid by Gelesis in January 2022 due to the closing of the business combination between Gelesis and Capstar on January 13, 2022.

Note from Associate

On July 27, 2022, PureTech, as a lender, entered into an unsecured Short Term Promissory Note ("Note") with Gelesis (GLS), as a borrower, in the amount of $15.0 million. The Note bears an annual interest rate of 15% per annum and accrues until the note is repaid. The term of the Note is the earlier of December 31, 2023 or five business days following the consummation of a qualified financing by Gelesis.

In case of default, PureTech will be issued a warrant which shall entitle PureTech to purchase at an exercise price per share of $0.01 a number of shares of Gelesis common Stock equal to (i) (A) 0.2 multiplied by (B) the amount of outstanding principal and accrued interest under the Note as of the date of conversion described below, divided by (ii) the volume weighted average price of each share of Common Stock, as reported by the New York Stock Exchange, for the last five (5) trading days ("the "Common Stock VWAP") occurring immediately prior to the date of exercise. In addition, PureTech will have the option to convert the amount of outstanding principal and accrued interest under the Note into a number of shares of Gelesis Common Stock (the "Conversion Securities") equal to (i) the amount of outstanding principal and accrued interest under the Note as of the date of such conversion, divided by (ii) the lesser of the price per share of (A) the Gelesis common Stock, as reported by the New York Stock Exchange, as of 4:00 P.M. Eastern Time on the date of the conversion notice or (B) the Common Stock VWAP as of the day prior to the date of the conversion notice.

Based on the terms of the note, the note is required to be measured at fair value with changes in fair value recorded through profit and loss. The fair value of the note as of December 31, 2022 was $16.5 million. During the year ended December 31, 2022 the Group recorded $963 thousand of interest income and a gain of $539 thousand for the change in the fair value of the note. The change in the fair value of the note was recorded in the line item Other Income/(expense) in the Consolidated Statements of Comprehensive Income/(Loss).

The note was valued using a discounted cash flow approach of the probability weighted future returns on the note, using a discount rate of 28.9%. Increasing or decreasing the discount rate by 5.0% will decrease or increase the value, respectively, by approximately $0.4 million. Also, increasing the estimated term to a qualified financing by 6 months (estimated as 3 months from December 31, 2022) will decrease the fair value by approximately $0.9 million.

Subsequent to balance sheet date, on April 10, 2023, the NYSE commenced proceedings to delist the common stock of Gelesis from the NYSE due to Gelesis ceasing to meet certain conditions to trade on such stock exchange. Trading in Gelesis's common stock was suspended immediately, and it was subsequently delisted from the NYSE. The common stock of Gelesis is currently available for trading in the over-the-counter ("OTC") market under the symbol GLSH. See Note 26 for additional details, including information related to an additional note issued by Gelesis to the Group after balance sheet date.

Fair Value Measurement and Classification

The fair value of financial instruments by category at December 31, 2022 and 2021:

	2022					
	Carrying Amount		Fair Value			
	Financial Assets $000s	Financial Liabilities $000s	Level 1 $000s	Level 2 $000s	Level 3 $000s	Total $000s
Financial assets:						
Money Markets[1,2]	**95,249**	**—**	**95,249**	**—**	**—**	**95,249**
Short-term investments[1]	**200,229**	**—**	**200,229**	**—**	**—**	**200,229**
Note from associate	**16,501**	**—**	**—**	**—**	**16,501**	**16,501**
Investments held at fair value	**251,892**	**—**	**239,299**	**—**	**12,593**	**251,892**
Trade and other receivables[3]	**11,867**	**—**	**—**	**11,867**	**—**	**11,867**
Total financial assets	**575,738**	**—**	**534,777**	**11,867**	**29,094**	**575,738**
Financial liabilities:						
Subsidiary warrant liability	**—**	**47**	**—**	**—**	**47**	**47**
Subsidiary preferred shares	**—**	**27,339**	**—**	**—**	**27,339**	**27,339**
Subsidiary notes payable	**—**	**2,345**	**—**	**2,097**	**248**	**2,345**
Share based liability awards	**—**	**5,932**	**4,396**	**—**	**1,537**	**5,932**
Total financial liabilities	**—**	**35,664**	**4,396**	**2,097**	**29,171**	**35,664**

1 Issued by a diverse group of corporations, largely consisting of financial institutions, virtually all of which are investment grade.

2 Included within Cash and cash equivalents

3 Outstanding receivables are owed primarily by government agencies and large corporations, virtually all of which are investment grade.

As of balance sheet date the long term loan book value (see Note 20) approximated its fair value due to its variable rate.

	2021					
	Carrying Amount		Fair Value			
	Financial Assets $000s	Financial Liabilities $000s	Level 1 $000s	Level 2 $000s	Level 3 $000s	Total $000s
Financial assets:						
Money Markets[1]	432,649	—	432,649	—	—	432,649
Short-term note from associate	15,120	—	—	—	15,120	15,120
Investments held at fair value[2]	493,888	—	254,355	—	239,533	493,888
Trade and other receivables[3]	3,174	—	—	3,174	—	3,174
Total financial assets	944,832	—	687,005	3,174	254,653	944,832
Financial liabilities:						
Subsidiary warrant liability	—	6,787	—	—	6,787	6,787
Subsidiary preferred shares	—	174,017	—	—	174,017	174,017
Subsidiary notes payable	—	4,641	—	1,945	2,696	4,641
Share based liability awards	—	7,362	6,081	—	1,281	7,362
Total financial liabilities	—	192,808	6,081	1,945	184,781	192,808

1 Issued by a diverse group of corporations, largely consisting of financial institutions, virtually all of which are investment grade. Included within Cash and cash equivalents

2 Balance prior to share of associate loss allocated to long-term interest (please refer to Note 5).

3 Outstanding receivables are owed primarily by government agencies, virtually all of which are investment grade.

17. Subsidiary Notes Payable

The subsidiary notes payable are comprised of loans and convertible notes. As of December 31, 2022 and December 31, 2021, the loan in Follica and the financial instruments for Knode and Appeering did not contain embedded derivatives and therefore these instruments continue to be held at amortized cost. The notes payable consist of the following:

As of December 31,	**2022 $000s**	2021 $000s
Loans	**2,097**	1,945
Convertible notes	**248**	2,696
Total subsidiary notes payable	**2,345**	4,641

Loans

In October 2010, Follica entered into a loan and security agreement with Lighthouse Capital Partners VI, L.P. The loan is secured by Follica's assets, including Follica's intellectual property and bears interest at a rate of 12.0 percent. The outstanding loan balance totaled approximately $2.0 million and $1.9 million as of December 31, 2022 and December 31, 2021, respectively. The increase in 2022 is attributed to interest expense for the year ended December 31, 2022.

Convertible Notes

Convertible Notes outstanding were as follows:

	Vedanta $000s	Knode $000s	Appeering $000s	Sonde $000s	Total $000s
January 1, 2021	25,000	89	134	—	25,223
Gross principal - issuance of notes - financing activity	—	—	—	2,215	2,215
Accrued interest on convertible notes - finance costs	797	5	8	70	880
Conversion to subsidiary preferred shares	(25,797)	—	—	—	(25,797)
Change in fair value - finance costs	—	—	—	175	175
December 31, 2021 and January 1, 2022	—	94	141	2,461	2,696
Gross principal - issuance of notes - financing activity	—	—	—	393	393
Accrued interest on convertible notes - finance costs	—	5	8	48	60
Change in fair value - finance costs	—	—	—	502	502
Deconsolidation	—	—	—	(3,403)	(3,403)
December 31, 2022	**—**	**99**	**149**	**—**	**248**

On December 30, 2020, Vedanta issued a $25.0 million convertible promissory note to an investor. The note bore interest at an annual rate of 6.0 percent and its maturity date was the first anniversary of the note. Prepayment of the note was not allowed and there was no conversion discount feature on the note. The note was mandatorily convertible in a Qualified equity financing and a Qualified Public Offering at the current price of the financing or offering, all as defined in the note purchase agreement. In addition, the note allowed for optional conversion immediately prior to a Non Qualified public offering, Non Qualified Equity financing, or a Corporate transaction and for a pay-out in the case of a change of control transaction. On July 19, 2021, upon the occurrence of Vedanta's Series D preferred share issuance that was considered to be a Qualified Equity Financing, the entire outstanding amount of the note, principal and interest, was converted into Series D preferred shares of Vedanta at the current price of the financing. For further details, please see Note 15.

On April 6, 2021, and on November 24, 2021, Sonde issued unsecured convertible promissory notes to its existing shareholders for a combined total of $4.3 million, of which $2.2 million were issued to third party shareholders (and $2.1 million were issued to the Company and eliminated in consolidation). In addition, in March 2022 Sonde issued an additional amount of $0.9 million, of which $0.4 million were issued to third parties (and $0.5 million issued to PureTech and eliminated in consolidation). The notes bore interest at an annual rate of 6.0 percent and were to mature on the second anniversary of the issuance. The notes were to mandatorily convert in a Qualified Financing, as defined in the note purchase agreement, at a discount of 20.0 percent from the price per share in the Qualified Financing. In addition, the notes allowed for optional conversion concurrently with a discount of 20.0 percent from the price per share in the Non Qualified Equity Financing. Upon the completion of the Preferred B round of financing in Sonde on May 25, 2022, the Group lost control in Sonde and all convertible notes were derecognized as part of the deconsolidation - See Note 5.

For the Vedanta and Sonde convertible notes, since these Notes contained embedded derivatives, the Notes were assessed under IFRS 9 and the entire financial instruments were elected to be accounted for as FVTPL. The Vedanta convertible note was settled through its conversion in July 2021 and the Sonde notes were deconsolidated in May 2022. See above.

18. Non-Controlling Interest

During the year ended December 31, 2022, Sonde Health, Inc was deconsolidated and therefore transferred retroactively to the Non-Controlled Founded Entity segment. See Note 5. Investments Held at Fair Value.

The Company has revised in the 2022 financial statements the prior period financial information related to the segmentation of NCI, to conform to the presentation as of and for the year ending December 31, 2022. Please refer to Note 4 “Segment Information” for further details regarding reportable segments.

The following table summarizes the changes in the equity classified non-controlling ownership interest in subsidiaries by reportable segment:

	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Total $000s
Balance at January 1, 2020 *	(8,682)	1,465	(11,016)	593	(17,639)
Share of comprehensive loss	(191)	(905)	(306)	(15)	(1,417)
Equity settled share-based payments	305	2,395	122	—	2,822
Other	—	11	19	(6)	24
Balance at December 31, 2020 and January 1, 2021 *	(8,567)	2,966	(11,181)	574	(16,209)
Share of comprehensive loss	(96)	(1,634)	(436)	15	(2,151)
NCI exercise of share-based awards in subsidiaries - change in NCI interest	—	(5,922)	—	—	(5,922)
Equity settled share-based payments	(4)	6,224	32	—	6,252
Acquisition of a subsidiary non controlling interest	8,668	—	—	—	8,668
Other	—	—	—	(6)	(6)
Balance at December 31, 2021 and January 1, 2022	—	1,634	(11,585)	583	(9,368)
Share of comprehensive income (loss)	—	13,604	(330)	15	13,290
NCI exercise of share-based awards	—	(15,164)	—	—	(15,164)
Deconsolidation of subsidiaries	—	—	11,904	—	11,904
Equity settled share-based payments	—	4,703	8	—	4,711
Other	—	—	2	(6)	(4)
Balance as of December 31, 2022	**—**	**4,778**	**—**	**592**	**5,369**

* Revised to reclassify Sonde to the Non-controlled Founded Entities segment to comply with current period classification. See Note 4.

The following tables summarize the financial information related to the Group's subsidiaries with material non-controlling interests, aggregated for interests in similar entities, and before and after intra group eliminations.

	2022			
For the year ended December 31	**Internal $000s**	**Controlled Founded Entities $000s**	**Intra-group eliminations $000s**	**Total $000s**
Statement of Comprehensive Loss				
Total revenue	**—**	**12,202**	**—**	**12,202**
Income/(loss) for the year	**—**	**98,633**	**1,003**	**99,636**
Other comprehensive income/(loss)	**—**	**—**	**—**	**—**
Total comprehensive income/(loss) for the year	**—**	**98,633**	**1,003**	**99,636**
Statement of Financial Position				
Total assets	**—**	**35,341**	**(100)**	**35,241**
Total liabilities	**—**	**76,635**	**(11,057)**	**65,578**
Net assets/(liabilities)	**—**	**(41,294)**	**10,957**	**(30,336)**

As of December 31, 2022, Controlled Founded Entities with non-controlling interests primarily include Follica Incorporated, Entrega Inc., and Vedanta Biosciences, Inc. Ownership interests of the non-controlling interests in Follica Incorporated, Entrega Inc., and Vedanta Biosciences, Inc are 19.9 percent, 11.7 percent, and 12.2 percent, respectively. In addition, Non-controlling interests include the amounts recorded for subsidiary stock options, with the vast majority comprising of Vedanta stock options.

	2021			
For the year ended December 31	Internal $000s	Controlled Founded Entities $000s	Intra-group eliminations $000s	Total $000s
Statement of Comprehensive Loss				
Total revenue	—	7,771	—	7,771
Income/(loss) for the year	—	(50,436)	792	(49,644)
Other comprehensive income/(loss)	—	—	—	—
Total comprehensive income/(loss) for the year	—	(50,436)	792	(49,644)
Statement of Financial Position				
Total assets	—	66,279	(161)	66,118
Total liabilities	—	228,856	(10,755)	218,101
Net assets/(liabilities)	—	(162,576)	10,594	(151,982)

As of December 31, 2021, Controlled Founded Entities with non-controlling interests primarily include, Follica Incorporated, Sonde Health Inc., Entrega Inc. and Vedanta Biosciences, Inc. Ownership interests of the non-controlling interests in Follica Incorporated, Sonde Health Inc., and Vedanta Biosciences, Inc are 19.9 percent, 11.7 percent, 6.2 percent and 3.7 percent, respectively. In addition, Non-controlling interests include the amounts recorded for subsidiary stock options, with the vast majority comprising of Vedanta stock options.

	2020			
For the year ended December 31	Internal $000s	Controlled Founded Entities $000s	Intra-group eliminations	Total
Statement of Comprehensive Loss				
Total revenue	3,267	1,957	—	5,224
Income/(loss) for the year	(2,407)	(53,535)	1,073	(54,869)
Total comprehensive income/(loss) for the year	(2,407)	(53,535)	1,073	(54,869)

As of December 31, 2020, Internal segment with non-controlling interests includes Alivio, Controlled Founded Entities with non-controlling interests primarily include, Follica Incorporated, Sonde Health Inc., and Vedanta Biosciences, Inc. Ownership interests of the non-controlling interests in Alivio Therapeutics, Inc., Follica Incorporated, Sonde Health Inc., and Vedanta Biosciences, Inc are 8.1 percent, 19.9 percent, 4.5 percent and 0.4 percent, respectively. In addition, Non-controlling interests include the amounts recorded for subsidiary stock options, with the vast majority comprising of Vedanta stock options.

On June 11, 2021, PureTech acquired the remaining 17.1 percent of the minority non-controlling interests of Alivio (after exercise of all in the money stock options) increasing its ownership to 100.0 percent of Alivio. The consideration for such non controlling interests amounted to $1.2 million, to be paid in three equal installments, with the first installment of $0.4 million paid at the effective date of the transaction and two additional installment to be paid upon the occurrence of certain contingent events. The Group recorded a contingent consideration liability of $0.6 million at fair value for the two additional installments, resulting in a total acquisition cost of $1.0 million. The excess of the consideration paid over the book value of the non-controlling interest of approximately $9.6 million was recorded directly as a charge to shareholders' equity. The second installment of $0.4 million was paid in July 2021, upon the occurrence of the contingent event specified in the agreement. The contingent consideration liability is adjusted to fair value at the end of each reporting period with changes in fair value recorded in earnings. Changes in fair value of the aforementioned contingent consideration liability were not material. As of December 31, 2022, the remaining contingent liability was reduced to zero as the second contingent event did not occur.

On December 1, 2021, options holders in Entrega exercised options into shares of common stock, increasing the NCI interest held from 0.2 percent to 11.7 percent. During 2021 option holders in Vedanta exercised options and increased the NCI interest to 3.7 percent. The exercise of the options resulted in an increase in the NCI share in Entrega's and Vedanta's shareholder's deficit of $5.9 million. The consideration paid by NCI ($0.1 million) together with the increase in NCI share in Entrega's and Vedanta's shareholder deficit ($5.9 million) amounted to $6.0 million and was recorded as a gain directly in shareholders' equity.

On February 15, 2022, option holders in Vedanta exercised options into shares of common stock, increasing the NCI interest held from 3.7 percent to 12.2 percent. The exercise of the options resulted in an increase in the NCI share in Vedanta's shareholder's deficit of $15.2 million. The consideration paid by NCI ($7.2 thousand) together with the increase in NCI share in Vedanta's shareholder deficit ($15.2 million) amounted to $15.2 million and was recorded as a gain directly in shareholders' equity.

19. Trade and Other Payables

Information regarding Trade and other payables was as follows:

As of December 31,	**2022 $000s**	2021 $000s
Trade payables	**26,504**	11,346
Accrued expenses	**24,518**	17,309
Income tax payable	**57**	57
Liability settled share based awards	**1,805**	4,703
Other	**1,957**	2,403
Total trade and other payables	**54,840**	35,817

20. Long-term loan

In September 2020, Vedanta entered into a $15.0 million loan and security agreement with Oxford Finance LLC. The loan is secured by Vedanta's assets, including equipment, inventory and intellectual property. The loan bears a floating interest rate of 7.7 percent plus the greater of (i) 30 day U.S. Dollar LIBOR reported in the Wall Street Journal or (ii) 0.17 percent. The loan matures September 2025 and requires interest only payments prior to 2023. The loan also carries a final fee upon full repayment of 7.0 percent of the original principal, or $1.1 million. As part of the loan agreement, Vedanta also issued Oxford Finance LLC 12,886 Series C-2 preferred share warrants with an exercise price of $23.28 per share, expiring September 2030. The outstanding loan balance totaled approximately $15.4 million as of December 31, 2022.

The following table summarizes long-term loan activity for the years ended December 31, 2022 and 2021:

	Long-term loan	
	2022 $000s	2021 $000s
Balance at January 1,	**15,118**	14,818
Accrued interest	**1,755**	1,502
Interest paid	**(1,436)**	(1,201)
Other	**(38)**	—
Balance at December 31,	**15,400**	15,118

The following table summarizes Vedanta's future principal payments for the long-term loan as of December 31, 2022:

Balance Type	2023	2024	2025	Total
Principal	5,156	5,625	4,219	15,000
Balance of accreted premium net of unamortized issuance costs				400
Total				**15,400**

The long-term loan is presented as follows in the Statement of Financial Position as of December 31, 2022 and 2021:

	Long-term loan	
	2022 $000s	2021 $000s
Current portion of Long-term loan	**5,156**	857
Long-term loan	**10,244**	14,261
Total Long-term loan	**15,400**	15,118

21 Leases

The activity related to the Group's right of use asset and lease liability for the years ended December 31, 2022 and 2021 is as follows:

	Right of use asset, net	
	2022 $000s	2021 $000s
Balance at January 1,	**17,166**	20,098
Additions	**163**	739
Tenant improvement - lease incentive	**—**	(733)
Depreciation	**(3,047)**	(2,938)
Balance at December 31,	**14,281**	17,166

	Total lease liability	
	2022 $000s	2021 $000s
Balance at January 1,	**32,990**	35,348
Additions	**163**	1,016
Cash paid for rent - principal - financing cash flow	**(4,025)**	(3,375)
Cash paid for rent - interest	**(1,982)**	(2,181)
Interest expense	**1,982**	2,181
Balance at December 31,	**29,128**	32,990

Depreciation of the right-of-use assets, which virtually all consist of leased real estate, is included in the General and administrative expenses and Research and development expenses line items in the Consolidated Statements of Comprehensive Income/(Loss). The Company recorded depreciation expense of $3.0 million, $2.9 million and $2.7 million for the years ended December 31, 2022, 2021 and 2020 respectively.

The following details the short term and long-term portion of the lease liability as of December 31, 2022 and 2021:

	Total lease liability	
	2022 $000s	2021 $000s
Short-term Portion of Lease Liability	**4,972**	3,950
Long-term Portion of Lease Liability	**24,155**	29,040
Total Lease Liability	**29,128**	32,990

The following table details the future maturities of the lease liability, showing the undiscounted lease payments to be paid after the reporting date:

	2022 $000s
Less than one year	**6,673**
One to two years	**6,763**
Two to three years	**5,168**
Three to four years	**4,419**
Four to five years	**4,551**
More than five years	**7,483**
Total undiscounted lease maturities	**35,056**
Interest	**5,928**
Total lease liability	**29,128**

During the year ended December 31, 2019, PureTech entered into a lease agreement for certain premises consisting of approximately 50,858 rentable square feet of space located at 6 Tide Street. The lease commenced on April 26, 2019 ("Commencement Date") for an initial term consisting of ten years and three months and there is an option to extend for two consecutive periods of five years each. The Company assessed at lease commencement date whether it is reasonably certain to exercise the extension options and deemed such options not reasonably certain to be exercised. The Company will reassess whether it is reasonably certain to exercise the options only if there is a significant event or significant changes in circumstances within its control.

On June 26, 2019, PureTech executed a sublease agreement with Gelesis. The lease is for the approximately 9,446 rentable square feet located on the sixth floor of the Company's former offices at the 501 Boylston Street building. The sublessee obtained possession of the premises on June 1, 2019 and the rent period term began on June 1, 2019 and expires on August 31, 2025. The sublease was determined to be a finance lease. As of December 31, 2022, the balances related to the sublease were as follows:

	Total lease receivable $000s
Short-term Portion of Lease Receivable	450
Long-term Portion of Lease Receivable	835
Total Lease Receivable	**1,285**

The following table details the future maturities of the lease receivable, showing the undiscounted lease payments to be received after the reporting date:

	2022 $000s
Less than one year	**513**
One to two years	**523**
Two to three years	**353**
Total undiscounted lease receivable	**1,389**
Unearned Finance income	**103**
Net investment in the lease	**1,285**

On August 6, 2019, PureTech executed a sublease agreement with Dewpoint Therapeutics, Inc. ("Dewpoint"). The sublease was for approximately 11,852 rentable square feet located on the third floor of the 6 Tide Street building, where the Company's offices are currently located. Dewpoint obtained possession of the premises on September 1, 2019 with a rent period term that began on September 1, 2019, and expired on August 31, 2021. The sublease was determined to be an operating lease.

Rental income recognized by the Company during the years ended December 31, 2021 and 2020 was $0.6 million and $1.1 million, respectively and is included in the Other income/(expense) line item in the Consolidated Statements of Comprehensive Income/(Loss).

22. Capital and Financial Risk Management

Capital Risk Management

The Group's capital and financial risk management policy is to maintain a strong capital base so as to support its strategic priorities, maintain investor, creditor and market confidence as well as sustain the future development of the business. The Group's objectives when managing capital are to safeguard its ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. To maintain or adjust the capital structure, the Group may issue new shares or incur new debt. The Group has some external debt and no material externally imposed capital requirements. The Group's share capital is clearly set out in Note 14.

Management continuously monitors the level of capital deployed and available for deployment in the Internal segment and at the corporate level as well as at Controlled Founded Entities. The Directors seek to maintain a balance between the higher returns that might be possible with higher levels of deployed capital and the advantages and security afforded by a sound capital position.

The Group's Directors have overall responsibility for establishment and oversight of the Group's capital and risk management framework. The Group is exposed to certain risks through its normal course of operations. The Group's main objective in using financial instruments is to promote the development and commercialization of intellectual property through the raising and investing of funds for this purpose. The Group's policies in calculating the nature, amount and timing of investments are determined by planned future investment activity. Due to the nature of activities and with the aim to maintain the investors' funds as secure and protected, the Group's policy is to hold any excess funds in highly liquid and readily available financial instruments and maintain insignificant exposure to other financial risks.

The Group has exposure to the following risks arising from financial instruments:

Credit Risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. Financial instruments that potentially subject the Group to concentrations of credit risk consist principally of cash and cash equivalents, short term investments, and trade and other receivables. The Group held the following balances (not including the income tax receivable resulting from overpayment of income taxes, see Note 25):

As of December 31	**2022 $000s**	2021 $000s
Cash and cash equivalents	**149,866**	465,708
Short-term investments	**200,229**	—
Trade and other receivables	**11,867**	3,174
Total	**361,961**	468,882

The Group invests its excess cash in U.S. Treasury Bills (presented as short-term investments), and money market accounts, which the Group believes are of high credit quality. Further the Group's cash and cash equivalents and short-term investments are held at diverse, investment-grade financial institutions.

The Group assesses the credit quality of customers on an ongoing basis. The credit quality of financial assets is assessed by historical and recent payment history, counterparty financial position, reference to credit ratings (if available) or to historical information about counterparty default rates. The Group does not have expected credit losses owing largely to a small number of counterparties and the high credit quality of most counterparties (primarily the US government and large funds with respect to grant income and large high credit quality corporations).

The aging of trade and other receivables that were not impaired at December 31 is as follows:

As of December 31	**2022 $000s**	2021 $000s
Not impaired	**11,867**	3,174
Total	**11,867**	3,174

With regard to the Note from associate, such note is presented at fair value which incorporates, among other factors, the credit risk of the counterparty. See Note 16 for details.

Liquidity Risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group actively manages its risk of a funds shortage by closely monitoring the maturity of its financial assets and liabilities and projected cash flows from operations, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation. Due to the nature of these financial liabilities, the funds are available on demand to provide optimal financial flexibility.

The table below summarizes the maturity profile of the Group's financial liabilities, including subsidiary preferred shares that have customary liquidation preferences, as of December 31, 2022 and 2021, based on contractual undiscounted payments:

	2022				
As of December 31	**Carrying Amount $000s**	**Within Three Months $000s**	**Three to Twelve Months $000s**	**One to Five Years $000s**	**Total $000s (*)**
Long-term loan (non-current + current)	**15,400**	**1,838**	**5,281**	**11,413**	**18,531**
Subsidiary notes payable	**2,345**	**2,345**	**—**	**—**	**2,345**
Trade and other payables	**54,840**	**54,840**	**—**	**—**	**54,840**
Warrants[2]	**47**	**47**	**—**	**—**	**47**
Subsidiary preferred shares (Note 15)[1]	**27,339**	**27,339**	**—**	**—**	**27,339**
Total	**99,971**	**86,409**	**5,281**	**11,413**	**103,103**

	2021				
As of December 31	Carrying Amount $000s	Within Three Months $000s	Three to Twelve Months $000s	One to Five Years $000s	Total $000s (*)
Long-term loan	15,118	296	2,182	16,274	18,752
Subsidiary notes payable	4,641	4,641	—	—	4,641
Trade and other payables	35,817	35,817	—	—	35,817
Warrants[2]	6,787	6,787	—	—	6,787
Subsidiary preferred shares (Note 15)[1]	174,017	174,017	—	—	174,017
Total	236,381	221,559	2,182	16,274	240,015

1 Redeemable only upon a liquidation or Deemed liquidation event, as defined in the applicable shareholder documents.

2 Warrants issued by subsidiaries to third parties to purchase preferred shares.

* Does not include payments in respect of lease obligations. For the contractual future payments related to lease obligations, see Note 21.

Interest Rate Sensitivity

As of December 31, 2022, the Group had cash and cash equivalents of $149.9 million, and short term investments of $200.2 million. The Group's exposure to interest rate sensitivity is impacted by changes in the underlying U.K. and U.S. bank interest rates. The Group has not entered into investments for trading or speculative purposes. Due to the conservative nature of the Group's investment portfolio, which is predicated on capital preservation and investments in short duration, high-quality U.S. Treasury Bills and related money market accounts, a change in interest rates would not have a material effect on the fair market value of the Group's portfolio, and therefore the Group does not expect operating results or cash flows to be significantly affected by changes in market interest rates.

Controlled Founded Entity Investments

The Group maintains investments in certain Controlled Founded Entities. The Group's investments in Controlled Founded Entities are eliminated as intercompany transactions upon financial consolidation. The Group is however exposed to a preferred share liability owing to the terms of existing preferred shares and the ownership of Controlled Founded Entities preferred shares by third parties. As discussed in Note 15, certain of the Group's subsidiaries have issued preferred shares that include the right to receive a payment in the event of any voluntary or involuntary liquidation, dissolution or winding up of a subsidiary, including in the event of "deemed liquidation" as defined in the incorporation documents of the entities, which shall be paid out of the assets of the subsidiary available for distribution to shareholders and before any payment shall be made to holders of ordinary shares. The liability of preferred shares is maintained at fair value through the profit and loss. The Group's strong cash position, budgeting and forecasting processes, as well as decision making and risk mitigation framework enable the Group to robustly monitor and support the business activities of the Controlled Founded Entities to ensure no exposure to dissolution or liquidation. Accordingly, the Group views exposure to 3rd party preferred share liability as low.

Non-Controlled Founded Entity Investments

The Group maintains certain investments in Non-Controlled Founded Entities which are deemed either as investments and accounted for as investments held at fair value or associates and accounted for under the equity method (please refer to Note 1). The Group's exposure to investments held at fair value is $251.9 million as of December 31, 2022, and the Group may or may not be able to realize the value in the future. Accordingly, the Group views the risk as high. The Group's exposure to investments in associates is limited to the carrying amount of the investment in an Associate. The Group is not exposed to further contractual obligations or contingent liabilities beyond the value of the investments. Accordingly, the Group does not view this as a high risk. As of December 31, 2022, Gelesis and Sonde are the only associates. The carrying amount of the investment in Gelesis and Sonde as associates was $9.1 million. Please refer to Notes 5, 6 and 16 for further information regarding the Group's exposure to Non-Controlled Founded Entity Investments.

Equity Price Risk

As of December 31, 2022, the Group held 1,054,464 common shares of Karuna, 2,671,800 common shares of Vor and 12,527,477 common shares of Akili. The fair value of these investments in Karuna, Vor and Akili was $239.0 million.

The investments in Karuna, Vor and Akili are exposed to fluctuations in the market price of these common shares. The effect of a 10.0 percent adverse change in the market price of Karuna, Vor and Akili common shares as of December 31, 2022, would have been a loss of approximately $23.9 million, that would have been recognized as a component of Other income (expense) in the Consolidated Statements of Comprehensive Income/(Loss).

Foreign Exchange Risk

The Group maintains consolidated financial statements in the Group's functional currency, which is the U.S. dollar. Monetary assets and liabilities denominated in currencies other than the functional currency are translated into the functional currency at rates of exchange prevailing at the balance sheet dates. Non-monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the exchange rates prevailing at the date of the transaction. Exchange gains or losses arising from foreign currency transactions are included in the determination of net income (loss) for the respective periods. Such foreign currency gains or losses were not material for all reported periods. See Note 9.

The Group does not currently engage in currency hedging activities since its foreign currency risk is limited, but the Group may begin to do so in the future if and when its foreign currency risk exposure changes.

23 Commitments and Contingencies

The Group is party to certain licensing agreements where the Group is licensing IP from third parties. In consideration for such licenses the Group has made upfront payments and may be required to make additional contingent payments based on developmental and sales milestones and/or royalty on future sales. As of December 31, 2022, these milestone events have not yet occurred and therefore the Group does not have a present obligation to make the related payments in respect of the licenses. Such milestones are dependent on events that are outside of the control of the Group and many of these milestone events are remote of occurring. As of December 31, 2022, payments in respect of developmental milestones that are dependent on events that are outside the control of the Group but are reasonably possible to occur amounted to approximately $8.7 million. These milestone amounts represent an aggregate of multiple milestone payments depending on different milestone events in multiple agreements. The probability that all such milestone events will occur in the aggregate is remote. Payments made to license IP represent the acquisition cost of intangible assets. See Note 12.

The Group is party to certain sponsored research arrangements as well as arrangements with contract manufacturing and contract research organizations, whereby the counterparty provides the Company with research and/or manufacturing services. As of December 31, 2022, the noncancellable commitments in respect of such contracts amounted to approximately $11.3 million.

24. Related Parties Transactions

Related Party Subleases and royalties

During 2019, PureTech executed a sublease agreement with a related party, Gelesis. Please refer to Note 21 for further details regarding the sublease.

The Group receives royalties from Gelesis on its product sales. Such royalties amounted to $509 thousand and $231 thousand for the years ended December 31, 2022 and 2021, respectively and are presented in Contract revenue in the Consolidated Statements of Comprehensive Income/(Loss).

Key Management Personnel Compensation

Key management includes executive directors and members of the executive management team of the Group (not including compensation provided to non-executive directors). The key management personnel compensation of the Group was as follows for the years ended December 31:

As of December 31	**2022 $000s**	2021 $000s	2020 $000s
Short-term employee benefits	**4,369**	4,666	4,833
Share-based payment expense	**2,741**	4,045	5,822
Total	**7,109**	8,711	10,656

Short-term employee benefits include salaries, health care and other non-cash benefits. Share-based payments are generally subject to vesting terms over future periods.

For cash settlements of share based awards – see Note 8.

In addition the Company paid remuneration to non-executive directors in the amounts of $655 thousand, $605 thousand and $690 thousand for the years ended December 31, 2022, 2021, and 2020, respectively. Also, the Company incurred $365 thousand and $161 thousand of stock based compensation expense for such non-executive directors for the years ended December 31, 2022 and 2021, respectively. There is no stock based compensation expense for such non-executive directors for the year ended December 31, 2020.

During the years ended December 31, 2022 and 2021, the Company incurred $51 thousand, and $181 thousand, respectively of expenses paid to related parties.

Convertible Notes Issued to Directors

Certain related parties of the Group have invested in convertible notes issued by the Group's subsidiaries. As of December 31, 2022 and 2021, the outstanding related party notes payable totaled $99 thousand and $94 thousand respectively, including principal and interest.

The notes issued to related parties bear interest rates, maturity dates, discounts and other contractual terms that are the same as those issued to outside investors during the same issuances, as described in Note 17.

Directors' and Senior Managers' Shareholdings and Share Incentive Awards

The Directors and senior managers hold beneficial interests in shares in the following businesses and sourcing companies as at December 31, 2022:

	Business Name (Share Class)	**Number of shares held as of December 31, 2022**	**Number of options held as of December 31, 2022**	**Number of RSUs held as of December 31, 2022**	**Ownership Interest[1]**
Directors:					
Ms Daphne Zohar[2]	Gelesis (Common)	**465,121**	**3,303,306**	**1,349,697**	**4.45 %**
Dr Robert Langer	Entrega (Common)	**250,000**	**82,500**	**—**	**4.09 %**
Dr Raju Kucherlapati	Enlight (Class B Common)	**—**	**30,000**	**—**	**3.00 %**
	Gelesis (Common)	**139,625**	**—**	**50,639**	**0.12 %**
Dr John LaMattina[3]	Akili (Common)	**56,554**	**—**	**—**	**0.07 %**
	Gelesis (Common)[3]	**395,035**	**37,129**	**—**	**0.38 %**
	Vedanta Biosciences (Common)	**25,000**	**—**	**—**	**0.17 %**
Senior Managers:					
Dr Bharatt Chowrira	Karuna (Common)	**5,000**	**—**	**—**	**0.01 %**
Dr Joseph Bolen	Vor (Common)	**—**	**9,191**	**—**	**0.01 %**

1 Ownership interests as of December 31, 2022 are calculated on a diluted basis, including issued and outstanding shares, warrants and options (and written commitments to issue options) but excluding unallocated shares authorized to be issued pursuant to equity incentive plans and any shares issuable upon conversion of outstanding convertible promissory notes.

2 Common shares, RSUs and options held by Yishai Zohar, who is the husband of Ms. Zohar. Ms. Zohar does not have any direct interest in the share capital of Gelesis. Ms. Zohar recuses herself from any and all material decisions with regard to Gelesis.

3 Dr John and Ms Mary LaMattina hold 345,035 shares of common shares in Gelesis. Individually, Dr LaMattina holds 50,000 shares of Gelesis and convertible notes issued by Appeering in the aggregate principal amount o $50,000.

Directors and senior managers hold 25,371,839 ordinary shares and 9.1 percent voting rights of the Company as of December 31, 2022. This amount excludes options to purchase 2,350,000 ordinary shares. This amount also excludes 6,448,899 shares, which are issuable based on the terms of performance based RSU awards granted to certain senior managers covering the financial years 2022, 2021 and 2020, and 172,056 shares, which are issuable to directors immediately prior to the Company's 2023 Annual General Meeting of Stockholders based on the terms of the RSU awards granted to non-executive directors in 2022. Such shares will be issued to such senior managers and non executive directors in future periods provided that

performance and/or service conditions are met and certain of the shares will be withheld for payment of customary withholding taxes.

Note from Associate

See Note 16 for details on the notes issued by Gelesis to the Company. The Company recognized finance income of 1.6 million with respect to interest and changes in fair value related to the notes.

As of December 31, 2022 the Group has a receivable from an associate in the amount of 1.1 million.

25. Taxation

Tax on the profit or loss for the year comprises current and deferred income tax. Tax is recognized in the Consolidated Statements of Comprehensive Income/(Loss) except to the extent that it relates to items recognized directly in equity.

For the years ended December 31, 2022, 2021 and 2020, the Group filed a consolidated U.S. federal income tax return which included all subsidiaries in which the Company owned greater than 80 percent of the vote and value. For the years ended December 31, 2022, 2021 and 2020, the Group filed certain consolidated state income tax returns which included all subsidiaries in which the Company owned greater than 50 percent of the vote and value. The remaining subsidiaries file separate U.S. tax returns.

Amounts recognized in Consolidated Statements of Comprehensive Income/(Loss):

As of December 31	**2022 $000s**	2021 $000s	2020 $000s
Income/(loss) for the year	**(37,065)**	(62,709)	4,568
Income tax expense/(benefit)	**(55,719)**	3,756	14,401
Income/(loss) before taxes	**(92,783)**	(58,953)	18,969

Recognized income tax expense/(benefit):

As of December 31	**2022 $000s**	2021 $000s	2020 $000s
Federal	**13,065**	22,138	21,796
Foreign	**—**	—	—
State	**1,336**	109	—
Total current income tax expense/(benefit)	**14,401**	22,247	21,796
Federal	**(48,240)**	(15,416)	(7,349)
Foreign	**—**	—	—
State	**(21,880)**	(3,075)	(46)
Total deferred income tax expense/(benefit)	**(70,120)**	(18,491)	(7,395)
Total income tax expense/(benefit), recognized	**(55,719)**	3,756	14,401

The tax expense/(benefit) was $(55.7) million, $3.8 million and $14.4 million in 2022, 2021 and 2020 respectively. The increase in tax benefit for the year ended December 31, 2022 is primarily the result of the loss before taxes in entities in the U.S. Federal and Massachusetts consolidated return groups of the Company.

Reconciliation of Effective Tax Rate

The Group is primarily subject to taxation in the U.S. A reconciliation of the U.S. federal statutory tax rate to the effective tax rate is as follows:

	2022		2021		2020	
As of December 31	**$000s**	**%**	$000s	%	$000s	%
US federal statutory rate	**(19,486)**	**21.00**	(12,380)	21.00	3,984	21.00
Effects of state tax rate in U.S.	**(8,043)**	**8.67**	(4,484)	7.61	1,844	9.72
R&D and orphan drug tax credits	**(6,876)**	**7.41**	(5,056)	8.58	(5,642)	(29.74)
Non deductible share based payment expenses	**788**	**(0.85)**	555	(0.94)	327	1.73
Finance income/(costs) – fair value accounting	**(28,783)**	**31.02**	(2,017)	3.42	919	4.84
Loss with respect to associate for which no deferred tax asset is recognized	**1,413**	**(1.52)**	11,542	(19.58)	—	—
Change in blended state rate impact due to state apportionment change	**(8,856)**	**9.54**	—	—	—	—
Transaction Costs	**—**	**—**	309	(0.52)	361	1.91
Interest Expense	**69**	**(0.07)**	217	(0.37)	(2,258)	(11.91)
Executive Compensation	**300**	**(0.32)**	746	(1.27)	827	4.36
Recognition of deferred tax assets and tax benefits not previously recognized	**(184)**	**0.20**	(414)	0.70	—	—
Current year losses for which no deferred tax asset is recognized	**17,287**	**(18.63)**	14,375	(24.38)	13,948	73.53
Sonde Deconsolidation	**(3,572)**	**3.85**	—	—	—	—
Other	**224**	**(0.25)**	363	(0.62)	91	0.48
	(55,719)	**60.05**	3,756	(6.37)	14,401	75.92

The Company is also subject to taxation in the UK but to date no taxable income has been generated in the UK. Changes in corporate tax rates can change both the current tax expense (benefit) as well as the deferred tax expense (benefit).

Deferred Tax Assets and Liabilities

Deferred tax assets have been recognized in the U.S. jurisdiction in respect of the following items:

As of December 31	**2022 $000s**	2021 $000s
Operating tax losses	**48,317**	46,982
Tax credits	**11,101**	10,673
Share-based payments	**8,423**	7,265
Capitalized Research & Experimental Expenditures	**36,084**	—
Investment in Associates	**13,036**	11,542
Lease Liability	**7,143**	8,969
Other temporary differences	**2,957**	2,665
Deferred tax assets	**127,061**	88,096
Investments held at fair value	**(47,877)**	(96,804)
ROU asset	**(3,519)**	(4,667)
Fixed assets	**(2,348)**	(3,547)
Deferred tax liabilities	**(53,744)**	(105,018)
Deferred tax assets (liabilities), net	**73,317**	(16,922)
Deferred tax liabilities, net, recognized	**(19,645)**	(89,765)
Deferred tax assets (liabilities), net, not recognized	**92,962**	72,843

We have recognized deferred tax assets related to entities in the U.S. Federal and Massachusetts consolidated return groups due to future reversals of existing taxable temporary differences that will be sufficient to recover the net deferred tax assets. Our unrecognized deferred tax assets of $93.0 million are primarily related to tax credit, loss carryforwards and deductible temporary differences in subsidiaries outside the U.S. Federal and Massachusetts consolidated return groups. Such deferred tax assets have not been recognized because it is not probable that future taxable profits will be available to support their realizability. The unrecognized deferred tax assets, to a lesser extent, also relate to unrecognized deferred tax assets with respect to a portion of Section 174 capitalized research & experimental expenditures which became effective in 2022 under the Tax Cuts and Jobs Act and an investment in an associate since the Group does not believe it is probable that such tax benefits will be realized in the foreseeable future.

There was movement in deferred tax recognized, which impacted income tax expense by approximately $70.1 million benefit, primarily related to changes in the value of investments and Section 174 capitalized research & experimental expenditures. The Company sold a portion of its stock in Karuna and VOR during 2022 resulting in net taxable income and current tax expense of $14.4 million.

Unrecognized Deferred Tax Assets

Deferred tax assets have not been recognized in respect of the following carryforward losses, credits and temporary differences, because it is not probable that future taxable profit will be available against which the Group can use the benefits therefrom.

	2022 $000s		2021 $000s	
As of December 31	**Gross Amount**	**Tax Effected**	Gross Amount	Tax Effected
Deductible Temporary Difference	**132,145**	**33,544**	59,925	16,224
Tax Losses	**219,466**	**48,317**	215,425	46,982
Tax Credits	**11,101**	**11,101**	9,636	9,636
Total	**362,712**	**92,962**	284,986	72,843

Tax Losses and tax credits carryforwards

Tax losses and tax credits for which no deferred tax asset was recognized

	2022 $000s		2021 $000s	
As of December 31	**Gross Amount**	**Tax Effected**	Gross Amount	Tax Effected
Tax losses expiring:				
Within 10 years	**23,930**	**5,387**	19,735	4,343
More than 10 years	**42,822**	**10,509**	47,937	11,611
Available Indefinitely	**152,714**	**32,421**	147,753	31,028
Total	**219,466**	**48,317**	215,425	46,982
Tax credits expiring:				
Within 10 years	**43**	**43**	4	4
More than 10 years	**11,058**	**11,058**	9,632	9,632
Available indefinitely	**—**	**—**	—	—
Total	**11,101**	**11,101**	9,636	9,636

The Group had U.S. federal net operating losses carry forwards (“NOLs”) of approximately $219.5 million, $215.4 million and $169.7 million as of December 31, 2022, 2021 and 2020, respectively, which are available to offset future taxable income. These NOLs expire through 2037 with the exception of $152.7 million which is not subject to expiration. The Group had U.S. Federal research and development tax credits of approximately $4.5 million, $3.9 million and $3.9 million as of December 31, 2022, 2021 and 2020, respectively, which are available to offset future taxes that expire at various dates through 2042. The Group also had Federal Orphan Drug credits of approximately $6.1 million and $5.7 million as of December 31, 2022, and 2021, which are available to offset future taxes that expire at various dates through 2042. A portion of these Federal NOLs and credits can only be used to offset the profits from the Company’s subsidiaries who file separate Federal tax returns. These NOLs and credits are subject to review and possible adjustment by the Internal Revenue Service.

The Group had state net operating losses carry forwards (“NOLs”) of approximately $71.7 million, $27.9 million and $67.4 million for the years ended December 31, 2022, 2021 and 2020, respectively, which are available to offset future taxable income. These NOLs expire at various dates beginning in 2030. The Group had Massachusetts research and development tax credits of approximately $0.6 million, $1.3 million and $2.1 million for the years ended December 31, 2022, 2021 and 2020, respectively, which are available to offset future taxes and expire at various dates through 2037. These NOLs and credits are subject to review and possible adjustment by the Massachusetts Department of Revenue.

Utilization of the NOLs and research and development credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986 due to ownership change limitations that have occurred previously or that could occur in the future. These ownership changes may limit the amount of NOL and research and development credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. The Company notes that a 382 analysis was performed through December 31, 2022. The results of this analysis concluded that certain net operating losses were subject to limitation under Section 382 of the Internal Revenue Code. None of the Company’s tax attributes which are subject to a restrictive Section 382 limitation have been recognized in the financial statements.

Tax Balances

The current tax related balances are presented in the Statement of Financial Position as follows:

As of December 31	2022 $000s	2021 $000s
Income tax receivable – current	**10,040**	4,514
Trade and Other Payables	**(57)**	(57)

Uncertain Tax Positions

The Company has no uncertain tax positions as of December 31, 2022. U.S. corporations are routinely subject to audit by federal and state tax authorities in the normal course of business.

26. Subsequent Events

The Company has evaluated subsequent events after December 31, 2022, the date of issuance of the Consolidated Financial Statements, and has not identified any recordable or disclosable events not otherwise reported in these Consolidated Financial Statements or notes thereto, except for the following:

On March 1, 2023 Vedanta issued convertible debt to a syndicate of investors. The initial close of the debt was for proceeds of approximately $88.5 million. The note carries an interest rate of 9 percent per annum. The debt has various conversion triggers and the conversion price is established at the lower of 80% of the equity price of the last financing round, or a certain pre-money valuation cap established in the agreement. As part of the issuance of the debt, the convertible debt holders were granted representation in Vedanta's Board of Directors and PureTech lost control over Vedanta. On April 24, 2023, Vedanta closed the second tranche of the convertible debt for additional proceeds of $18.0 million, of which $5.0 million were invested by the Company.

On March 22, 2023, the Company entered into an agreement with Royalty Pharma according to which Royalty Pharma acquired an interset in the Group's royalty from Karuna's KarXT, with $100.0 million in cash up-front, and up to $400.0 million in additional cash consideration, contingent on the achievement of certain regulatory and commercial milestones.

Gelesis

On February 21, 2023, the Company entered into a Note and Warrant Purchase agreement with Gelesis for $5.0 million cash consideration. As part of the agreement, the Company received a short term convertible senior secured note of $5.0 million and warrants to purchase additional shares of Gelesis' common stock. The note carries an interest rate of 12 percent per annum and holds an initial maturity date of July 31, 2023 unless the note is earlier converted or redeemed by the issuer.

On April 10, 2023, the NYSE commenced proceedings to delist the common stock of Gelesis from the NYSE due to Gelesis ceasing to meet certain conditions to trade on such stock exchange. Trading in the Gelesis's common stock was suspended immediately, and it was subsequently delisted from the NYSE. The common stock of Gelesis is currently available for trading in the over-the-counter ("OTC") market under the symbol GLSH.

In addition, in April 2023 PureTech submitted a non-binding proposal to acquire all of the outstanding equity of Gelesis. Negotiations related to the proposal and any potential deal remain ongoing and are subject to, among other things, approval of any definitive transaction by independent committees of the boards of both Gelesis and PureTech.

Exhibit 2.3

Description of Securities

The following description of the securities registered under Section 12 of the Securities Exchange Act of 1934 of PureTech Health plc ("PureTech," "us," "our," "we" or the "Company") is a summary of the rights of our American Depository Shares and certain provisions of our articles of association in effect as of December 31, 2021 (the "Articles"). This summary does not purport to be complete and is qualified in its entirety by the provisions of our Articles previously filed with the Securities and Exchange Commission and incorporated by reference as an exhibit to the Annual Report on Form 20-F of which this Exhibit 2.3 is a part, as well as to the applicable provisions of the laws and regulations of England and Wales. We encourage you to read our Articles and applicable legislation on England and Wales carefully.

Ordinary Shares

The holders of our ordinary shares, par value £0.01 per share, are entitled to receive dividends in proportion to the number of ordinary shares held by them and according to the amount paid up on such ordinary shares during any portion or portions of the period in respect of which the dividend is paid. Holders of ordinary shares are entitled, in proportion to the number of ordinary shares held by them and to the amounts paid up thereon, to share in any surplus in the event of our winding up. The holders of ordinary shares are entitled to receive notice of, attend either in person or by proxy or, being a corporation, by a duly authorized representative, and vote at general meetings of shareholders.

Share Register

We are required by the Companies Act 2006 to keep a register of our shareholders. Under English law, the ordinary shares are deemed to be issued when the name of the shareholder is entered in our share register. The share register therefore is prima facie evidence of the identity of our shareholders, and the shares that they hold. The share register generally provides limited, or no, information regarding the ultimate beneficial owners of our ordinary shares. Our share register is maintained by our registrar, Computershare Investor Services PLC.

Under the Companies Act 2006, we must enter an allotment of shares in our share register as soon as practicable and in any event within two months of the allotment. We are also required by the Companies Act 2006 to register a transfer of shares (or give the transferee notice of and reasons for refusal) as soon as practicable and in any event within two months of receiving notice of the transfer.

We, any of our shareholders or any other affected person may apply to the court for rectification of the share register if:

- the name of any person is wrongly entered in or omitted from our register of members; or
- there is a failure or unnecessary delay in amending the register of members to show the date a member ceased to be a member.

Objects

Section 31 of the Companies Act 2006 provides that the objects of a company are unrestricted unless any restrictions are set out in the articles. There are no such restrictions in the Articles and our objects are therefore unrestricted.

Voting Rights

Subject to any rights or restrictions attached to any shares, on a show of hands:

- every shareholder who is entitled to vote on the resolution and who is present in person has one vote;
- every proxy present who has be duly appointed by one or more shareholders entitled to vote on the resolution(s) has one vote;
- a proxy has one vote for and one vote against the resolution(s) if he has been duly appointed by more than one shareholder entitled to vote on the resolution and either (i) is instructed by one or more of those shareholders to vote for the resolution and by one or more others to vote against it; or (ii) is instructed by one or more of those shareholders to vote in one way and is given a discretion as to how to vote by one or more others (and wishes to use that discretion to vote in the other way);
- subject to any rights or restrictions attached to any shares, on a poll every shareholder who is entitled to vote on the resolutions and is present in person or by proxy shall have one vote for every share of which he is the holder;
- where there are joint holders of a share, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the vote or votes of the other joint holder or holders. Seniority is determined by the order in which the names of the holders stand in the register; and
- unless the Board otherwise determines, a shareholder shall not be entitled to vote unless all calls or other sums due and payable from him in respect of shares in our company have been paid.

Dividends

Subject to the Companies Act 2006 and the Articles, we may by ordinary resolution declare dividends, but no such dividends shall exceed the amount recommended by the Board. Subject to the Companies Act 2006, the Board may declare and pay such interim dividends (including any dividend payable at a fixed rate) as appear to the Board to be justified by the profits of our company available for distribution.

Except as otherwise provided by the rights attached to shares, all dividends shall be declared and paid according to the amounts paid up or credited as paid up (other than amounts paid in advance of calls) on the shares in respect of which the dividend is paid and shall be apportioned and paid proportionately to the amounts paid up on such shares during any portion or portions of the period in respect of which the dividend is paid.

Dividends may be declared or paid in whatever currency the Board decides. Unless otherwise provided by the rights attached to the shares, dividends shall not carry a right to receive interest.

All dividends unclaimed for a period of 12 years after having been declared or becoming due for payment shall be forfeited and cease to remain owing by us.

The Board may, with the authority of an ordinary resolution of our company:

- offer holders of ordinary shares the right to elect to receive further ordinary shares, credited as fully paid, instead of cash in respect of all or part of any dividend or dividends specified by the ordinary resolution; and

- direct that payment of all or part of any dividend declared may be satisfied by the distribution of specific assets.

There are no fixed or specified dates on which entitlements to dividends payable by us arise.

Pre-Emption Rights

In certain circumstances, shareholders may have statutory pre-emption rights under the Companies Act 2006 in respect of the allotment of new shares in our company. These statutory pre-emption rights would require us to offer new shares for allotment to existing shareholders on a pro rata basis before allotting them to other persons. In such circumstances, the procedure for the exercise of such statutory pre-emption rights would be set out in the documentation by which such shares would be offered to shareholders.

Distribution of Assets on a Winding-Up

On a winding up, a liquidator may, with the authority of a special resolution of our company and any other sanction required by law divide among the shareholders in kind the whole or any part of the assets of our company, whether or not the assets consist of property of one kind or different kinds and may for such purposes set such value as he considers fair upon any one or more class or classes of property and may determine how such division shall be carried out as between the Shareholders or different classes of Shareholders. The liquidator may, with the same authority, transfer any part of the assets to trustees on such trusts for the benefit of shareholders as the liquidator, with the same authority, thinks fit and the liquidation may then be closed and our company dissolved, but so that no Shareholder shall be compelled to accept any shares or other property in respect of which there is a liability.

Transfer of Shares

Every transfer of shares which are in certificated form must be in writing in any usual form or in any form approved by the Board and shall be executed by or on behalf of the transferor and (in the case of a transfer of a share which is not fully paid up) by or on behalf of the transferee.

Every transfer of shares which are in uncertificated form must be made by means of a relevant system (such as CREST).

The Board may, in its absolute discretion and without giving reason, refuse to register any transfer of certificated shares if: (a) it is in respect of a share which is not fully paid up (provided that, if such share is admitted to trading

on a recognised investment exchange, the refusal does not prevent dealings in our company's shares from taking place on an open and proper basis); (b) it is in respect of more than one class of share; (c) it is not duly stamped (if so required)or duly certified or otherwise shown to the satisfaction of the Board to be exempt from stamp duty; or (d) it is not delivered for registration to the registered office of our company or such other place as the Board may from time to time determine, accompanied (except in the case of a transfer by a recognized person (as defined in the Articles) where a certificate has not been issued) by the relevant share certificate and such other evidence as the Board may reasonably require to show the right of the transferor to make the transfer and, if the transfer is signed by some other person on his behalf, the authority of that person to do so.

The Board may, in its absolute discretion and without giving reason, refuse to register any transfer or allotment of shares which is in favor of: (a) a child, bankrupt or person of unsound mind; or (b) more than four joint transferees

Restrictions on Voting Rights

If a member or any person appearing to be interested in shares held by such a member has been duly served with a notice under section 793 of the Companies Act 2006 and has failed in relation to any shares ("default shares")

Variation of Class Rights

Subject to the Companies Act 2006, all or any of the rights or privileges attached to any class of shares in our company may be varied or abrogated in such manner (if any) as may be provided by such rights, or, in the absence of any such provision, either with the consent in writing of the holders of at least three-fourths of the nominal amount of the issued shares of that class or with the sanction of a special resolution passed at a separate meeting of such holders of shares of that class, but not otherwise. The quorum at any such meeting (other than an adjourned meeting) is two persons holding or representing by proxy at least one third in nominal amount of the issued shares of the class in question.

The rights attached to any class of shares shall not, unless otherwise expressly provided in the rights attaching to such shares, be deemed to be varied or abrogated by the creation or issue of shares ranking pari passu with or subsequent to them or by the purchase or redemption by us of any of our own shares.

Share Capital, Changes in Capital and Purchase of Own Shares

Subject to the Companies Act 2006 and to the Articles, the power to allot and issue shares shall be exercised by the Board at such times and on such terms and conditions as the Board may determine.

Subject to the Articles and to any rights attached to any existing shares, any share may be issued with such rights or restrictions as we may from time to time determine by ordinary resolution.

We may issue redeemable shares and the Board may determine the terms, conditions and manner of redemption of such shares, provided it does so before the shares are allotted.

General Meetings

The Board may convene a general meeting whenever it thinks fit.

Pursuant to the Companies Act 2006, an annual general meeting shall be called on not less than 21 clear days' notice. All other general meetings shall be called by not less than 14 clear days' notice.

The quorum for a general meeting is two shareholders present in person or by proxy and entitled to vote.

The Board and, at any general meeting, the chairman of the meeting may make any arrangement and impose any requirement or restriction which it or he considers appropriate to ensure the security or orderly conduct of the meeting. This may include requirements for evidence of identity to be produced by those attending, the searching of their personal property and the restriction of items which may be taken into the meeting place.

Appointment of Directors

Unless otherwise determined by ordinary resolution, there shall be no maximum number of directors, but the number of directors shall not be less than two. Subject to the Companies Act 2006 and the Articles, we may by ordinary resolution appoint any person who is willing to act as a director either as an additional director or to fill a vacancy. The Board may also appoint any person who is willing to act as a director, subject to the Companies Act 2006 and the Articles. Any person appointed by the Board as a director will hold office only until conclusion of the next annual general meeting, unless he is re-elected during such meeting.

The Board may appoint any director to hold any employment or executive office in our company and may also revoke or terminate any such appointment (without prejudice to any claim for damages for breach of any service contract between the director and our company). The Board may by ordinary resolution appoint any person who is willing to act as a director either as an additional director or to fill a vacancy. The Board may also appoint any person who is willing to act as a director, subject to the Companies Act 2006 and the Articles. Any person appointed by the Board as a director will hold office only until conclusion of the next annual general meeting, unless he is re-elected during such meeting.

The Board may appoint any director to hold any employment or executive office in our company and may also revoke or terminate any such appointment (without prejudice to any claim for damages for breach of any service contract between the director and our company).

Retirement and Removal of Directors

Our Articles provide that at each annual general meeting of our company, one-third of the directors who are subject to retirement by rotation or, if their number is not three, the number nearest to but not exceeding one third shall retire from office unless there are fewer than three directors who are subject to retirement by rotation, in which case only one shall retire from office. However, in accordance with the U.K. Corporate Governance Code and best practice, at each annual general meeting all of our directors retire from office and put themselves forward for re-election. In addition, any director who has been a director at each of the preceding two annual general meetings shall also retire. Each such director may, if eligible, offer himself for re-election. If our company, at the meeting at which a director retires, does not fill the vacancy the retiring director shall, if willing, be deemed to have been reappointed unless it is expressly resolved not to fill the vacancy or a resolution for the reappointment of the director is put to the meeting and lost.

Without prejudice to the provisions of the Companies Act 2006, our company may by ordinary resolution remove any director before the expiration of his period of office and may by ordinary resolution appoint another director in his place.

Directors' Interests

Subject to the Companies Act 2006 and provided that he has disclosed to the directors the nature and extent of any interest, a director is able to enter into contracts or other arrangements with us, hold any other office (except auditor) with us or be a director, employee or otherwise interested in any company in which our company is interested. Such a director shall not be liable to account to us for any profit, remuneration or other benefit realized by any such office, employment, contract, arrangement or proposal.

Save as otherwise provided by the Articles, a director shall not vote on, or be counted in the quorum in relation to, any resolution of the Board concerning any contract, arrangement, transaction or proposal to which our company is or is to be a party and in which he (together with any person connected with him) is to his knowledge materially interested, directly or indirectly. Interests of which the director is not aware, interests which cannot reasonably be regarded as likely to give rise to a conflict of interest and interests arising purely as a result of an interest in our company's shares, debentures or other securities are disregarded. However, a director can vote and be counted in the quorum where the resolution relates to any of the following:

- the giving of any guarantee, security or indemnity in respect of (i) money lent or obligations incurred by him or by any other person at the request of or for the benefit of our company or any of its subsidiary undertakings or (ii) a debt or obligation of our company or any of its subsidiary undertakings for which the director himself has assumed responsibility in whole or in part under a guarantee or indemnity or by the giving of security;

- the participation of the director, in an offer of securities of our company or any of its subsidiary undertakings, including participation in the underwriting or sub-underwriting of the offer;

- a proposal involving another company in which he and any persons connected with him has a direct or indirect interest of any kind, unless he and any persons connected with him hold an interest in shares representing one percent or more of either any class of equity share capital, or the voting rights, in such company;

- any arrangement for the benefit of employees of our company or of any of its subsidiary undertakings which does not award the director any privilege or benefit not generally awarded to the employees to whom such arrangement relates;

- any proposal concerning the purchase or maintenance of any insurance policy under which he may benefit;

- any proposal concerning indemnities in favor of directors or the funding of expenditure by one or more directors on defending proceedings against such director(s).

A director shall not vote or be counted in the quorum on any resolution of the Board concerning his own appointment (including fixing or varying the terms of his appointment or its termination) as the holder of any office or place of profit with our company or any company in which our company is interested.

The Board may authorize any matter that would otherwise involve a Director breaching his duty under the Companies Act 2006 to avoid conflicts of interest, provided that the interested director(s) do not vote or count in the quorum in relation to any resolution authorizing the matter. The Board may authorize the relevant matter on such terms as it may determine including:

- whether the interested director(s) may vote or be counted in the quorum in relation to any resolution relating to the relevant matter;
- the exclusion of the interested director(s) from all information and discussion by our company of the relevant matter; and
- the imposition of confidentiality obligations on the interested director(s).

An interested director must act in accordance with any terms determined by the Board. An authorization of a relevant matter may also provide that where the interested director obtains information that is confidential to a third party (other than through his position as director) he will not be obliged to disclose it to our company or to use it in relation to our company's affairs, if to do so would amount to a breach of that confidence.

Powers of the Directors

Subject to the Articles and to any directions given by special resolution of the Company, the business of the Company shall be managed by the Board, which may exercise all the powers of the Company whether relating to the management of the business or not.

Differences in Corporate Law

The applicable provisions of the Companies Act 2006 differ from laws applicable to U.S. corporations and their shareholders. Set forth below is a summary of certain differences between the provisions of the Companies Act 2006 applicable to us and the Delaware General Corporation Law relating to shareholders' rights and protections. This summary is not intended to be a complete discussion of the respective rights and it is qualified in its entirety by reference to Delaware law and English law.

	ENGLAND AND WALES	DELAWARE
Number of Directors	Under the Companies Act 2006, a public limited company must have at least two directors and the number of directors may be fixed by or in the manner provided in a company's articles of association.	Under Delaware law, a corporation must have at least one director and the number of directors shall be fixed by or in the manner provided in the bylaws.

Removal of Directors	Under the Companies Act 2006, shareholders may remove a director without cause by an ordinary resolution (which is passed by a simple majority of those voting in person or by proxy at a general meeting) irrespective of any provisions of any service contract the director has with the company, provided 28 clear days' notice of the resolution has been given to the company and its shareholders. On receipt of notice of an intended resolution to remove a director, the company must forthwith send a copy of the notice to the director concerned. Certain other procedural requirements under the Companies Act 2006 must also be followed such as allowing the director to make representations against his or her removal either at the meeting or in writing.	Under Delaware law, any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors, except (a) unless the certificate of incorporation provides otherwise, in the case of a corporation whose board of directors is classified, shareholders may effect such removal only for cause, or (b) in the case of a corporation having cumulative voting, if less than the entire board of directors is to be removed, no director may be removed without cause if the votes cast against his removal would be sufficient to elect him if then cumulatively voted at an election of the entire board of directors, or, if there are classes of directors, at an election of the class of directors of which he is a part.
Vacancies on the Board of Directors	Under English law, the procedure by which directors, other than a company's initial directors, are appointed is generally set out in a company's articles of association, provided that where two or more persons are appointed as directors of a public limited company by resolution of the shareholders, resolutions appointing each director must be voted on individually.	Under Delaware law, vacancies and newly created directorships may be filled by a majority of the directors then in office (even though less than a quorum) or by a sole remaining director unless (a) otherwise provided in the certificate of incorporation or by-laws of the corporation or (b) the certificate of incorporation directs that a particular class of stock is to elect such director, in which case a majority of the other directors elected by such class, or a sole remaining director elected by such class, will fill such vacancy.

Annual General Meeting	Under the Companies Act 2006, a public limited company must hold an annual general meeting within the six-month period following the company's annual accounting reference date.	Under Delaware law, the annual meeting of stockholders shall be held at such place, on such date and at such time as may be designated from time to time by the board of directors or as provided in the certificate of incorporation or by the bylaws.
General Meeting	Under the Companies Act 2006, a general meeting of the shareholders of a public limited company may be called by the directors. Shareholders holding at least 5 percent of the paid-up capital of the company carrying voting rights at general meetings can require the directors to call a general meeting and, if the directors fail to do so within 21 days (with the meeting to be held not more than 28 days after the date of the notice), may themselves convene a general meeting.	Under Delaware law, special meetings of the stockholders may be called by the board of directors or by such person or persons as may be authorized by the certificate of incorporation or by the bylaws.

Notice of General Meetings	Under the Companies Act 2006, 21 clear days' notice must be given for an annual general meeting and any resolutions to be proposed at the meeting. Subject to a company's articles of association providing for a longer period, at least 14 clear days' notice is required for any other general meeting. In addition, certain matters, such as the removal of directors or auditors, require special notice, which is 28 clear days' notice. The shareholders of a company may in all cases consent to a shorter notice period, the proportion of shareholders' consent required being 100 percent of those entitled to attend and vote in the case of an annual general meeting and, in the case of any other general meeting, a majority in number of the members having a right to attend and vote at the meeting, being a majority who together hold not less than 95 percent in nominal value of the shares giving a right to attend and vote at the meeting.	Under Delaware law, unless otherwise provided in the certificate of incorporation or bylaws, written notice of any meeting of the stockholders must be given to each stockholder entitled to vote at the meeting not less than ten nor more than 60 days before the date of the meeting and shall specify the place, date, hour, and purpose or purposes of the meeting.
Proxy	Under the Companies Act 2006, at any meeting of shareholders, a shareholder may designate another person to attend, speak and vote at the meeting on their behalf by proxy.	Under Delaware law, at any meeting of stockholders, a stockholder may designate another person to act for such stockholder by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A director of a Delaware corporation may not issue a proxy representing the director's voting rights as a director.

Pre-emptive Rights	Under the Companies Act 2006, "equity securities", being (i) shares in the company other than shares that, with respect to dividends and capital, carry a right to participate only up to a specified amount in a distribution ("ordinary shares") or (ii) rights to subscribe for, or to convert securities into, ordinary shares, proposed to be allotted for cash must be offered first to the existing equity shareholders in the company in proportion to the respective nominal value of their holdings, unless an exception applies or a special resolution to the contrary has been passed by shareholders in a general meeting or the articles of association provide otherwise in each case in accordance with the provisions of the Companies Act 2006.	Under Delaware law, shareholders have no preemptive rights to subscribe to additional issues of stock or to any security convertible into such stock unless, and except to the extent that, such rights are expressly provided for in the certificate of incorporation.

Authority to Allot	Under the Companies Act 2006 the directors of a company must not allot shares or grant of rights to subscribe for or to convert any security into shares unless an exception applies or an ordinary resolution to the contrary has been passed by shareholders in a general meeting or the articles of association provide otherwise in each case in accordance with the provisions of the Companies Act 2006 default, breach of duty or breach of trust in relation to the company is void.	Under Delaware law, if the corporation's charter or certificate of incorporation so provides, the board of directors has the power to authorize the issuance of stock. It may authorize capital stock to be issued for consideration consisting of cash, any tangible or intangible property or any benefit to the corporation or any combination thereof. It may determine the amount of such consideration by approving a formula. In the absence of actual fraud in the transaction, the judgment of the directors as to the value of such consideration is conclusive can limit the liability of a director for:
	Any provision by which a company directly or indirectly provides an indemnity, to any extent, for a director of the company or of an associated company against any liability attaching to him in connection with any negligence, default, breach of duty or breach of trust in relation to the company of which he is a director is also void except as permitted by the Companies Act 2006, which provides exceptions for the company to (a) purchase and maintain insurance against such liability; (b) provide a "qualifying third party indemnity" (being an indemnity against liability incurred by the director to a person other than the company or an associated company or criminal proceedings in which he is not convicted); and (c) provide a "qualifying pension scheme indemnity" (being an indemnity against liability incurred in connection with the company's activities as trustee of an occupational pension plan).	• any breach of the director's duty of loyalty to the corporation or its stockholders; • acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; • intentional or negligent payment of unlawful dividends or stock purchases or redemptions; or • any transaction from which the director derives an improper personal benefit

Voting Rights	Under English law, unless a poll is demanded by the shareholders of a company or is required by the chairman of the meeting or the company's articles of association, shareholders shall vote on all resolutions on a show of hands. Under the Companies Act 2006, a poll may be demanded by (a) not fewer than five shareholders having the right to vote on the resolution; (b) any shareholder(s) representing not less than 10 percent of the total voting rights of all the shareholders having the right to vote on the resolution; or (c) any shareholder(s) holding shares in the company conferring a right to vote on the resolution being shares on which an aggregate sum has been paid up equal to not less than 10 percent of the total sum paid up on all the shares conferring that right. A company's articles of association may provide more extensive rights for shareholders to call a poll. Under English law, an ordinary resolution is passed on a show of hands if it is approved by a simple majority (more than 50 percent) of the votes cast by shareholders present (in person or by proxy) and entitled to vote. If a poll is demanded, an ordinary resolution is passed if it is approved by holders representing a simple majority of the total voting rights of shareholders present, in person or by proxy, who, being entitled to vote, vote on the resolution. Special resolutions require the affirmative vote of not less than 75 percent of the votes cast by shareholders present, in person or by proxy, at the meeting and entitled to vote.	Delaware law provides that, unless otherwise provided in the certificate of incorporation, each stockholder is entitled to one vote for each share of capital stock held by such stockholder.

Shareholder Vote on Certain Transactions	The Companies Act 2006 provides for schemes of arrangement, which are arrangements or compromises between a company and any class of shareholders or creditors and used in certain types of reconstructions, amalgamations, capital reorganizations or takeovers. These arrangements require: • the approval at a shareholders' or creditors' meeting convened by order of the court, of a majority in number of shareholders or creditors representing 75 percent in value of the capital held by, or debt owed to, the class of shareholders or creditors, or class thereof present and voting, either in person or by proxy; and • the approval of the court.	Generally, under Delaware law, unless the certificate of incorporation provides for the vote of a larger portion of the stock, completion of a merger, consolidation, sale, lease or exchange of all or substantially all of a corporation's assets or dissolution requires: • the approval of the board of directors; and • approval by the vote of the holders of a majority of the outstanding stock or, if the certificate of incorporation provides for more or less than one vote per share, a majority of the votes of the outstanding stock of a corporation entitled to vote on the matter.

Standard of Conduct for Directors		
	Under English law, a director owes various statutory and fiduciary duties to the company, including: • to act in the way he considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole; • to avoid a situation in which he has, or can have, a direct or indirect interest that conflicts, or possibly conflicts, with the interests of the company; • to act in accordance with the company's constitution and only exercise his powers for the purposes for which they are conferred; • to exercise independent judgment; • to exercise reasonable care, skill and diligence; • not to accept benefits from a third party conferred by reason of his being a director or doing, or not doing, anything as a director; and • a duty to declare any interest that he has, whether directly or indirectly, in a proposed or existing transaction or arrangement with the company.	Delaware law does not contain specific provisions setting forth the standard of conduct of a director. The scope of the fiduciary duties of directors is generally determined by the courts of the State of Delaware. In general, directors have a duty to act without self-interest, on a well-informed basis and in a manner they reasonably believe to be in the best interest of the stockholders. Directors of a Delaware corporation owe fiduciary duties of care and loyalty to the corporation and to its shareholders. The duty of care generally requires that a director act in good faith, with the care that an ordinarily prudent person would exercise under similar circumstances. Under this duty, a director must inform himself of all material information reasonably available regarding a significant transaction. The duty of loyalty requires that a director act in a manner he reasonably believes to be in the best interests of the corporation. He must not use his corporate position for personal gain or advantage. In general, but subject to certain exceptions, actions of a director are presumed to have been made on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the corporation. However, this presumption may be rebutted by evidence of a breach of one of the fiduciary duties. Delaware courts have also imposed a heightened standard of conduct upon directors of a Delaware corporation who take any action designed to defeat a threatened change in control of the corporation. In addition, under Delaware law, when the board of directors of a Delaware corporation approves the sale or break-up of a corporation, the board of directors may, in certain circumstances, have a duty to obtain the highest value reasonably available to the shareholders.

Stockholder Suits	Under English law, generally, the company, rather than its shareholders, is the proper claimant in an action in respect of a wrong done to the company or where there is an irregularity in the company's internal management. Notwithstanding this general position, the Companies Act 2006 provides that (i) a court may allow a shareholder to bring a derivative claim (that is, an action in respect of and on behalf of the company) in respect of a cause of action arising from a director's negligence, default, breach of duty or breach of trust and (ii) a shareholder may bring a claim for a court order where the company's affairs have been or are being conducted in a manner that is unfairly prejudicial to some of its shareholders.	Under Delaware law, a stockholder may initiate a derivative action to enforce a right of a corporation if the corporation fails to enforce the right itself. The complaint must: • state that the plaintiff was a stockholder at the time of the transaction of which the plaintiff complains or that the plaintiffs shares thereafter devolved on the plaintiff by operation of law; and • allege with particularity the efforts made by the plaintiff to obtain the action the plaintiff desires from the directors and the reasons for the plaintiff's failure to obtain the action; or • state the reasons for not making the effort. Additionally, the plaintiff must remain a stockholder through the duration of the derivative suit. The action will not be dismissed or compromised without the approval of the Delaware Court of Chancery.

Description of American Depository Shares

Citibank, N.A. has agreed to act as the depositary bank for our American Depositary Shares. Citibank's depositary offices are located at 388 Greenwich Street, New York, New York, 10013. American Depositary Shares are frequently referred to as "ADSs" and represent ownership interests in securities that are on deposit with the depositary bank. ADSs may be represented by certificates that are commonly known as "American Depositary Receipts" or "ADRs." The depositary bank typically appoints a custodian to safekeep the securities on deposit. In this case, the custodian is Citibank, N.A.—London Branch, located at Citigroup Centre Canary Wharf, London E14 5LB D.

We have appointed Citibank as depositary bank pursuant to a deposit agreement. A copy of the deposit agreement is on file with the SEC under cover of a Registration Statement on Form F-6. You may obtain a copy of the deposit agreement from the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 and from the SEC's website (www.sec.gov). Please refer to Registration Number 333-249809 when retrieving such copy.

We are providing you with a summary description of the material terms of the ADSs and of your material rights as an owner of ADSs. Please remember that summaries by their nature lack the precision of the information summarized and that the rights and obligations of an owner of ADSs will be determined by reference to the terms of the deposit agreement and not by this summary. We urge you to review the deposit agreement in its entirety. The portions of this summary description that are italicized describe matters that may be relevant to the ownership of ADSs but that may not be contained in the deposit agreement.

Each ADS represents the right to receive, and to exercise the beneficial ownership interests in, ordinary shares that are on deposit with the depositary bank and/or custodian. An ADS also represents the right to receive, and to exercise the beneficial interests in, any other property received by the depositary bank or the custodian on behalf of the owner of the ADS but that has not been distributed to the owners of ADSs because of legal restrictions or practical considerations. We and the depositary bank may agree to change the ADS-to-Share ratio by amending the deposit agreement. This amendment may give rise to, or change, the depositary fees payable by ADS owners. The custodian, the depositary bank and their respective nominees hold all deposited property for the benefit of the holders and beneficial owners of ADSs. The deposited property does not constitute the proprietary assets of the depositary bank, the custodian or their nominees. Beneficial ownership in the deposited property under the terms of the deposit agreement are vested in the beneficial owners of the ADSs. The depositary bank, the custodian and their respective nominees are the record holders of the deposited property represented by the ADSs for the benefit of the holders and beneficial owners of the corresponding ADSs. A beneficial owner of ADSs may or may not be the holder of ADSs. Beneficial owners of ADSs are able to receive, and to exercise beneficial ownership interests in, the deposited property only through the registered holders of the ADSs, the registered holders of the ADSs (on behalf of the applicable ADS owners) only through the depositary bank, and the depositary bank (on behalf of the owners of the corresponding ADSs) directly, or indirectly, through the custodian or their respective nominees, in each case upon the terms of the deposit agreement.

If you become (or already are) an owner of ADSs, you will become (or already are) a party to the deposit agreement and therefore will be (or are) bound to its terms and to the terms of any ADR that represents your ADSs. The deposit agreement and the ADR specify our rights and obligations as well as your rights and obligations as owner of ADSs and those of the depositary bank. As an ADS holder you appoint the depositary bank to act on your behalf in certain circumstances. The deposit agreement and the ADRs are governed by New York law. However, our obligations to the holders of ordinary shares will continue to be governed by the laws of England and Wales, which may be different from the laws of the United States.

In addition, applicable laws and regulations may require you to satisfy reporting requirements and obtain regulatory approvals in certain circumstances. You are solely responsible for complying with such reporting requirements and obtaining such approvals. Neither the depositary bank, the custodian, us or any of their or our respective agents or affiliates shall be required to take any actions whatsoever on your behalf to satisfy such reporting requirements or obtain such regulatory approvals under applicable laws and regulations.

As an owner of ADSs, we will not treat you as one of our shareholders and you will not have direct shareholder rights. The depositary bank will hold on your behalf the shareholder rights attached to the ordinary shares underlying your ADSs. An owner of ADSs is able to exercise the shareholders rights for the ordinary shares represented by ADSs through the depositary bank only to the extent contemplated in the deposit agreement. To exercise any shareholder rights not contemplated in the deposit agreement you will, as an ADS owner, need to arrange for the cancellation of your ADSs and become a direct shareholder.

The manner in which you own the ADSs (e.g., in a brokerage account vs. as registered holder, or as holder of certificated vs. uncertificated ADSs) may affect your rights and obligations, and the manner in which, and extent to which, the depositary bank's services are made available to you. As an owner of ADSs, you may hold your ADSs either by means of an ADR registered in your name, through a brokerage or safekeeping account, or through an account established by the depositary bank in your name reflecting the registration of uncertificated ADSs directly on the books of the depositary bank (commonly referred to as the "direct registration system" or "DRS"). The direct registration system reflects the uncertificated (book-entry) registration of ownership of ADSs by the depositary bank. Under the direct registration system, ownership of ADSs is evidenced by periodic statements issued by the depositary bank to the holders of the ADSs. The direct registration system includes automated transfers between the depositary bank and The Depository Trust Company ("DTC"), the central book-entry clearing and settlement system for equity securities in the United States. If you decide to hold your ADSs through your brokerage or safekeeping account, you must rely on the procedures of your broker or bank to assert your rights as ADS owner. Banks and brokers typically hold securities such as the ADSs through clearing and settlement systems such as DTC. The procedures of such clearing and settlement systems may limit your ability to exercise your rights as an owner of ADSs. Please consult with your broker or bank if you have any questions concerning these limitations and procedures. All ADSs held through DTC will be registered in the name of a nominee of DTC. This summary description assumes you have opted to own the ADSs directly by means of an ADS registered in your name and, as such, we will refer to you as the "holder." When we refer to "you," we assume the reader owns ADSs and will own ADSs at the relevant time.

The registration of the ordinary shares in the name of the depositary bank or the custodian shall, to the maximum extent permitted by applicable law, vest in the depositary bank or the custodian the record ownership in the applicable ordinary shares with the beneficial ownership rights and interests in such ordinary shares being at all times vested with the beneficial owners of the ADSs representing the ordinary shares. The depositary bank or the custodian shall at all times be entitled to exercise the beneficial ownership rights in all deposited property, in each case only on behalf of the holders and beneficial owners of the ADSs representing the deposited property.

Dividends and Distributions

As a holder of ADSs, you generally have the right to receive the distributions we make on the securities deposited with the custodian. Your receipt of these distributions may be limited, however, by practical considerations and legal limitations. Holders of ADSs will receive such distributions under the terms of the deposit agreement in proportion to the number of ADSs held as of the specified record date, after deduction of the applicable fees, taxes and expenses.

Distributions of Cash

Whenever we make a cash distribution for the securities on deposit with the custodian, we will deposit the funds with the custodian. Upon receipt of confirmation of the deposit of the requisite funds, the depositary bank will arrange for the funds received in a currency other than U.S. dollars to be converted into U.S. dollars and for the distribution of the U.S. dollars to the holders, subject to the laws and regulations of England and Wales.

The conversion into U.S. dollars will take place only if practicable and if the U.S. dollars are transferable to the United States. The depositary bank will apply the same method for distributing the proceeds of the sale of any property (such as undistributed rights) held by the custodian in respect of securities on deposit.

The distribution of cash will be made net of the fees, expenses, taxes and governmental charges payable by holders under the terms of the deposit agreement. The depositary bank will hold any cash amounts it is unable to distribute in a non-interest bearing account for the benefit of the applicable holders and beneficial owners of ADSs until the distribution can be effected or the funds that the depositary bank holds must be escheated as unclaimed property in accordance with the laws of the relevant states of the United States.

Distributions of Shares

Whenever we make a free distribution of ordinary shares for the securities on deposit with the custodian, we will deposit the applicable number of ordinary shares with the custodian. Upon receipt of confirmation of such deposit, the depositary bank will either distribute to holders new ADSs representing the ordinary shares deposited or modify the ADS-to-ordinary shares ratio, in which case each ADS you hold will represent rights and interests in the additional ordinary shares so deposited. Only whole new ADSs will be distributed. Fractional entitlements will be sold and the proceeds of such sale will be distributed as in the case of a cash distribution.

The distribution of new ADSs or the modification of the ADS-to-ordinary shares ratio upon a distribution of ordinary shares will be made net of the fees, expenses, taxes and governmental charges payable by holders under the terms of the deposit agreement. In order to pay such taxes or governmental charges, the depositary bank may sell all or a portion of the new ordinary shares so distributed.

No such distribution of new ADSs will be made if it would violate a law (*e.g.*, the U.S. securities laws) or if it is not operationally practicable. If the depositary bank does not distribute new ADSs as described above, it may sell the ordinary shares received upon the terms described in the deposit agreement and will distribute the proceeds of the sale as in the case of a distribution of cash.

Distributions of Rights

Whenever we intend to distribute rights to subscribe for additional ordinary shares, we will give prior notice to the depositary bank and we will assist the depositary bank in determining whether it is lawful and reasonably practicable to distribute rights to subscribe for additional ADSs to holders.

The depositary bank will establish procedures to distribute rights to subscribe for additional ADSs to holders and to enable such holders to exercise such rights if it is lawful and reasonably practicable to make the rights available to holders of ADSs, and if we provide all of the documentation contemplated in the deposit agreement (such as opinions to address the lawfulness of the transaction). You may have to pay fees, expenses, taxes and other governmental charges to subscribe for the new ADSs upon the exercise of your rights. The depositary bank is not

obligated to establish procedures to facilitate the distribution and exercise by holders of rights to subscribe for new ordinary shares other than in the form of ADSs.

The depositary bank will *not* distribute the rights to you if:

- We do not timely request that the rights be distributed to you or we request that the rights not be distributed to you; or
- We fail to deliver satisfactory documents to the depositary bank; or
- It is not reasonably practicable to distribute the rights.

The depositary bank will sell the rights that are not exercised or not distributed if such sale is lawful and reasonably practicable. The proceeds of such sale will be distributed to holders as in the case of a cash distribution. If the depositary bank is unable to sell the rights, it will allow the rights to lapse.

Elective Distributions

Whenever we intend to distribute a dividend payable at the election of shareholders either in cash or in additional shares, we will give prior notice thereof to the depositary bank and will indicate whether we wish the elective distribution to be made available to you. In such case, we will assist the depositary bank in determining whether such distribution is lawful and reasonably practicable.

The depositary bank will make the election available to you only if it is reasonably practicable and if we have provided all of the documentation contemplated in the deposit agreement. In such case, the depositary bank will establish procedures to enable you to elect to receive either cash or additional ADSs, in each case as described in the deposit agreement.

If the election is not made available to you, you will receive either cash or additional ADSs, depending on what a shareholder in England and Wales would receive upon failing to make an election, as more fully described in the deposit agreement.

Other Distributions

Whenever we intend to distribute property other than cash, ordinary shares or rights to subscribe for additional ordinary shares, we will notify the depositary bank in advance and will indicate whether we wish such distribution to be made to you. If so, we will assist the depositary bank in determining whether such distribution to holders is lawful and reasonably practicable.

If it is reasonably practicable to distribute such property to you and if we provide to the depositary bank all of the documentation contemplated in the deposit agreement, the depositary bank will distribute the property to the holders in a manner it deems practicable.

The distribution will be made net of fees, expenses, taxes and governmental charges payable by holders under the terms of the deposit agreement. In order to pay such taxes and governmental charges, the depositary bank may sell all or a portion of the property received.

The depositary bank will *not* distribute the property to you and will sell the property if:

- We do not request that the property be distributed to you or if we request that the property not be distributed to you; or
- We do not deliver satisfactory documents to the depositary bank; or
- The depositary bank determines that all or a portion of the distribution to you is not reasonably practicable.

The proceeds of such a sale will be distributed to holders as in the case of a cash distribution.

Redemption

Whenever we decide to redeem any of the securities on deposit with the custodian, we will notify the depositary bank in advance. If it is practicable and if we provide all of the documentation contemplated in the deposit agreement, the depositary bank will provide notice of the redemption to the holders. The custodian will be instructed to surrender the shares being redeemed against payment of the applicable redemption price. The depositary bank will convert into U.S. dollars, upon the terms of the deposit agreement, the redemption funds received in a currency other than U.S. dollars and will establish procedures to enable holders to receive the net proceeds from the redemption upon surrender of their ADSs to the depositary bank. You may have to pay fees, expenses, taxes and other governmental charges upon the redemption of your ADSs. If less than all ADSs are being redeemed, the ADSs to be retired will be selected by lot or on a *pro rata* basis, as the depositary bank may determine.

Changes Affecting Ordinary Shares

The ordinary shares held on deposit for your ADSs may change from time to time. For example, there may be a change in nominal or par value, split-up, cancellation, consolidation or any other reclassification of such ordinary shares or a recapitalization, reorganization, merger, consolidation or sale of assets of the company.

If any such change were to occur, your ADSs would, to the extent permitted by law and the deposit agreement, represent the right to receive the property received or exchanged in respect of the ordinary shares held on deposit.

The depositary bank may in such circumstances deliver new ADSs to you, amend the deposit agreement, the ADRs and the applicable Registration Statement(s) on Form F-6, call for the exchange of your existing ADSs for new ADSs and take any other actions that are appropriate to reflect as to the ADSs the change affecting the ordinary shares. If the depositary bank may not lawfully distribute such property to you, the depositary bank may sell such property and distribute the net proceeds to you as in the case of a cash distribution.

Issuance of ADSs upon Deposit of Ordinary Shares

The ordinary shares have been deposited by us with the custodian and the depositary bank has issued ADSs to the holders thereof.

The depositary bank may create ADSs on your behalf if you or your broker deposit ordinary shares with the custodian. The depositary bank will deliver these ADSs to the person you indicate only after you pay any applicable

issuance fees and any charges and taxes payable for the transfer of the ordinary shares to the custodian. Your ability to deposit ordinary shares and receive ADSs may be limited by U.S. and English legal considerations applicable at the time of deposit.

The issuance of ADSs may be delayed until the depositary bank or the custodian receives confirmation that all required approvals have been given and that the ordinary shares have been duly transferred to the custodian. The depositary bank will only issue ADSs in whole numbers.

When you make a deposit of ordinary shares, you will be responsible for transferring good and valid title to the depositary bank. As such, you will be deemed to represent and warrant that:

- The ordinary shares are duly authorized, validly issued, fully paid, non-assessable and legally obtained.
- All preemptive (and similar) rights, if any, with respect to such ordinary shares have been validly waived or exercised.
- You are duly authorized to deposit the ordinary shares.
- The ordinary shares presented for deposit are free and clear of any lien, encumbrance, security interest, charge, mortgage or adverse claim, and are not, and the ADSs issuable upon such deposit will not be, "restricted securities" (as defined in the deposit agreement).
- The ordinary shares presented for deposit have not been stripped of any rights or entitlements.

If any of the representations or warranties are incorrect in any way, we and the depositary bank may, at your cost and expense, take any and all actions necessary to correct the consequences of the misrepresentations.

Transfer, Combination and Split Up of ADRs

As an ADR holder, you are entitled to transfer, combine or split up your ADRs and the ADSs evidenced thereby. For transfers of ADRs, you will have to surrender the ADRs to be transferred to the depositary bank and also must:

- ensure that the surrendered ADR is properly endorsed or otherwise in proper form for transfer;
- provide such proof of identity and genuineness of signatures as the depositary bank deems appropriate;
- provide any transfer stamps required by the State of New York or the United States; and
- pay all applicable fees, charges, expenses, taxes and other government charges payable by ADR holders pursuant to the terms of the deposit agreement, upon the transfer of ADRs.

To have your ADRs either combined or split up, you must surrender the ADRs in question to the depositary bank with your request to have them combined or split up, and you must pay all applicable fees, charges and expenses payable by ADR holders, pursuant to the terms of the deposit agreement, upon a combination or split up of ADRs.

Withdrawal of Ordinary Shares Upon Cancellation of ADSs

As a holder, you are entitled to present your ADSs to the depositary bank for cancellation and then receive the corresponding number of underlying ordinary shares at the custodian's offices. Your ability to withdraw the ordinary shares held in respect of the ADSs may be limited by U.S. and English law considerations applicable at the time of withdrawal. In order to withdraw the ordinary shares represented by your ADSs, you will be required to pay to the depositary bank the fees for cancellation of ADSs and any charges and taxes payable upon the transfer of the ordinary shares. You assume the risk for delivery of all funds and securities upon withdrawal. Once canceled, the ADSs will not have any rights under the deposit agreement.

If you hold ADSs registered in your name, the depositary bank may ask you to provide proof of identity and genuineness of any signature and such other documents as the depositary bank may deem appropriate before it will cancel your ADSs. The withdrawal of the ordinary shares represented by your ADSs may be delayed until the depositary bank receives satisfactory evidence of compliance with all applicable laws and regulations. Please keep in mind that the depositary bank will only accept ADSs for cancellation that represent a whole number of securities on deposit.

You have the right to withdraw the securities represented by your ADSs at any time except for:

- Temporary delays that may arise because (i) the transfer books for the ordinary shares or ADSs are closed, or (ii) ordinary shares are immobilized on account of a shareholders' meeting or a payment of dividends.

- Obligations to pay fees, taxes and similar charges.

- Restrictions imposed because of laws or regulations applicable to ADSs or the withdrawal of securities on deposit.

The deposit agreement may not be modified to impair your right to withdraw the securities represented by your ADSs except to comply with mandatory provisions of law.

Each holder and beneficial owner of ADSs agrees to provide such information as the company may request in a disclosure notice given pursuant to the U.K. Companies Act 2006, as amended, or the Companies Act, or the Articles. Each holder and beneficial owner of ADSs acknowledges that it understands that failure to comply with such request may result in the imposition of sanctions against the holder of the ordinary shares in respect of which the non-complying person is or was, or appears to be or has been, interested as provided in the Companies Act and the Articles which currently include, the withdrawal of the voting rights of such Shares and the imposition of restrictions on the rights to receive dividends on and to transfer such Shares.

Voting Rights

As a holder, you generally have the right under the deposit agreement to instruct the depositary bank to exercise the voting rights for the ordinary shares represented by your ADSs. The voting rights of holders of ordinary shares are described in herein above.

At our request, the depositary bank will distribute to you any notice of shareholders' meeting received from us together with information explaining how to instruct the depositary bank to exercise the voting rights of the

securities represented by ADSs. In lieu of distributing such materials, the depositary bank may distribute to holders of ADSs instructions on how to retrieve such materials upon request.

If the depositary bank timely receives voting instructions from a holder of ADSs, it will endeavor to vote the securities (in person or by proxy) represented by the holder's ADSs as follows:

- In the event of voting by show of hands, the depositary bank will vote (or cause the custodian to vote) all ordinary shares held on deposit at that time in accordance with the voting instructions received from a majority of holders of ADSs who provide timely voting instructions.

- In the event of voting by poll, the depositary bank will vote (or cause the Custodian to vote) the ordinary shares held on deposit in accordance with the voting instructions received from the holders of ADSs.

Securities for which no voting instructions have been received will not be voted (except as otherwise contemplated in the deposit agreement). Please note that the ability of the depositary bank to carry out voting instructions may be limited by practical and legal limitations and the terms of the securities on deposit. We cannot assure you that you will receive voting materials in time to enable you to return voting instructions to the depositary bank in a timely manner.

Fees and Charges

As an ADS holder, you are required to pay the following fees under the terms of the deposit agreement:

SERVICE	FEES
• Issuance of ADSs (e.g., an issuance of ADS upon a deposit of ordinary shares, upon a change in the ADS(s)-to-ordinary share(s) ratio, or for any other reason), excluding ADS issuances as a result of distributions of ordinary shares)	Up to U.S.$0.05 per ADS issued
• Cancellation of ADSs (e.g., a cancellation of ADSs for delivery of deposited property, upon a change in the ADS(s)-to-ordinary share(s) ratio, or for any other reason)	Up to U.S.$0.05 per ADS cancelled
• Distribution of cash dividends or other cash distributions (e.g., upon a sale of rights and other entitlements)	Up to U.S.$0.05 per ADS held
• Distribution of ADSs pursuant to (i) share dividends or other free share distributions, or (ii) exercise of rights to purchase additional ADSs	Up to U.S.$0.05 per ADS held
• Distribution of securities other than ADSs or rights to purchase additional ADSs (e.g., upon a spin-off)	Up to U.S.$0.05 per ADS held
• ADS Services	Up to U.S.$0.05 per ADS held on the applicable record date(s) established by the depositary bank
• Registration of ADS transfers (e.g., upon a registration of the transfer of registered ownership of ADSs, upon a transfer of ADSs into DTC and *vice versa*, or for any other reason)	Up to U.S.$0.05 per ADS (or fraction thereof) transferred
• Conversion of ADSs of one series for ADSs of another series (e.g., upon conversion of partial entitlement ADSs for full entitlement ADSs, or upon conversion of restricted ADSs (each as defined in the deposit agreement) into freely transferable ADSs, and *vice versa*).	Up to U.S.$0.05 per ADS (or fraction thereof) converted

As an ADS holder you will also be responsible to pay certain charges such as:

- taxes (including applicable interest and penalties) and other governmental charges;
- the registration fees as may from time to time be in effect for the registration of ordinary shares on the share register and applicable to transfers of ordinary shares to or from the name of the custodian, the depositary bank or any nominees upon the making of deposits and withdrawals, respectively;
- certain cable, telex and facsimile transmission and delivery expenses;
- the fees, expenses, spreads, taxes and other charges of the depositary bank and/or service providers (which may be a division, branch or affiliate of the depositary bank) in the conversion of foreign currency;
- the reasonable and customary out-of-pocket expenses incurred by the depositary bank in connection with compliance with exchange control regulations and other regulatory requirements applicable to ordinary shares, ADSs and ADRs; and
- the fees, charges, costs and expenses incurred by the depositary bank, the custodian, or any nominee in connection with the ADR program.

ADS fees and charges for (i) the issuance of ADSs, and (ii) the cancellation of ADSs are charged to the person for whom the ADSs are issued (in the case of ADS issuances) and to the person for whom ADSs are cancelled (in the case of ADS cancellations). In the case of ADSs issued by the depositary bank into DTC, the ADS issuance and cancellation fees and charges may be deducted from distributions made through DTC, and may be charged to the DTC participant(s) receiving the ADSs being issued or the DTC participant(s) holding the ADSs being cancelled, as the case may be, on behalf of the beneficial owner(s) and will be charged by the DTC participant(s) to the account of the applicable beneficial owner(s) in accordance with the procedures and practices of the DTC participants as in effect at the time. ADS fees and charges in respect of distributions and the ADS service fee are charged to the holders as of the applicable ADS record date. In the case of distributions of cash, the amount of the applicable ADS fees and charges is deducted from the funds being distributed. In the case of (i) distributions other than cash and (ii) the ADS service fee, holders as of the ADS record date will be invoiced for the amount of the ADS fees and charges and such ADS fees and charges may be deducted from distributions made to holders of ADSs. For ADSs held through DTC, the ADS fees and charges for distributions other than cash and the ADS service fee may be deducted from distributions made through DTC, and may be charged to the DTC participants in accordance with the procedures and practices prescribed by DTC and the DTC participants in turn charge the amount of such ADS fees and charges to the beneficial owners for whom they hold ADSs. In the case of (i) registration of ADS transfers, the ADS transfer fee will be payable by the ADS Holder whose ADSs are being transferred or by the person to whom the ADSs are transferred, and (ii) conversion of ADSs of one series for ADSs of another series, the ADS conversion fee will be payable by the Holder whose ADSs are converted or by the person to whom the converted ADSs are delivered.

In the event of refusal to pay the depositary bank fees, the depositary bank may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set off the amount of the depositary bank fees from any distribution to be made to the ADS holder. Certain depositary fees and charges (such as the ADS services fee) may become payable shortly after the purchase of ADSs. Note that the fees and charges you may be required to pay may vary over time and may be changed by us and by the depositary bank. You will receive prior notice of such changes. The depositary bank may reimburse us for certain expenses incurred by us in respect of the ADR program, by making available a portion of the ADS fees charged in respect of the ADR program or otherwise, upon such terms and conditions as we and the depositary bank agree from time to time.

Amendments and Termination

We may agree with the depositary bank to modify the deposit agreement at any time without your consent. We undertake to give holders 30 days' prior notice of any modifications that would materially prejudice any of their substantial rights under the deposit agreement. We will not consider to be materially prejudicial to your substantial rights any modifications or supplements that are reasonably necessary for the ADSs to be registered under the Securities Act or to be eligible for book-entry settlement, in each case without imposing or increasing the fees and charges you are required to pay. In addition, we may not be able to provide you with prior notice of any modifications or supplements that are required to accommodate compliance with applicable provisions of law.

You will be bound by the modifications to the deposit agreement if you continue to hold your ADSs after the modifications to the deposit agreement become effective. The deposit agreement cannot be amended to prevent you from withdrawing the ordinary shares represented by your ADSs (except as permitted by law).

We have the right to direct the depositary bank to terminate the deposit agreement. Similarly, the depositary bank may in certain circumstances on its own initiative terminate the deposit agreement. In either case, the depositary bank must give notice to the holders at least 30 days before termination. Until termination, your rights under the deposit agreement will be unaffected.

Termination

After termination, the depositary bank will continue to collect distributions received (but will not distribute any such property until you request the cancellation of your ADSs) and may sell the securities held on deposit. After the sale, the depositary bank will hold the proceeds from such sale and any other funds then held for the holders of ADSs in a non-interest bearing account. At that point, the depositary bank will have no further obligations to holders other than to account for the funds then held for the holders of ADSs still outstanding (after deduction of applicable fees, taxes and expenses).

In connection with any termination of the deposit agreement, the depositary bank may make available to owners of ADSs a means to withdraw the ordinary shares represented by ADSs and to direct the depositary of such ordinary shares into an unsponsored American depositary share program established by the depositary bank. The ability to receive unsponsored American depositary shares upon termination of the deposit agreement would be subject to satisfaction of certain U.S. regulatory requirements applicable to the creation of unsponsored American depositary shares and the payment of applicable depositary fees.

Books of Depositary

The depositary bank maintains ADS holder records at its depositary office. You may inspect such records at such office during regular business hours but solely for the purpose of communicating with other holders in the interest of business matters relating to the ADSs and the deposit agreement.

The depositary bank will maintain in New York facilities to record and process the issuance, cancellation, combination, split-up and transfer of ADSs. These facilities may be closed from time to time, to the extent not prohibited by law.

Limitations on Obligations and Liabilities

The deposit agreement limits our obligations and the depositary bank's obligations to you. Please note the following:

- We and the depositary bank are obligated only to take the actions specifically stated in the deposit agreement without negligence or bad faith.
- The depositary bank disclaims any liability for any failure to carry out voting instructions, for any manner in which a vote is cast or for the effect of any vote, provided it acts in good faith and in accordance with the terms of the deposit agreement.
- The depositary bank disclaims any liability for any failure to determine the lawfulness or practicality of any action, for the content of any document forwarded to you on our behalf or for the accuracy of any translation of such a document, for the investment risks associated with investing in ordinary shares, for the validity or worth of the ordinary shares, for any tax consequences that result from the ownership of ADSs, for the credit-worthiness of any third party, for allowing any rights to lapse under the terms of the deposit agreement, for the timeliness of any of our notices or for our failure to give notice.
- We and the depositary bank are not obligated to perform any act that is inconsistent with the terms of the deposit agreement.
- We and the depositary bank disclaim any liability if we or the depositary bank are prevented or forbidden from or subject to any civil or criminal penalty or restraint on account of, or delayed in, doing or performing any act or thing required by the terms of the deposit agreement, by reason of any provision, present or future of any law or regulation, or by reason of present or future provision of any provision of our Articles, or any provision of or governing the securities on deposit, or by reason of any act of God or war or other circumstances beyond our control.
- We and the depositary bank disclaim any liability by reason of any exercise of, or failure to exercise, any discretion provided for in the deposit agreement or in our Articles or in any provisions of or governing the securities on deposit.

- We and the depositary bank further disclaim any liability for any action or inaction in reliance on the advice or information received from legal counsel, accountants, any person presenting Shares for deposit, any holder of ADSs or authorized representatives thereof, or any other person believed by either of us in good faith to be competent to give such advice or information.

- We and the depositary bank also disclaim liability for the inability by a holder to benefit from any distribution, offering, right or other benefit that is made available to holders of ordinary shares but is not, under the terms of the deposit agreement, made available to you.

- We and the depositary bank may rely without any liability upon any written notice, request or other document believed to be genuine and to have been signed or presented by the proper parties.

- We and the depositary bank also disclaim liability for any consequential or punitive damages for any breach of the terms of the deposit agreement.
- No disclaimer of any Securities Act liability is intended by any provision of the deposit agreement.

- Nothing in the deposit agreement gives rise to a partnership or joint venture, or establishes a fiduciary relationship, among us, the depositary bank and you as ADS holder.

- Nothing in the deposit agreement precludes Citibank, N.A. (or its affiliates) from engaging in transactions in which parties adverse to us or the holders or beneficial owners of ADS have interests, and nothing in the deposit agreement obligates Citibank, N.A. to disclose those transactions, or any information obtained in the course of those transactions, to us or to the holders or beneficial owners of ADS, or to account for any payment received as part of those transactions.

Taxes

You are responsible for the taxes and other governmental charges payable on the ADSs and the securities represented by the ADSs. We, the depositary bank and the custodian may deduct from any distribution the taxes and governmental charges payable by holders and may sell any and all property on deposit to pay the taxes and governmental charges payable by holders. You are liable for any deficiency if the sale proceeds do not cover the taxes that are due.

The depositary bank may refuse to issue ADSs, to deliver, transfer, split and combine ADRs or to release securities on deposit until all taxes and charges are paid by the applicable holder. The depositary bank and the custodian may take reasonable administrative actions to obtain tax refunds and reduced tax withholding for any distributions on your behalf. However, you may be required to provide to the depositary bank and to the custodian proof of taxpayer status and residence and such other information as the depositary bank and the custodian may require to fulfill legal obligations. You are required to indemnify us, the depositary bank and the custodian for any claims with respect to taxes based on any tax benefit obtained for you.

Foreign Currency Conversion

The depositary bank will arrange for the conversion of all foreign currency received into U.S. dollars if such conversion is practical, and it will distribute the U.S. dollars in accordance with the terms of the deposit agreement. You may have to pay fees and expenses incurred in converting foreign currency, such as fees and expenses incurred in complying with currency exchange controls and other governmental requirements.

If the conversion of foreign currency is not practical or lawful, or if any required approvals are denied or not obtainable at a reasonable cost or within a reasonable period, the depositary bank may take the following actions in its discretion:

- Convert the foreign currency to the extent practical and lawful and distribute the U.S. dollars to the holders for whom the conversion and distribution is lawful and practical.
- Distribute the foreign currency to holders for whom the distribution is lawful and practical.
- Hold the foreign currency (without liability for interest) for the applicable holders.

Governing Law/Waiver of Jury Trial

The deposit agreement, the ADRs, and the ADSs will be interpreted in accordance with the laws of the State of New York. The rights of holders of ordinary shares (including ordinary shares represented by ADSs) is governed by the laws of England and Wales.

AS A PARTY TO THE DEPOSIT AGREEMENT, YOU IRREVOCABLY WAIVE, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, YOUR RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF, OR RELATING TO, THE DEPOSIT AGREEMENT OR THE ADRs, OR ANYTHING CONTAINED THEREIN AGAINST US AND/OR THE DEPOSITARY.

The deposit agreement provides that, to the extent permitted by law, ADS holders waive the right to a jury trial of any claim they may have against us or the depositary arising out of or relating to our ordinary shares, the ADSs or the deposit agreement, including any claim under U.S. federal securities laws. If we or the depositary opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable in the facts and circumstances of that case in accordance with applicable case law. However, you will not be deemed, by agreeing to the terms of the deposit agreement, to have waived our or the depositary's compliance with U.S. federal securities laws and the rules and regulations promulgated thereunder.

Exhibit 4.16

Execution Version

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED (INDICATED BY: [***]) FROM THE EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) THE TYPE OF INFORMATION THAT THE REGISTRANT CUSTOMARILY AND ACTUALLY TREATS AS PRIVATE OR CONFIDENTIAL.

AMENDED AND RESTATED VOTING AGREEMENT
SONDE HEALTH, INC.

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AMENDED AND RESTATED VOTING AGREEMENT

THIS AMENDED AND RESTATED VOTING AGREEMENT (this "**Agreement**"), is made and entered into as of this 25th day of May, 2022, by and among Sonde Health, Inc., a Delaware corporation (the "**Company**"), each holder of the Series A-1 Preferred Stock, $0.0001 par value per share, of the Company ("**Series A-1 Preferred Stock**"), Series A-2 Preferred Stock, $0.0001 par value per share, of the Company ("**Series A-2 Preferred Stock**", and Series B Preferred Stock, $0.0001 par value per share, of the Company ("**Series B Preferred Stock**", and referred to herein collectively with the Series A-1 Preferred Stock and Series A-2 Preferred Stock, as the "**Preferred Stock**") listed on Schedule A (together with any subsequent investors, or transferees, who become parties hereto as "Investors" pursuant to Subsections 7.1(a) or 7.2 below, the "**Investors**"), and those certain stockholders of the Company and holders of options to acquire shares of the capital stock of the Company listed on Schedule B (together with any subsequent stockholders or option holders, or any transferees, who become parties hereto as "Key Holders" pursuant to Subsections 7.1(b) or 7.2 below, the "**Key Holders**," and together collectively with the Investors, the "**Stockholders**").

RECITALS

A. Concurrently with the execution of this Agreement, the Company and certain of the Investors are entering into a Series B Preferred Stock Purchase Agreement (as amended from time to time, the "**Purchase Agreement**") providing for the sale of shares of the Series B Preferred Stock. Certain of the Investors (the "**Existing Investors**") and the Key Holders are parties to that certain Voting Agreement, dated April 9, 2019, by and among the Company and the parties thereto, as amended (the "**Prior Agreement**"). The Company, the Key Holders and the Existing Investors party to the Prior Agreement desire to amend and restate that agreement to provide those Investors purchasing shares of the Series B Preferred Stock pursuant to the Purchase Agreement with the right, among other rights, to designate the election of certain members of the board of directors of the Company (the "**Board**") in accordance with the terms of this Agreement.

B. The Amended and Restated Certificate of Incorporation of the Company (as the same may be amended and/or restated from time to time, the "**Restated Certificate**") provides that (a) the holders of record of the shares of the Series B Preferred Stock, exclusively and as a separate class, shall be entitled to elect one director of the Company (the "**Series B Director**"), (b) the holders of record of the shares of Series A-2 Preferred Stock, exclusively and as a separate class, shall be entitled to elect two directors of the Company (the "**Series A-2 Directors**"), (c) the holders of record of the shares of the Series B Preferred Stock and Series A-2 Preferred Stock, voting together as a single class and on an as-converted basis, shall be entitled to elect one director of the Company and (d) the holders of record of the shares of common stock, $0.0001 par value per share, of the Company (the "**Common Stock**") and Preferred Stock, voting together as a single class and on an as-converted basis, shall be entitled to elect the balance of the total number of directors of the Company.

C. The parties also desire to enter into this Agreement to set forth their agreements and understandings with respect to how shares of the capital stock of the Company held by them will be voted on, or tendered in connection with, an acquisition of the Company.

NOW, THEREFORE, the Existing Investors hereby agree that the Prior Agreement is hereby amended and restated in its entirety by this Agreement, and parties further agree as follows:

1. Voting Provisions Regarding the Board.

1.1 Size of the Board. Each Stockholder agrees to vote, or cause to be voted, all Shares (as defined below) owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that the size of the Board shall be set and remain at six (6) directors and may be increased only with the written consent of the Requisite Holders (as defined in the Restated Certificate). For purposes of this Agreement, the term "**Shares**" shall mean and include any securities of the Company that the holders of which are entitled to vote for members of the Board, including without limitation, all shares of Common Stock and Preferred Stock, by whatever name called, now owned or subsequently acquired by a Stockholder, however acquired, whether through stock splits, stock dividends, reclassifications, recapitalizations, similar events or otherwise.

1.2 Board Composition. Each Stockholder agrees to vote, or cause to be voted, all Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that at each annual or special meeting of stockholders at which an election of directors is held or pursuant to any written consent of the stockholders, subject to Section 5, the following persons shall be elected to the Board:

(a) **[***]**;

(b) As the Series A-2 Directors:

(i) **[***]**;

(ii) One person designated from time to time by PureTech Health LLC, for so long as such Stockholder and its Affiliates (as defined below) continue to own beneficially at least 1,000,000 shares of Series A-2 Preferred Stock (such number subject to appropriate adjustment for any stock splits, stock dividends, combinations, recapitalizations and the like), which individual shall initially be Eric Elenko;

(c) **[***]**;

(d) **[***]**; and

(e) **[***]**.

To the extent that any of clauses (a) through (e) above shall not be applicable, any member of the Board who would otherwise have been designated in accordance with the terms thereof shall instead be voted upon by all the Stockholders of the Company entitled to vote thereon in accordance with, and pursuant to, the Restated Certificate.

For purposes of this Agreement, an individual, firm, corporation, partnership, association, limited liability company, trust or any other entity (collectively, a "**Person**") shall be deemed an "**Affiliate**" of another Person who, directly or indirectly, controls, is controlled by or is under common control with such Person, including, without limitation, any general partner, managing member, officer, director or trustee of such Person, or any venture capital fund or registered investment company now or hereafter existing that is controlled by one or more general partners, managing members or investment advisers of, or shares the same management company or investment adviser with, such Person.

1.3 Failure to Designate a Board Member. In the absence of any designation from the Persons or groups with the right to designate a director as specified above, the director previously designated by them and then serving shall be reelected if still eligible and willing to serve as provided herein and otherwise, such Board seat shall remain vacant.

1.4 Removal of Board Members. Each Stockholder also agrees to vote, or cause to be voted, all Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that:

(a) no director elected pursuant to Subsections 1.2 or 1.3 of this Agreement may be removed from office other than for cause unless (i) such removal is directed or approved by the affirmative vote of the Person(s) entitled under Subsection 1.2 to designate that director; or (ii) the Person(s) originally entitled to designate or approve such director pursuant to Subsection 1.2 is no longer so entitled to designate or approve such director;

(b) any vacancies created by the resignation, removal or death of a director elected pursuant to Subsections 1.2 or 1.3 shall be filled pursuant to the provisions of this Section 1; and

(c) upon the request of any party entitled to designate a director as provided in Subsection 1.2 to remove such director, such director shall be removed.

All Stockholders agree to execute any written consents required to perform the obligations of this Section 1, and the Company agrees at the request of any Person or member of a group entitled to designate directors to call a special meeting of stockholders for the purpose of electing directors.

1.5 No Liability for Election of Recommended Directors. No Stockholder, nor any Affiliate of any Stockholder, shall have any liability as a result of designating a person for election as a director for any act or omission by such designated person in his or her capacity as a director of the Company, nor shall any Stockholder have any liability as a result of voting for any such designee in accordance with the provisions of this Agreement.

1.6 No "Bad Actor" Designees. Each Person with the right to designate or participate in the designation of a director as specified above hereby represents and warrants to the Company that, to such Person's knowledge, none of the "bad actor" disqualifying events described in Rule 506(d)(1)(i)-(viii) promulgated under the Securities Act of 1933, as amended (the "**Securities Act**") (each, a "**Disqualification Event**"), is applicable to such Person's initial designee named above except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable. Any director designee to whom any Disqualification Event is applicable, except for a Disqualification Event to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable, is hereinafter referred to as a "**Disqualified Designee**". Each Person with the right to designate or participate in the designation of a director as specified above hereby covenants and agrees (A) not to designate or participate in the designation of any director designee who, to such Person's knowledge, is a Disqualified Designee and (B) that in the event such Person becomes aware that any individual previously designated by any such Person is or has become a Disqualified Designee, such Person shall as promptly as practicable take such actions as are necessary to remove such Disqualified Designee from the Board and designate a replacement designee who is not a Disqualified Designee.

2. Vote to Increase Authorized Common Stock. Each Stockholder agrees to vote or cause to be voted all Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to increase the number of authorized shares of Common Stock from time to time to ensure that there will be sufficient shares of Common Stock available for conversion of all of the shares of Preferred Stock outstanding at any given time.

3. Drag-Along Right.

1.1 Definitions. A "**Sale of the Company**" shall mean either: (a) a transaction or series of related transactions in which a Person, or a group of related Persons, acquires from stockholders of the Company shares representing more than **[***]** of the outstanding voting power of the Company (a "**Stock Sale**"); or (b) a transaction that qualifies as a "**Deemed Liquidation Event**" as defined in the Restated Certificate.

1.2 Actions to be Taken. In the event that (i) the Board and (ii) the Requisite Holders (the "**Selling Investors**"), approve a Sale of the Company in writing, specifying that this Section 3 shall apply to such transaction, then, subject to satisfaction of each of the conditions set forth in Subsection 3.3 below, each Stockholder and the Company hereby agree:

(a) if such transaction requires stockholder approval, with respect to all Shares that such Stockholder owns or over which such Stockholder otherwise exercises voting power, to vote (in person, by proxy or by action by written consent, as applicable) all Shares in favor of, and adopt, such Sale of the Company (together with any related amendment or restatement to the Restated Certificate required to implement such Sale of the Company) and to vote in opposition to any and all other proposals that could reasonably be expected to delay or impair the ability of the Company to consummate such Sale of the Company;

(b) if such transaction is a Stock Sale, to sell the same proportion of shares of capital stock of the Company beneficially held by such Stockholder as is being sold by the Selling Investors to the Person to whom the Selling Investors propose to sell their Shares, and, except as permitted in Subsection 3.3 below, on the same terms and conditions as the Selling Investors;

(c) to execute and deliver all related documentation and take such other action in support of the Sale of the Company as shall reasonably be requested by the Company or the Selling Investors in order to carry out the terms and provision of this Section 3, including, without limitation, executing and delivering instruments of conveyance and transfer, and any purchase agreement, merger agreement, any associated indemnity agreement, or escrow agreement, any associated voting, support, or joinder agreement, consent, waiver, governmental filing, share certificates duly endorsed for transfer (free and clear of impermissible liens, claims and encumbrances), and any similar or related documents;

(d) not to deposit, and to cause their Affiliates not to deposit, except as provided in this Agreement, any Shares of the Company owned by such party or Affiliate in a voting trust or subject any Shares to any arrangement or agreement with respect to the voting of such Shares, unless specifically requested to do so by the acquirer in connection with the Sale of the Company;

(e) to refrain from (i) exercising any dissenters' rights or rights of appraisal under applicable law at any time with respect to such Sale of the Company, or (ii); asserting any claim or commencing any suit (x) challenging the Sale of the Company or this Agreement, or (y) alleging a breach of any fiduciary duty of the Selling Investors or any affiliate or associate thereof (including, without limitation, aiding and abetting breach of fiduciary duty) in connection with the evaluation, negotiation or entry into the Sale of the Company, or the consummation of the transactions contemplated thereby;

(f) if the consideration to be paid in exchange for the Shares pursuant to this Section 3 includes any securities and due receipt thereof by any Stockholder would require under applicable law (x) the registration or qualification of such securities or of any person as a broker or dealer or agent with respect to such securities; or (y) the provision to any Stockholder of any information other than such information as a prudent issuer would generally furnish in an offering made solely to "accredited investors" as defined in Regulation D

promulgated under the Securities Act of 1933, as amended (the "**Securities Act**"), the Company may cause to be paid to any such Stockholder in lieu thereof, against surrender of the Shares which would have otherwise been sold by such Stockholder, an amount in cash equal to the fair value (as determined in good faith by the Board) of the securities which such Stockholder would otherwise receive as of the date of the issuance of such securities in exchange for the Shares; and

(g) in the event that the Selling Investors, in connection with such Sale of the Company, appoint a stockholder representative (the "**Stockholder Representative**") with respect to matters affecting the Stockholders under the applicable definitive transaction agreements following consummation of such Sale of the Company, (x) to consent to (i) the appointment of such Stockholder Representative, (ii) the establishment of any applicable escrow, expense or similar fund in connection with any indemnification or similar obligations, and (iii) the payment of such Stockholder's pro rata portion (from the applicable escrow or expense fund or otherwise) of any and all reasonable fees and expenses to such Stockholder Representative in connection with such Stockholder Representative's services and duties in connection with such Sale of the Company and its related service as the representative of the Stockholders, and (y) not to assert any claim or commence any suit against the Stockholder Representative or any other Stockholder with respect to any action or inaction taken or failed to be taken by the Stockholder Representative, within the scope of the Stockholder Representative's authority, in connection with its service as the Stockholder Representative, absent fraud, bad faith, gross negligence or willful misconduct.

1.3 Conditions. Notwithstanding anything to the contrary set forth herein, a Stockholder will not be required to comply with Subsection 3.2 above in connection with any proposed Sale of the Company (the "**Proposed Sale**"), unless:

(a) any representations and warranties to be made by such Stockholder in connection with the Proposed Sale are limited to representations and warranties related to authority, ownership and the ability to convey title to such Shares, including, but not limited to, representations and warranties that (i) the Stockholder holds all right, title and interest in and to the Shares such Stockholder purports to hold, free and clear of all liens and encumbrances, (ii) the obligations of the Stockholder in connection with the transaction have been duly authorized, if applicable, (iii) the documents to be entered into by the Stockholder have been duly executed by the Stockholder and delivered to the acquirer and are enforceable (subject to customary limitations) against the Stockholder in accordance with their respective terms; and (iv) neither the execution and delivery of documents to be entered into by the Stockholder in connection with the transaction, nor the performance of the Stockholder's obligations thereunder, will cause a breach or violation of the terms of any agreement to which the Stockholder is a party, or any law or judgment, order or decree of any court or governmental agency that applies to the Stockholder;

(b) such Stockholder is not required to agree (unless such Stockholder is a Company officer or employee) to any restrictive covenant in connection with the Proposed Sale (including without limitation any covenant not to compete or covenant not to solicit customers, employees or suppliers of any party to the Proposed Sale);

(c) such Stockholder and its Affiliates are not required to amend, extend or terminate any contractual or other relationship with the Company, the acquirer or their respective Affiliates, except that the Stockholder may be required to agree to terminate the investment-related documents between or among such Stockholder, the Company and/or other stockholders of the Company;

(d) the Stockholder is not liable for the breach of any representation, warranty or covenant made by any other Person in connection with the Proposed Sale, other than the Company;

(e) the liability for indemnification, if any, of such Stockholder in the Proposed Sale and for the inaccuracy of any representations and warranties made by the Company or its Stockholders in connection with such Proposed Sale, is several and not joint with any other Person (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any stockholder of any of identical representations, warranties and covenants provided by all stockholders), and is pro rata in proportion to, and does not exceed, the amount of consideration paid to such Stockholder in connection with such Proposed Sale; and

(f) subject to Section 3.5, upon the consummation of the Proposed Sale (i) each holder of each class or series of the capital stock of the Company will receive the same form of consideration for their shares of such class or series as is received by other holders in respect of their shares of such same class or series of stock, and if any holders of any capital stock of the Company are given a choice as to the form of consideration to be received as a result of the Proposed Sale, all holders of such capital stock will be given the same option, (ii) each holder of a series of Preferred Stock will receive the same amount of consideration per share of such series of Preferred Stock as is received by other holders in respect of their shares of such same series, (iii) each holder of Common Stock will receive the same amount of consideration per share of Common Stock as is received by other holders in respect of their shares of Common Stock, and (iv) unless waived pursuant to the terms of the Company's Certificate of Incorporation in effect immediately prior to the Proposed Sale and as may be required by law, the aggregate consideration receivable by all holders of the Preferred Stock and Common Stock shall be allocated among the holders of Preferred Stock and Common Stock on the basis of the relative liquidation preferences to which the holders of each respective series of Preferred Stock and the holders of Common Stock are entitled in a Deemed Liquidation Event (assuming for this purpose that the Proposed Sale is a Deemed Liquidation Event) in accordance with the Company's Certificate of Incorporation in effect immediately prior to the Proposed Sale; provided, however, that notwithstanding the foregoing provisions of this Subsection 3.3(f), if the consideration to be paid in exchange for the Key Holder Shares or Investor Shares, as applicable, pursuant to this Subsection 3.3(f) includes any securities and due receipt thereof by any Key Holder or Investor would require under applicable law (x) the registration or qualification of such securities or of any person as a broker or dealer or agent with respect to such securities; or (y) the provision to any Key Holder or Investor of any information other than such information as a prudent issuer would generally furnish in an offering made solely to "accredited investors" as defined in Regulation D promulgated under the Securities Act, the Company may cause to be paid to any such Key Holder or Investor in lieu thereof, against surrender of the Key Holder Shares or Investor Shares, as applicable, which would have otherwise been sold by such Key Holder or Investor, an amount in cash equal to the fair value (as determined in good faith by the Board) of the securities which such Key Holder or Investor would otherwise receive as of the date of the issuance of such securities in exchange for the Key Holder Shares or Investor Shares, as applicable.

1.4 Restrictions on Sales of Control of the Company. No Stockholder shall be a party to any Stock Sale unless (a) all holders of Preferred Stock are allowed to participate in such transaction(s) and (b) the consideration received pursuant to such transaction is allocated among the parties thereto in the manner specified in the Company's Certificate of Incorporation in effect immediately prior to the Stock Sale (as if such transaction(s) were a Deemed Liquidation Event), unless the holders of at least the requisite percentage required to waive treatment of the transaction(s) as a Deemed Liquidation Event pursuant to the terms of the Company's Certificate of Incorporation in effect immediately prior to the Proposed Sale, elect to

allocate the consideration differently by written notice given to the Company at least **[***]** prior to the effective date of any such transaction or series of related transactions.

1.5 Consideration Payable to **[***]**. **[***]**.

4. Remedies.

1.1 Covenants of the Company. The Company agrees to use its best efforts, within the requirements of applicable law, to ensure that the rights granted under this Agreement are effective and that the parties enjoy the benefits of this Agreement. Such actions include, without limitation, the use of the Company's best efforts to cause the nomination and election of the directors as provided in this Agreement.

1.2 Irrevocable Proxy and Power of Attorney. Each party to this Agreement hereby constitutes and appoints as the proxies of the party and hereby grants a power of attorney to the Chief Executive Officer of the Company, and a designee of the Selling Investors, and each of them, with full power of substitution, with respect to the matters set forth herein, including, without limitation, election of persons as members of the Board in accordance with Section 1, votes to increase authorized shares pursuant to Section 2 hereof and votes regarding any Sale of the Company pursuant to Section 3 hereof, and hereby authorizes each of them to represent and vote, if and only if the party (i) fails to vote, or (ii) attempts to vote (whether by proxy, in person or by written consent), in a manner which is inconsistent with the terms of this Agreement, all of such party's Shares in favor of the election of persons as members of the Board determined pursuant to and in accordance with the terms and provisions of this Agreement or the increase of authorized shares or approval of any Sale of the Company pursuant to and in accordance with the terms and provisions of Sections 2 and 3, respectively, of this Agreement or to take any action reasonably necessary to effect Sections 2 and 3, respectively, of this Agreement. The power of attorney granted hereunder shall authorize the Chief Executive Officer of the Company, to execute and deliver the documentation referred to in Section 3.2(c) on behalf of any party failing to do so within **[***]** of a request by the Company. Each of the proxy and power of attorney granted pursuant to this Section 4.2 is given in consideration of the agreements and covenants of the Company and the parties in connection with the transactions contemplated by this Agreement and, as such, each is coupled with an interest and shall be irrevocable unless and until this Agreement terminates or expires pursuant to Section 6 hereof. Each party hereto hereby revokes any and all previous proxies or powers of attorney with respect to the Shares and shall not hereafter, unless and until this Agreement terminates or expires pursuant to Section 6 hereof, purport to grant any other proxy or power of attorney with respect to any of the Shares, deposit any of the Shares into a voting trust or enter into any agreement (other than this Agreement), arrangement or understanding with any person, directly or indirectly, to vote, grant any proxy or give instructions with respect to the voting of any of the Shares, in each case, with respect to any of the matters set forth herein.

1.3 Specific Enforcement. Each party acknowledges and agrees that each party hereto will be irreparably damaged in the event any of the provisions of this Agreement are not performed by the parties in accordance with their specific terms or are otherwise breached. Accordingly, it is agreed that each of the Company and the Stockholders shall be entitled to an injunction to prevent breaches of this Agreement, and to specific enforcement of this Agreement and its terms and provisions in any action instituted in any court of the United States or any state having subject matter jurisdiction.

1.4 Remedies Cumulative. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

5. "Bad Actor" Matters.

1.1 Definitions. For purposes of this Agreement:

(a) "**Company Covered Person**" means, with respect to the Company as an "issuer" for purposes of Rule 506 promulgated under the Securities Act, any Person listed in the first paragraph of Rule 506(d)(1).

(b) "**Disqualified Designee**" means any director designee to whom any Disqualification Event is applicable, except for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable.

(c) "**Disqualification Event**" means a "bad actor" disqualifying event described in Rule 506(d)(1)(i)-(viii) promulgated under the Securities Act.

(d) "**Rule 506(d) Related Party**" means, with respect to any Person, any other Person that is a beneficial owner of such first Person's securities for purposes of Rule 506(d) promulgated under the Securities Act.

1.2 Representations.

(a) Each Person with the right to designate or participate in the designation of a director pursuant to this Agreement hereby represents that (i) such Person has exercised reasonable care to determine whether any Disqualification Event is applicable to such Person, any director designee designated by such Person pursuant to this Agreement or any of such Person's Rule 506(d) Related Parties, except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable and (ii) no Disqualification Event is applicable to such Person, any Board member designated by such Person pursuant to this Agreement or any of such Person's Rule 506(d) Related Parties, except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable. Notwithstanding anything to the contrary in this Agreement, each Investor makes no representation regarding any Person that may be deemed to be a beneficial owner of the Company's voting equity securities held by such Investor solely by virtue of that Person being or becoming a party to (x) this Agreement, as may be subsequently amended, or (y) any other contract or written agreement to which the Company and such Investor are parties regarding (1) the voting power, which includes the power to vote or to direct the voting of, such security; and/or (2) the investment power, which includes the power to dispose, or to direct the disposition of, such security.

(b) The Company hereby represents and warrants to the Investors that no Disqualification Event is applicable to the Company or, to the Company's knowledge, any Company Covered Person, except for a Disqualification Event as to which Rule 506(d)(2)(ii-iv) or (d)(3) is applicable.

1.3 Covenants. Each Person with the right to designate or participate in the designation of a director pursuant to this Agreement covenants and agrees (i) not to designate or participate in the designation of any director designee who, to such Person's knowledge, is a Disqualified Designee, (ii) to exercise reasonable care to determine whether any director designee designated by such person is a Disqualified Designee, (iii) that in the event such Person becomes aware that any individual previously designated by any such Person is or has become a Disqualified Designee, such Person shall as promptly as practicable take such actions as are necessary to remove such Disqualified Designee from the Board and designate a replacement designee who is not a Disqualified Designee, and (iv) to notify the Company promptly in writing in the event a Disqualification Event becomes applicable to such Person or any of its Rule 506(d) Related Parties, or, to such Person's knowledge, to such Person's initial designee named in

Section 1, except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable.

6. Term. This Agreement shall be effective as of the date hereof and shall continue in effect until and shall terminate upon the earliest to occur of (a) the consummation of the Company's first underwritten public offering of its Common Stock (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to its stock option, stock purchase or similar plan or an SEC Rule 145 transaction); (b) the consummation of a Sale of the Company and distribution of proceeds to or escrow for the benefit of the Stockholders in accordance with the Restated Certificate, provided that the provisions of Section 3 hereof will continue after the closing of any Sale of the Company to the extent necessary to enforce the provisions of Section 3 with respect to such Sale of the Company; and (c) termination of this Agreement in accordance with Subsection 7.8 below.

7. Miscellaneous.

1.1 Additional Parties.

(a) Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of Preferred Stock or stock senior to Preferred Stock after the date hereof, as a condition to the issuance of such shares the Company shall require that any purchaser of such shares become a party to this Agreement by executing and delivering (i) the Adoption Agreement attached to this Agreement as Exhibit A, or (ii) a counterpart signature page hereto agreeing to be bound by and subject to the terms of this Agreement as an Investor and Stockholder hereunder. In either event, each such person shall thereafter be deemed an Investor and Stockholder for all purposes under this Agreement.

(b) In the event that after the date of this Agreement, the Company enters into an agreement with any Person to issue shares of capital stock to such Person (other than to a purchaser of Preferred Stock described in Subsection 7.1(a) above), following which such Person shall hold Shares constituting **[***]** or more of the then outstanding capital stock of the Company (treating for this purpose all shares of Common Stock issuable upon exercise of or conversion of outstanding options, warrants or convertible securities, as if exercised and/or converted or exchanged), then, the Company shall cause such Person, as a condition precedent to entering into such agreement, to become a party to this Agreement by executing an Adoption Agreement in the form attached hereto as Exhibit A, agreeing to be bound by and subject to the terms of this Agreement as a Stockholder and thereafter such person shall be deemed a Stockholder for all purposes under this Agreement.

1.2 Transfers. Each transferee or assignee of any Shares subject to this Agreement shall continue to be subject to the terms hereof, and, as a condition precedent to the Company's recognition of such transfer, each transferee or assignee shall agree in writing to be subject to each of the terms of this Agreement by executing and delivering an Adoption Agreement substantially in the form attached hereto as Exhibit A. Upon the execution and delivery of an Adoption Agreement by any transferee, such transferee shall be deemed to be a party hereto as if such transferee were the transferor and such transferee's signature appeared on the signature pages of this Agreement and shall be deemed to be an Investor and Stockholder, or Key Holder and Stockholder, as applicable. The Company shall not permit the transfer of the Shares subject to this Agreement on its books or issue a new certificate representing any such Shares unless and until such transferee shall have complied with the terms of this Subsection 7.2. Each certificate instrument, or book entry representing the Shares subject to this Agreement if issued on or after the date of this Agreement shall be notated by the Company with the legend set forth in Subsection 7.12.

1.3 Successors and Assigns. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

1.4 Governing Law. This Agreement shall be governed by the internal law of the State of Delaware, without regard to conflict of law principles that would result in the application of any law other than the law of the State of Delaware.

1.5 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

1.6 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

1.7 Notices.

(a) All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their address as set forth on Schedule A or Schedule B hereto, or to such email address, facsimile number or address as subsequently modified by written notice given in accordance with this Subsection 7.7.

(b) Consent to Electronic Notice. Each Investor and Key Holder consents to the delivery of any stockholder notice pursuant to the Delaware General Corporation Law (the "DGCL"), as amended or superseded from time to time, by electronic transmission pursuant to Section 232 of the DGCL (or any successor thereto) at the electronic mail address or the facsimile number as on the books of the Company. To the extent that any notice given by means of electronic transmission is returned or undeliverable for any reason, the foregoing consent shall be deemed to have been revoked until a new or corrected electronic mail address has been provided, and such attempted electronic notice shall be ineffective and deemed to not have been given. Each Investor and Key Holder agrees to promptly notify the Company of any change in its electronic mail address, and that failure to do so shall not affect the foregoing.

1.8 Consent Required to Amend, Modify, Terminate or Waive. This Agreement may be amended, modified or terminated (other than pursuant to Section 6) and the observance of any term hereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only by a written instrument executed by (a) the Company, (b) the Key Holders holding at least a majority of the Shares then held by the Key Holders who are then providing services to the Company as officers, employees or consultants, and (c) the Requisite Holders. Notwithstanding the foregoing:

(a) this Agreement may not be amended, modified or terminated and the observance of any term of this Agreement may not be waived with respect to any Investor or Key Holder without the written consent of such Investor or Key Holder unless such amendment, modification, termination or waiver applies to all Investors or Key Holders, as the case may be, in the same fashion;

(b) [***];

(c) [***];

(d) the provisions of Subsection 1.2(b)(ii) and this Subsection 7.8(d) may not be amended, modified, terminated or waived without the written consent of PureTech Health LLC;

(e) the consent of the Key Holders shall not be required for any amendment, modification, termination or waiver if such amendment, modification, termination, or waiver either (A) is not directly applicable to the rights of the Key Holders hereunder; or (B) does not adversely affect the rights of the Key Holders in a manner that is different than the effect on the rights of the other parties hereto;

(f) Schedule A hereto may be amended by the Company from time to time in accordance with the Purchase Agreement to add information regarding additional Purchasers (as defined in the Purchase Agreement) without the consent of the other parties hereto; and

(g) any provision hereof may be waived by the waiving party on such party's own behalf, without the consent of any other party.

The Company shall give prompt written notice of any amendment, modification, termination, or waiver hereunder to any party that did not consent in writing thereto. Any amendment, modification, termination, or waiver effected in accordance with this Subsection 7.8 shall be binding on each party and all of such party's successors and permitted assigns, whether or not any such party, successor or assignee entered into or approved such amendment, modification, termination or waiver. For purposes of this Subsection 7.8, the requirement of a written instrument may be satisfied in the form of an action by written consent of the Stockholders circulated by the Company and executed by the Stockholder parties specified, whether or not such action by written consent makes explicit reference to the terms of this Agreement.

1.9 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default previously or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

1.10 Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

1.11 Entire Agreement. Upon the effectiveness of this Agreement, the Prior Agreement shall be deemed amended and restated to read in its entirety as set forth in this Agreement. This Agreement (including the Exhibits hereto), the Restated Certificate and the other Transaction Agreements (as defined in the Purchase Agreement) constitute the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

1.12 Share Certificate Legend. Each certificate, instrument, or book entry representing any Shares issued after the date hereof shall be notated by the Company with a legend reading substantially as follows:

> "THE SHARES REPRESENTED HEREBY ARE SUBJECT TO A VOTING AGREEMENT, AS MAY BE AMENDED FROM TIME TO TIME, (A COPY OF WHICH MAY BE OBTAINED UPON WRITTEN REQUEST FROM THE COMPANY), AND BY ACCEPTING ANY INTEREST IN SUCH SHARES THE PERSON ACCEPTING SUCH INTEREST SHALL BE DEEMED TO AGREE TO AND SHALL BECOME BOUND BY ALL THE PROVISIONS OF THAT VOTING AGREEMENT, INCLUDING CERTAIN RESTRICTIONS ON TRANSFER AND OWNERSHIP SET FORTH THEREIN."

The Company, by its execution of this Agreement, agrees that it will cause the certificates instruments, or book entry evidencing the Shares issued after the date hereof to be notated with the legend required by this Subsection 7.12 of this Agreement, and it shall supply, free of charge, a copy of this Agreement to any holder of such Shares upon written request from such holder to the Company at its principal office. The parties to this Agreement do hereby agree that the failure to cause the certificates, instruments, or book entry evidencing the Shares to be notated with the legend required by this Subsection 7.12 herein and/or the failure of the Company to supply, free of charge, a copy of this Agreement as provided hereunder shall not affect the validity or enforcement of this Agreement.

1.13 Stock Splits, Stock Dividends, etc. In the event of any issuance of Shares or the voting securities of the Company hereafter to any of the Stockholders (including, without limitation, in connection with any stock split, stock dividend, recapitalization, reorganization, or the like), such Shares shall become subject to this Agreement and shall be notated with the legend set forth in Subsection 7.12.

1.14 Manner of Voting. The voting of Shares pursuant to this Agreement may be effected in person, by proxy, by written consent or in any other manner permitted by applicable law. For the avoidance of doubt, voting of the Shares pursuant to the Agreement need not make explicit reference to the terms of this Agreement.

1.15 Further Assurances. At any time or from time to time after the date hereof, the parties agree to cooperate with each other, and at the request of any other party, to execute and deliver any further instruments or documents and to take all such further action as the other party may reasonably request in order to carry out the intent of the parties hereunder.

1.16 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware or the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such

suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

1.17 Costs of Enforcement. If any party to this Agreement seeks to enforce its rights under this Agreement by legal proceedings, the non-prevailing party shall pay all costs and expenses incurred by the prevailing party, including, without limitation, all reasonable attorneys' fees.

1.18 Aggregation of Stock. All Shares held or acquired by a Stockholder and/or its Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement, and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

1.19 Spousal Consent. If any individual Stockholder is married on the date of this Agreement, such Stockholder's spouse shall execute and deliver to the Company a consent of spouse in the form of Exhibit B hereto ("**Consent of Spouse**"), effective on the date hereof. Notwithstanding the execution and delivery thereof, such consent shall not be deemed to confer or convey to the spouse any rights in such Stockholder's Shares that do not otherwise exist by operation of law or the agreement of the parties. If any individual Stockholder should marry or remarry subsequent to the date of this Agreement, such Stockholder shall within thirty (30) days thereafter obtain his/her new spouse's acknowledgement of and consent to the existence and binding effect of all restrictions contained in this Agreement by causing such spouse to execute and deliver a Consent of Spouse acknowledging the restrictions and obligations contained in this Agreement and agreeing and consenting to the same.

1.20 No Presumption against Drafter. The parties have participated jointly in negotiating and drafting this agreement. In the event that an ambiguity or a question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provision of this Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Voting Agreement as of the date first written above.

SONDE HEALTH, INC.

By: /s/ David Liu
Name: David Liu
Title: Chief Executive Officer

KEY HOLDERS:

/s/[***]
[***]

/s/[***]
[***]

/s/[***]
[***]

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Voting Agreement as of the date first written above.

[***]

By: /s/[***]
Name: **[***]**
Title: **[***]**

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Voting Agreement as of the date first written above.

INVESTORS:

PURETECH HEALTH LLC

By: /s/ Bharatt Chowrira
Name: Bharatt Chowrira
Title: President

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Voting Agreement as of the date first written above.

[***]

By: /s/[***]
Name: **[***]**
Title: **[***]**

By: /s/[***]
Name: **[***]**
Title: **[***]**

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Voting Agreement as of the date first written above.

[***]

By: /s/[***]
Name: [***]
Title: [***]

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Voting Agreement as of the date first written above.

[***]
By: [***]

By: /s/[***]
Name: [***]
Title: [***]

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Voting Agreement as of the date first written above.

[***]

By: /s/[***]
Name: [***]
Title: [***]

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Voting Agreement as of the date first written above.

/s/[***]
[***]

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Voting Agreement as of the date first written above.

/s/[***]
[***]

SCHEDULE A

INVESTORS

[***]

SCHEDULE B

KEY HOLDERS

[***]

EXHIBIT A

ADOPTION AGREEMENT

This Adoption Agreement ("**Adoption Agreement**") is executed on _____, 20__, by the undersigned (the "**Holder**") pursuant to the terms of that certain Amended and Restated Voting Agreement dated as of May [__], 2022 (the "**Agreement**"), by and among the Company and certain of its Stockholders, as such Agreement may be amended or amended and restated hereafter. Capitalized terms used but not defined in this Adoption Agreement shall have the respective meanings ascribed to such terms in the Agreement. By the execution of this Adoption Agreement, the Holder agrees as follows.

1.1 Acknowledgement. Holder acknowledges that Holder is acquiring certain shares of the capital stock of the Company (the "**Stock**") [or options, warrants, or other rights to purchase such Stock (the "**Options**")], for one of the following reasons (Check the correct box):

☐ As a transferee of Shares from a party in such party's capacity as an "Investor" bound by the Agreement, and after such transfer, Holder shall be considered an "Investor" and a "Stockholder" for all purposes of the Agreement.

☐ As a transferee of Shares from a party in such party's capacity as a "Key Holder" bound by the Agreement, and after such transfer, Holder shall be considered a "Key Holder" and a "Stockholder" for all purposes of the Agreement.

☐ As a new Investor in accordance with Subsection 7.1(a) of the Agreement, in which case Holder will be an "Investor" and a "Stockholder" for all purposes of the Agreement.

☐ In accordance with Subsection 7.1(b) of the Agreement, as a new party who is not a new Investor, in which case Holder will be a "Stockholder" for all purposes of the Agreement.

1.2 Agreement. Holder hereby (a) agrees that the Stock [Options], and any other shares of capital stock or securities required by the Agreement to be bound thereby, shall be bound by and subject to the terms of the Agreement and (b) adopts the Agreement with the same force and effect as if Holder were originally a party thereto.

1.3 Notice. Any notice required or permitted by the Agreement shall be given to Holder at the address or facsimile number listed below Holder's signature hereto.

HOLDER: __

By: __
Name and Title of Signatory

Address:__

__

Facsimile Number:__

ACCEPTED AND AGREED:

SONDE HEALTH, INC.

By:__

Title:__

EXHIBIT B

CONSENT OF SPOUSE

I, [_____], spouse of [_____], acknowledge that I have read the Amended and Restated Voting Agreement, dated as of May [__], 2022, to which this Consent is attached as Exhibit B (the "**Agreement**"), and that I know the contents of the Agreement. I am aware that the Agreement contains provisions regarding the voting and transfer of shares of capital stock of the Company that my spouse may own, including any interest I might have therein.

I hereby agree that my interest, if any, in any shares of capital stock of the Company subject to the Agreement shall be irrevocably bound by the Agreement and further understand and agree that any community property interest I may have in such shares of capital stock of the Company shall be similarly bound by the Agreement.

I am aware that the legal, financial and related matters contained in the Agreement are complex and that I am free to seek independent professional guidance or counsel with respect to this Consent. I have either sought such guidance or counsel or determined after reviewing the Agreement carefully that I will waive such right.

Dated:

[*Name of Key Holder's Spouse*]

Exhibit 4.17

Execution Version

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED (INDICATED BY: [***]) FROM THE EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) THE TYPE OF INFORMATION THAT THE REGISTRANT CUSTOMARILY AND ACTUALLY TREATS AS PRIVATE OR CONFIDENTIAL.

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

SONDE HEALTH, INC.

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AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

THIS AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (this "**Agreement**"), is made as of the 25th day of May, 2022, by and among Sonde Health, Inc., a Delaware corporation (the "**Company**"), and each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an "**Investor**", and any purchaser that becomes a party to this Agreement in accordance with Section 6.9 hereof.

RECITALS

WHEREAS, certain of the Investors (the "**Existing Investors**") possess registration rights, information rights, rights of first offer, and other rights pursuant to that certain Investors' Rights Agreement dated as of April 9, 2019, by and among the Company and such Existing Investors (the "**Prior Agreement**"); and

WHEREAS, the Existing Investors are holders of at least sixty percent (60%) of the Series A-2 Preferred Stock, $0.0001 par value per share, of the Company (the "**Series A-2 Preferred Stock**"), and desire to amend and restate the Prior Agreement in its entirety and to accept the rights created pursuant to this Agreement in lieu of the rights granted to them under the Prior Agreement; and

WHEREAS, certain of the Investors are parties to that certain Series B Preferred Stock Purchase Agreement of even date herewith by and among the Company and such Investors (the "**Purchase Agreement**"), which provides that as a condition to closing of the issuance of Series B Preferred Stock, this Agreement must be executed and delivered by such Investors and the Company;

NOW, THEREFORE, the Existing Investors hereby agree that the Prior Agreement is hereby amended and restated in its entirety by this Agreement, and the parties to this Agreement further agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer, director or trustee of such Person, or any venture capital fund or registered investment company now or hereafter existing that is controlled by one or more general partners, managing members or investment adviser of, or shares the same management company or investment adviser with, such Person.

1.2 "**Board of Directors**" means the board of directors of the Company.

1.3 "**Certificate of Incorporation**" means the Company's Amended and Restated Certificate of Incorporation, as amended and/or restated from time to time.

1.4 "**Common Stock**" means shares of the Company's common stock, par value $0.0001 per share.

1.5 "**Competitor**" means a Person engaged, directly or indirectly (including through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), in analyzing speech as an indicator or predictor of a speaker's physical or mental health state or changes therein, but shall not include (a) **[***]**.

1.6 "**Damages**" means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.7 "**Derivative Securities**" means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly)**,** Common Stock, including options and warrants.

1.8 "**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.9 "**Excluded Registration**" means (i) a registration relating to the sale or grant of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, equity incentive or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.10 "**FOIA Party**" means a Person that, in the determination of the Board of Directors, may be subject to, and thereby required to disclose non-public information furnished by or relating to the Company under, the Freedom of Information Act, 5 U.S.C. 552 ("**FOIA**"), any state public records access law, any state or other jurisdiction's laws similar in intent or effect to FOIA, or any other similar statutory or regulatory requirement.

1.11 "**Form S-1**" means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.12 "**Form S-3**" means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits forward incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.13 "**GAAP**" means generally accepted accounting principles in the United States as in effect from time to time.

1.14 "**Holder**" means any holder of Registrable Securities who is a party to this Agreement.

1.15 "**IFRS**" means the International Financial Reporting Standards.

1.16 "**Immediate Family Member**" means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, life-partner or similar statutorily-recognized domestic

partner, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including, adoptive relationships, of a natural person referred to herein.

1.17 "**Initiating Holders**" means, collectively, Holders who properly initiate a registration request under this Agreement.

1.18 "**IPO**" means the Company's first underwritten public offering of its Common Stock under the Securities Act.

1.19 "**Major Investor**" means any Investor that, individually or together with such Investor's Affiliates, holds at least **[***]** shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.20 "**New Securities**" means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.21 "**Person**" means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.22 "**Preferred Stock**" means, collectively, shares of the Company's Series A-1 Preferred Stock, Series A-2 Preferred Stock and Series B Preferred Stock.

1.23 "**Registrable Securities**" means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; (ii) any Common Stock, or any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of the Company**,** acquired by the Investors after the date hereof; and (iii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (i) and (ii) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Subsection 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Subsection 2.13 of this Agreement.

1.24 "**Registrable Securities then outstanding**" means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.25 "**Relevant Stockholder**" means each of **[***.]**

1.26 "**Restricted Securities**" means the securities of the Company required to be notated with the legend set forth in Subsection 2.12(b) hereof.

1.27 "**SEC**" means the Securities and Exchange Commission.

1.28 "**SEC Rule 144**" means Rule 144 promulgated by the SEC under the Securities Act.

1.29 "**SEC Rule 145**" means Rule 145 promulgated by the SEC under the Securities Act.

1.30 "**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.31 "**Selling Expenses**" means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Subsection 2.6.

2. Registration Rights. The Company covenants and agrees as follows:

1.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the earlier of (i) **[***]** after the date of this Agreement or (ii) **[***]** after the effective date of the registration statement for the IPO, the Company receives a request from Holders of **[***]** of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to at least **[***]** of the Registrable Securities then outstanding (or a lesser percent if the anticipated aggregate offering price, net of Selling Expenses, would exceed **[***]**), then the Company shall (x) within **[***]** after the date such request is given, give notice thereof (the "**Demand Notice**") to all Holders other than the Initiating Holders; and (y) as soon as practicable, and in any event within **[***]** after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within **[***]** of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least **[***]** of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least **[***]**, then the Company shall (i) within **[***]** after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within **[***]** after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within **[***]** of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Subsection 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than **[***]** after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than **[***]** in any

[***] period; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such [***] period other than an Excluded Registration.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(a)(i) during the period that is [***] before the Company's good faith estimate of the date of filing of, and ending on a date that is [***] after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected [***] registration pursuant to Subsection 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Subsection 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(b) (i) during the period that is [***] before the Company's good faith estimate of the date of filing of, and ending on a date that is [***] after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected [***] registrations pursuant to Subsection 2.1(b) within the [***] period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Subsection 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Subsection 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Subsection 2.1(d); provided, that if such withdrawal is during a period the Company has deferred taking action pursuant to Subsection 2.1(c), then the Initiating Holders may withdraw their request for registration and such registration will not be counted as "effected" for purposes of this Subsection 2.1(d).

1.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its securities under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within [***] after such notice is given by the Company, the Company shall, subject to the provisions of Subsection 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Subsection 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Subsection 2.6.

1.3 Underwriting Requirements.

(a) If, pursuant to Subsection 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Subsection 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Initiating Holders, subject only to the reasonable approval of the Board of Directors. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Subsection 2.4(e)) enter into an underwriting

agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Subsection 2.3, if the underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Subsection 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, or (ii) the number of Registrable Securities included in the offering be reduced below **[***]** of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Subsection 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

1.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its best efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to **[***]** or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that such **[***]** period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

1.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

1.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Subsection 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b), as the case may be. All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

1.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

1.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such

Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Subsections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Subsection 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Subsection 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Subsection 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a

material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Subsection 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Subsection 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

1.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after **[***]** after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies; and (ii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

1.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of **[***]**, enter into any agreement with any holder or prospective holder of any securities of the Company that would provide to such holder or prospective holder the right to include securities in any registration on

other than either a pro rata basis with respect to the Registrable Securities or on a subordinate basis after all Holders have had the opportunity to include in the registration and offering all shares of Registrable Securities that they wish to so include; provided that this limitation shall not apply to Registrable Securities acquired by any additional Investor that becomes a party to this Agreement in accordance with Subsection 6.9.

1.11 Market Stand-off Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the registration by the Company for its own behalf of shares of its Common Stock or any other equity securities under the Securities Act on a registration statement on Form S-1 or Form S-3, and ending on the date specified by the Company and the managing underwriter (such period not to exceed **[***]** in the case of the IPO, or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports, and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in applicable FINRA rules, or any successor provisions or amendments thereto), or ninety (90) days in the case of any registration other than the IPO, or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in applicable FINRA rules, or any successor provisions or amendments thereto), (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock held immediately before the effective date of the registration statement for such offering or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Subsection 2.11 shall apply only to the IPO, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, or the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the immediate family of the Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value, and shall be applicable to the Holders only if all officers and directors are subject to the same restrictions and the Company uses commercially reasonable efforts to obtain a similar agreement from all stockholders individually owning more than **[***]** of the Company's outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Preferred Stock). The underwriters in connection with such registration are intended third-party beneficiaries of this Subsection 2.11 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Subsection 2.11 or that are necessary to give further effect thereto. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Company stockholders that are subject to such agreements, based on the number of shares subject to such agreements, except that, notwithstanding the foregoing, the Company and the underwriters may, in their sole discretion, waive or terminate these restrictions with respect to up to **[***]** of the Common Stock.

1.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer,

except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

(b) Each certificate, instrument, or book entry representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Subsection 2.12(c)) be notated with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Subsection 2.12.

(c) The holder of such Restricted Securities, by acceptance of ownership thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144; or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that each transferee agrees in writing to be subject to the terms of this Subsection 2.12. Each certificate, instrument, or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Subsection 2.12(b), except that such certificate instrument, or book entry shall not be notated with such restrictive legend if, in the opinion of

counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

1.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Subsections 2.1 or 2.2 shall terminate upon the earliest to occur of: **[***]**.

3. Information and Observer Rights.

1.1 Delivery of Financial Statements. The Company shall deliver to each Major Investor, provided that the Board of Directors has not reasonably determined that such Major Investor is a Competitor of the Company:

(a) as soon as practicable, but in any event within **[***]** after the end of each fiscal year of the Company (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year, and a comparison between (x) the actual amounts as of and for such fiscal year and (y) the comparable amounts for the prior year and as included in the Budget (as defined in Subsection 3.1(d)) for such year, with an explanation of any material differences between such amounts and a schedule as to the sources and applications of funds for such year, and (iii) a statement of stockholders' equity as of the end of such year;

(b) as soon as practicable, but in any event within **[***]** days after the end of each of the first three (3) quarters of each fiscal year of the Company, unaudited statements of income and cash flows for such fiscal quarter, and an unaudited balance sheet and a statement of stockholders' equity as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments; and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event within **[***]** after the end of each of the first three (3) quarters of each fiscal year of the Company, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Major Investors to calculate their respective percentage equity ownership in the Company, and certified by the chief financial officer or chief executive officer of the Company as being true, complete, and correct;

(d) as soon as practicable, but in any event **[***]** before the end of each fiscal year, a budget and business plan for the next fiscal year (collectively, the "**Budget**"), approved by the Board of Directors prepared on a monthly basis, including balance sheets, income statements, and statements of cash flow for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company;

(e) with respect to the financial statements called for in Subsection 3.1(a), Subsection 3.1(b) and Subsection 3.1(d), an instrument executed by the chief financial officer or chief executive officer of the Company certifying that such financial statements were prepared in accordance with GAAP consistently applied with prior practice for earlier periods (except as otherwise set forth in Subsection 3.1(b) and Subsection 3.1(d)) and fairly present the financial condition of the Company and its results of operation for the periods specified therein;

(f) to the extent any Major Investor so requests, copies of the financial statements called for in Subsection 3.1(a), Subsection 3.1(b) and Subsection 3.1(d) prepared in accordance with IFRS (except that such financial statements called for in Subsection 3.1(b) may be (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with IFRS); and

(g) such other information relating to the financial condition, business, prospects, or corporate affairs of the Company as any Major Investor may from time to time reasonably request; provided, however, that the Company shall not be obligated under this Subsection 3.1 to provide information (i) that the Company reasonably determines in good faith to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in a form acceptable to the Company); or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Subsection 3.1 to the contrary, the Company may cease providing the information set forth in this Subsection 3.1 during the period starting with the date **[***]** before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Subsection 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

1.2 Inspection. The Company shall permit each Major Investor (provided that the Board of Directors has not reasonably determined that such Major Investor is a Competitor of the Company), at such Major Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Major Investor; provided, however, that the Company shall not be obligated pursuant to this Subsection 3.2 to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

1.3 Observer Rights. **[***]**.

1.4 Termination of Information and Observer Rights. The covenants set forth in Subsection 3.1, Subsection 3.2, and Subsection 3.3 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon the closing of a Deemed Liquidation Event, as such term is defined in the Certificate of Incorporation, whichever event occurs first.

1.5 Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Subsection 3.5 by such Investor), (b) is or has

been independently developed or conceived by such Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to such Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Subsection 3.5 and such prospective purchaser is not a Competitor of the Company; (iii) to any existing or prospective Affiliate, partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be required by law, regulation, rule, court order or subpoena, provided that such Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

4. Rights to Future Stock Issuances.

1.1 Right of First Offer. Subject to the terms and conditions of this Subsection 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Major Investor. A Major Investor shall be entitled to apportion the right of first offer hereby granted to it in such proportions as it deems appropriate, among (i) itself, (ii) its Affiliates and (iii) its beneficial interest holders, such as limited partners, members or any other Person having "beneficial ownership," as such term is defined in Rule 13d-3 promulgated under the Exchange Act, of such Major Investor ("**Investor Beneficial Owners**"); provided that each such Affiliate or Investor Beneficial Owner (x) is not a Competitor or FOIA Party, unless such party's purchase of New Securities is otherwise consented to by the Board of Directors, (y) agrees to enter into this Agreement and each of the Amended and Restated Voting Agreement and Amended and Restated Right of First Refusal and Co-Sale Agreement of even date herewith among the Company, the Investors and the other parties named therein, as an "**Investor**" under each such agreement (provided that any Competitor or FOIA Party shall not be entitled to any rights as a Major Investor under Subsections 3.1, 3.2 and 4.1 hereof), and (z) agrees to purchase at least such number of New Securities as are allocable hereunder to the Major Investor holding the fewest number of Preferred Stock and any other Derivative Securities.

(a) The Company shall give notice (the "**Offer Notice**") to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within **[***]** after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock then held by such Major Investor (including all shares of Common Stock then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by such Major Investor) bears to the total Common Stock of the Company then held by all the Major Investors (including all shares of Common Stock issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by all the Major Investors). At the expiration of such **[***]** period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a "**Fully Exercising Investor**") of any other Major Investor's failure to do likewise. During the **[***]** period commencing after the Company has given such notice, each Fully Exercising

Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Subsection 4.1(b) shall occur within the later of **[***]** of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Subsection 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Subsection 4.1(b), the Company may, during the **[***]** period following the expiration of the periods provided in Subsection 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within **[***]** of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Major Investors in accordance with this Subsection 4.1.

(d) The right of first offer in this Subsection 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Certificate of Incorporation); (ii) shares of Common Stock issued in the IPO and (iii) shares of Series B Preferred Stock issued pursuant to Section 1.4 of the Purchase Agreement.

1.2 Termination. The covenants set forth in Subsection 4.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon the closing of a Deemed Liquidation Event, as such term is defined in the Certificate of Incorporation, whichever event occurs first.

5. Additional Covenants.

1.1 Insurance. The Company shall continue to maintain Directors and Officers liability insurance in an amount and on terms and conditions satisfactory to the Board of Directors, and will use commercially reasonable efforts to cause such insurance policies to be maintained until such time as the Board of Directors determines that such insurance should be discontinued. The Directors and Officers liability insurance shall not be cancelable by the Company without prior approval by the Board of Directors. Notwithstanding any other provision of this Section 5.1 to the contrary, for so long as **[***]** is serving on the Board of Directors, the Company shall not cease to maintain a Directors and Officers liability insurance policy in an amount of at least **[***]** unless approved by **[***]**, and the Company shall annually, within **[***]** after the end of each fiscal year of the Company, deliver to the holders of Preferred Stock a certification that such a Directors and Officers liability insurance policy remains in effect.

1.2 Employee Agreements. The Company will cause each Person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement. In addition, the Company shall not amend, modify, terminate, waive, or otherwise alter, in whole or in part, any

of the above-referenced agreements or any restricted stock agreement between the Company and any employee, without the consent of the Board of Directors.

1.3 Employee Stock. Unless otherwise approved by the Board of Directors, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a **[***]** period, with the first **[***]** of such shares vesting following **[***]** of continued employment or service, and the remaining shares vesting in equal installments every **[***]** over the following **[***]**, and (ii) a market stand-off provision substantially similar to that in Subsection 2.11. Without the prior approval by the Board of Directors, the Company shall not amend, modify, terminate, waive or otherwise alter, in whole or in part, any stock purchase, stock restriction or option agreement with any existing employee or service provider if such amendment would cause it to be inconsistent with this Subsection 5.3. In addition, unless otherwise approved by the Board of Directors, the Company shall retain (and not waive) a "right of first refusal" on employee transfers until the Company's IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

1.4 Qualified Small Business Stock. The Company shall use commercially reasonable efforts to cause the shares of Series B Preferred Stock issued pursuant to the Purchase Agreement, as well as any shares into which such shares are converted, within the meaning of Section 1202(f) of the Internal Revenue Code (the "**Code**"), to constitute "qualified small business stock" as defined in Section 1202(c) of the Code; provided, however, that such requirement shall not be applicable if the Board of Directors of the Company determines, in its good-faith business judgment, that such qualification is inconsistent with the best interests of the Company. The Company shall submit to its stockholders (including the Investors) and to the Internal Revenue Service any reports that may be required under Section 1202(d)(1)(C) of the Code and the regulations promulgated thereunder. In addition, within twenty (20) business days after any Investor's written request therefor, the Company shall, at its option, either (i) deliver to such Investor a written statement indicating whether (and what portion of) such Investor's interest in the Company constitutes "qualified small business stock" as defined in Section 1202(c) of the Code or (ii) deliver to such Investor such factual information in the Company's possession as is reasonably necessary to enable such Investor to determine whether (and what portion of) such Investor's interest in the Company constitutes "qualified small business stock" as defined in Section 1202(c) of the Code.

1.5 Board Matters. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule. The Company shall reimburse all directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board of Directors. The Company shall also maintain a formal scientific advisory board comprised of outside scientists who shall from time to time advise the Board of Directors and Company on matters within their expertise.

1.6 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, the Certificate of Incorporation, or elsewhere, as the case may be.

1.7 Expenses of Counsel. In the event of a transaction which is a Sale of the Company (as defined in the Amended and Restated Voting Agreement of even date herewith among the Investors, the Company and the other parties named therein), the reasonable fees and disbursements of one counsel for the Major Investors ("**Investor Counsel**"), in their capacities as stockholders, shall be borne and paid by the Company. Investor Counsel shall be selected by Major Investors possessing a majority of the Registrable Securities held by Major Investors. At the outset of considering a transaction which, if consummated would constitute a Sale of the Company, the Company shall obtain the ability to share with the Investor Counsel (and such counsel's clients) and shall share the confidential information (including, without limitation, the initial and all subsequent drafts of memoranda of understanding, letters of intent and other transaction documents and related noncompete, employment, consulting and other compensation agreements and plans) pertaining to and memorializing any of the transactions which, individually or when aggregated with others would constitute the Sale of the Company. The Company shall be obligated to share (and cause the Company's counsel and investment bankers to share) such materials when distributed to the Company's executives and/or any one or more of the other parties to such transaction(s). In the event that Investor Counsel deems it appropriate, in its reasonable discretion, to enter into a joint defense agreement or other arrangement to enhance the ability of the parties to protect their communications and other reviewed materials under the attorney client privilege, the Company shall, and shall direct its counsel to, execute and deliver to Investor Counsel and its clients such an agreement in form and substance reasonably acceptable to Investor Counsel and the Company's counsel. In the event that one or more of the other party or parties to such transactions require the clients of Investor Counsel to enter into a confidentiality agreement and/or joint defense agreement in order to receive such information, then the Company shall share whatever information can be shared without entry into such agreement and shall, at the same time, in good faith work expeditiously to enable Investor Counsel and its clients to negotiate and enter into the appropriate agreement(s) without undue burden to the clients of Investor Counsel.

1.8 Indemnification Matters. The Company hereby acknowledges that one (1) or more of the directors nominated to serve on the Board of Directors by the Investors (each an "**Investor Director**") may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Investors and certain of their Affiliates (collectively, the "**Investor Indemnitors**"). The Company hereby agrees (a) that it is the indemnitor of first resort (*i.e.*, its obligations to any such Investor Director are primary and any obligation of the Investor Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such Investor Director are secondary), (b) that it shall be required to advance the full amount of expenses incurred by such Investor Director and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such Investor Director to the extent legally permitted and as required by the Company's Certificate of Incorporation or Bylaws of the Company (or any agreement between the Company and such Investor Director), without regard to any rights such Investor Director may have against the Investor Indemnitors, and, (c) that it irrevocably waives, relinquishes and releases the Investor Indemnitors from any and all claims against the Investor Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Investor Indemnitors on behalf of any such Investor Director with respect to any claim for which such Investor Director has sought indemnification from the Company shall affect the foregoing and the Investor Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Investor Director against the Company. The Investor Directors and the Investor Indemnitors are intended third-party beneficiaries of this Subsection 5.9 and shall have the right, power and authority to enforce the provisions of this Subsection 5.9 as though they were a party to this Agreement.

1.9 Right to Conduct Activities. **[***]**

1.10 Harassment Policy. The Company is subject to and shall maintain (i) a Code of Conduct governing appropriate workplace behavior and (ii) an Anti-Harassment and Discrimination Policy prohibiting discrimination and harassment at the Company.

1.11 Termination of Covenants. The covenants set forth in this Section 5, except for Subsections 5.7, 5.8, 5.9 and 5.10 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Certificate of Incorporation, whichever event occurs first.

6. Miscellaneous.

1.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; or (iii) after such transfer, holds at least **[***]** shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Subsection 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall, as a condition to the applicable transfer, establish a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

1.2 Governing Law. This Agreement shall be governed by the internal law of the State of Delaware, without regard to conflict of law principles that would result in the application of any law other than the law of the State of Delaware.

1.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes**.**

1.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

1.5 Notices.

(a) All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Subsection 6.5.

(b) Consent to Electronic Notice. Each Investor consents to the delivery of any stockholder notice pursuant to the Delaware General Corporation Law (the "**DGCL**"), as amended or superseded from time to time, by electronic transmission pursuant to Section 232 of the DGCL (or any successor thereto) at the electronic mail address or the facsimile number as on the books of the Company. To the extent that any notice given by means of electronic transmission is returned or undeliverable for any reason, the foregoing consent shall be deemed to have been revoked until a new or corrected electronic mail address has been provided, and such attempted electronic notice shall be ineffective and deemed to not have been given. Each Investor agrees to promptly notify the Company of any change in such stockholder's electronic mail address, and that failure to do so shall not affect the foregoing.

1.6 Amendments and Waivers. Any term of this Agreement may be amended, modified or terminated and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and [***]; provided that the Company may in its sole discretion waive compliance with Subsection 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Subsection 2.12(c) shall be deemed to be a waiver); and provided further that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, (a) this Agreement may not be amended, modified or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, modification, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction), (b) Subsections 3.1 and 3.2, Section 4 and any other section of this Agreement applicable to the Major Investors (including this clause (b) of this Subsection 6.6) may not be amended, modified, terminated or waived without the written consent of the holders of at least a majority of the Registrable Securities then outstanding and held by the Major Investors and (c) the rights of a Relevant Stockholder under Subsection 3.3 may not be amended, modified, terminated or waived without the written consent of the Relevant Stockholder. Notwithstanding the foregoing, Schedule A hereto may be amended by the Company from time to time to add transferees of any Registrable Securities in compliance with the terms of this Agreement without the consent of the other parties; and Schedule A hereto may also be amended by the Company after the date of this Agreement without the consent of the other parties to add information regarding any additional Investor who becomes a party to this Agreement in accordance with Subsection 6.9. The Company shall give prompt notice of any amendment, modification or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, modification, termination, or waiver. Any amendment, modification, termination, or waiver effected in accordance with this Subsection 6.6 shall be binding on all parties hereto,

regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

1.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

1.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

1.9 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of Series B Preferred Stock after the date hereof, whether pursuant to the Purchase Agreement or otherwise, any purchaser of such shares of Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

1.10 Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled. Upon the effectiveness of this Agreement, the Prior Agreement shall be deemed amended and restated and superseded and replaced in its entirety by this Agreement, and shall be of no further force or effect.

1.11 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware or the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL

NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

1.12 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or non-defaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

1.13 No Presumption against Drafter. The parties have participated jointly in negotiating and drafting this agreement. In the event that an ambiguity or a question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provision of this Agreement.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

SONDE HEALTH, INC.

By: /s/ David Liu
Name: David Liu
Title: Chief Executive Officer

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/[***]
Name: [***]
Title: [***]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

PURETECH HEALTH LLC

By: /s/ Bharatt Chowrira
Name: Bharatt Chowrira
Title: President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/[***]__
Name: [***]
Title: [***]

By: /s/[***]__
Name: [***]
Title: [***]

Signature Page to Amended and Restated Investors' Rights Agreement

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/[***]
Name: [***]
Title: [***]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: [***]

By: /s/[***]
Name: [***]
Title: [***]

Signature Page to Amended and Restated Investors' Rights Agreement

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/[***]
Name: [***]
Title: [***]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

/s/[***]
[***]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

/s/[***]__
[***]

Signature Page to Amended and Restated Investors' Rights Agreement

Signature Page to Amended and Restated Investors' Rights Agreement

SCHEDULE A

Investors

[***]

Exhibit 4.18

Execution Version

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED (INDICATED BY: [***]) FROM THE EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) THE TYPE OF INFORMATION THAT THE REGISTRANT CUSTOMARILY AND ACTUALLY TREATS AS PRIVATE OR CONFIDENTIAL.

AMENDED AND RESTATED RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT
SONDE HEALTH, INC.

Exhibit 4.18

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AMENDED AND RESTATED RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT

THIS AMENDED AND RESTATED RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT (this "**Agreement**"), is made as of the 25th day of May, 2022 by and among Sonde Health, Inc., a Delaware corporation (the "**Company**"), the Investors (as defined below) listed on Schedule A and the Key Holders (as defined below) listed on Schedule B.

WHEREAS, each Key Holder is the beneficial owner of the number of shares of Capital Stock (which may be subject to vesting), or of options to purchase Common Stock, set forth opposite the name of such Key Holder on Schedule B;

WHEREAS, the Company, the Key Holders and certain Investors (the "**Existing Investors**") previously entered into a Right of First Refusal and Co-Sale Agreement, dated April 9, 2019 (the "**Prior Agreement**"), in connection with the purchase of shares of Series A-2 Preferred Stock of the Company, par value $0.0001 per share (the "**Series A-2 Preferred Stock**");

WHEREAS, the Key Holders, the Existing Investors and the Company desire to induce certain of the Investors to purchase shares of Series B Preferred Stock of the Company, par value $0.0001 per share ("Series B Preferred Stock"), pursuant to that certain Series B Preferred Stock Purchase Agreement dated as of the date hereof by and among the Company and such Investors, as amended from time to time (the "**Purchase Agreement**") by amending and restating the Prior Agreement in its entirety to provide the Investors with the rights and privileges as set forth herein.

NOW, THEREFORE, the Company, the Key Holders, and the Investors, including certain of the Existing Investors each hereby agree that the Prior Agreement is hereby amended and restated in its entirety by this Agreement, and the parties hereto further agree as follows:

1. Definitions.

1.1 "**Affiliate**" means, with respect to any specified Investor, any other Investor who directly or indirectly, controls, is controlled by or is under common control with such Investor, including, without limitation, any general partner, managing member, officer, director or trustee of such Investor, or any venture capital fund or registered investment company now or hereafter existing which is controlled by one or more general partners, managing members or investment advisers of, or shares the same management company or investment adviser with, such Investor.

1.2 "**Board of Directors**" means the board of directors of the Company.

1.3 "**Capital Stock**" means (a) shares of Common Stock and Preferred Stock (whether now outstanding or hereafter issued in any context), (b) shares of Common Stock issued or issuable upon conversion of Preferred Stock, and (c) shares of Common Stock issued or issuable upon exercise or conversion, as applicable, of stock options, warrants or other convertible securities of the Company, in each case now owned or subsequently acquired by any Key Holder, any Investor, or their respective successors or permitted transferees or assigns. For purposes of the number of shares of Capital Stock held by an Investor or Key Holder (or any other calculation based thereon), all shares of Preferred Stock shall be deemed to have been converted into Common Stock at the then-applicable conversion ratio.

1.4 "**Change of Control**" means a transaction or series of related transactions in which a person, or a group of related persons, acquires from stockholders of the Company

shares representing more than fifty percent (50%) of the outstanding voting power of the Company.

1.5 "**Common Stock**" means shares of Common Stock of the Company, par value $0.0001 per share.

1.6 "**Deemed Liquidation Event**" shall have the meaning ascribed to such term in the Restated Certificate.

1.7 "**Investors**" means the persons named on Schedule A hereto, each person to whom the rights of an Investor are assigned pursuant to Subsection 6.9, each person who hereafter becomes a signatory to this Agreement pursuant to Subsection 6.11 and any one of them, as the context may require.

1.8 "**Key Holders**" means the persons named on Schedule B hereto, each person to whom the rights of a Key Holder are assigned pursuant to Subsection 3.1, each person who hereafter becomes a signatory to this Agreement pursuant to Subsection 6.9 or 6.17 and any one of them, as the context may require.

1.9 "**Preferred Stock**" means collectively, all shares of Series A-1 Preferred Stock, Series A-2 Preferred Stock and Series B Preferred Stock.

1.10 "**Proposed Key Holder Transfer**" means any assignment, sale, offer to sell, pledge, mortgage, hypothecation, encumbrance, disposition of or any other like transfer or encumbering of any Transfer Stock (or any interest therein) proposed by any of the Key Holders.

1.11 "**Proposed Transfer Notice**" means written notice from a Key Holder setting forth the terms and conditions of a Proposed Key Holder Transfer.

1.12 "**Prospective Transferee**" means any person to whom a Key Holder proposes to make a Proposed Key Holder Transfer.

1.13 "**Restated Certificate**" means the Company's Amended and Restated Certificate of Incorporation, as amended and/or restated from time to time.

1.14 "**Right of Co-Sale**" means the right, but not an obligation, of an Investor to participate in a Proposed Key Holder Transfer on the terms and conditions specified in the Proposed Transfer Notice.

1.15 "**Right of First Refusal**" means the right, but not an obligation, of each Investor, to purchase up to its pro rata portion (based upon the total number of shares of Capital Stock then held by all Investors) of the Transfer Stock with respect to a Proposed Key Holder Transfer, on the terms and conditions specified in the Proposed Transfer Notice.

1.16 "**Secondary Refusal Right**" means the right, but not an obligation, of the Company to purchase any Transfer Stock not purchased pursuant to the Right of First Refusal on the terms and conditions specified in the Proposed Transfer Notice.

1.17 "**Series A-1 Preferred Stock**" means the Series A-1 Preferred Stock of the Company, par value $0.0001 per share.

1.18 "**Transfer Stock**" means shares of Capital Stock owned by a Key Holder, or issued to a Key Holder after the date hereof (including, without limitation, in connection with any stock split, stock dividend, recapitalization, reorganization, or the like), but does not include

any shares of Preferred Stock or of Common Stock that are issued or issuable upon conversion of Preferred Stock.

2. Agreement Among the Company, the Investors and the Key Holders.

1.1 Right of First Refusal.

(a) Grant. Subject to the terms of Section 3 below, each Key Holder hereby unconditionally and irrevocably grants to the Investors a Right of First Refusal to purchase all or any portion of Transfer Stock that such Key Holder may propose to transfer in a Proposed Key Holder Transfer, at the same price and on the same terms and conditions as those offered to the Prospective Transferee.

(b) Notice. Each Key Holder proposing to make a Proposed Key Holder Transfer must deliver a Proposed Transfer Notice to the Company and each Investor not later than **[***]** prior to the consummation of such Proposed Key Holder Transfer. Such Proposed Transfer Notice shall contain the material terms and conditions (including price and form of consideration) of the Proposed Key Holder Transfer, a statement including the name and, if different, the ultimate beneficial owner of the Prospective Transferee, and the intended date of the Proposed Key Holder Transfer. To exercise its Right of First Refusal under this Section 2, an Investor must deliver notice to the selling Key Holder and the Company within **[***]** after delivery of the Proposed Transfer Notice (the "**Notice Period**") specifying the number of shares of Transfer Stock to be purchased by said Investor. In the event of a conflict between this Agreement and any other agreement that may have been entered into by a Key Holder with the Company that contains a preexisting right of first refusal, the Company and the Key Holder acknowledge and agree that the terms of this Agreement shall control and the preexisting right of first refusal shall be deemed satisfied by compliance with Subsection 2.1(a) and this Subsection 2.1(b).

(c) Undersubscription of Transfer Stock. If options to purchase have been exercised by the Investors pursuant to Subsection 2.1(b) with respect to some but not all of the Transfer Stock by the end of the Notice Period, then the Company shall, within **[***]** after the expiration of the Notice Period, send written notice to those Investors who fully exercised their Right of First Refusal within the initial Notice Period (the "**Exercising Investors**"). Each Exercising Investor shall, subject to the provisions of this Subsection 2.1(c), have an additional option to purchase all or any part of the balance of any such remaining unsubscribed shares of Transfer Stock on the terms and conditions set forth in the Proposed Transfer Notice. To exercise such option, an Exercising Investor must deliver notice to the selling Key Holder and the Company within **[***]** after the expiration of the Notice Period (the "**Undersubscription Notice Period**"). In the event there are **[***]** or more such Exercising Investors that choose to exercise the last-mentioned option for a total number of remaining shares in excess of the number available, the remaining shares available for purchase under this Subsection 2.1(c) shall be allocated to such Exercising Investors pro rata based on the number of shares of Capital Stock such Exercising Investors hold. If the options to purchase the remaining shares are exercised in full by the Exercising Investors, the Company shall immediately notify all of the Exercising Investors and the selling Key Holder of that fact.

(d) Grant of Secondary Refusal Right to Company. Subject to the terms of Section 3 below, each Key Holder hereby unconditionally and irrevocably grants to the Company a Secondary Refusal Right to purchase all or any portion of the Transfer Stock not purchased by the Investors pursuant to the Right of First Refusal pursuant to Subsections 2.1(b) and 2.1(c), as provided in this Subsection 2.1(d). To exercise its Secondary Refusal Right, the Company must deliver a notice to the selling Key Holder within **[***]** after the expiration of the Undersubscription Notice Period (the "**Secondary Exercise Deadline**"). In the event of a

conflict between this Agreement and any other agreement that may have been entered into by a Key Holder with the Company that contains a preexisting right of first refusal, the Company and the Key Holder acknowledge and agree that the terms of this Agreement shall control and the preexisting right of first refusal shall be deemed satisfied by compliance with Subsection 2.1(a), Subsection 2.1(b), Subsection 2.1(c), and this Subsection 2.1(d).

(e) Consideration; Closing. If the consideration proposed to be paid for the Transfer Stock is in property, services or other non-cash consideration, the fair market value of the consideration shall be as determined in good faith by the Board of Directors. If the Company or any Investor cannot for any reason pay for the Transfer Stock in the same form of non-cash consideration, the Company or such Investor may pay the cash value equivalent thereof, as determined in good faith by the Board of Directors and as set forth in the Proposed Transfer Notice. The closing of the purchase of Transfer Stock by the Company and the Investors shall take place, and all payments from the Company and the Investors shall have been delivered to the selling Key Holder, by the later of (i) the date specified in the Proposed Transfer Notice as the intended date of the Proposed Key Holder Transfer; and (ii) **[***]** after delivery of the Proposed Transfer Notice.

1.2 Right of Co-Sale.

(a) Exercise of Right. If any Transfer Stock subject to a Proposed Key Holder Transfer is not purchased pursuant to Subsection 2.1 above and thereafter is to be sold to a Prospective Transferee, each respective Investor may elect to exercise its Right of Co-Sale and participate on a pro rata basis in the Proposed Key Holder Transfer as set forth in Subsection 2.2(b) below and, subject to Subsection 2.2(d), otherwise on the same terms and conditions specified in the Proposed Transfer Notice. Each Investor who desires to exercise its Right of Co-Sale (each, a "**Participating Investor**") must give the selling Key Holder written notice to that effect within **[***]** after the delivery of the Secondary Exercise Deadline described above, and upon giving such notice such Participating Investor shall be deemed to have effectively exercised the Right of Co-Sale.

(b) Shares Includable. Each Participating Investor may include in the Proposed Key Holder Transfer all or any part of such Participating Investor's Capital Stock equal to the product obtained by multiplying (i) the aggregate number of shares of Transfer Stock subject to the Proposed Key Holder Transfer (excluding shares purchased by the Company or the Participating Investors pursuant to the Right of First Refusal or Secondary Refusal Right) by (ii) a fraction, the numerator of which is the number of shares of Capital Stock owned by such Participating Investor immediately before consummation of the Proposed Key Holder Transfer (including any shares that such Participating Investor has agreed to purchase pursuant to the Right of First Refusal) and the denominator of which is the total number of shares of Capital Stock owned, in the aggregate, by all Participating Investors immediately prior to the consummation of the Proposed Key Holder Transfer (including any shares that all Participating Investors have collectively agreed to purchase pursuant to the Right of First Refusal), plus the number of shares of Transfer Stock held by the selling Key Holder. To the extent one (1) or more of the Participating Investors exercise such right of participation in accordance with the terms and conditions set forth herein, the number of shares of Transfer Stock that the selling Key Holder may sell in the Proposed Key Holder Transfer shall be correspondingly reduced.

(c) Purchase and Sale Agreement. The Participating Investors and the selling Key Holder agree that the terms and conditions of any Proposed Key Holder Transfer in accordance with this Subsection 2.2 will be memorialized in, and governed by, a written purchase and sale agreement with the Prospective Transferee (the "**Purchase and Sale Agreement**") with customary terms and provisions for such a transaction, and the Participating Investors and the selling Key Holder further covenant and agree to enter into such Purchase and

Sale Agreement as a condition precedent to any sale or other transfer in accordance with this Subsection 2.2.

(d) Allocation of Consideration.

(i) Subject to Subsection 2.2(d)(ii), the aggregate consideration payable to the Participating Investors and the selling Key Holder shall be allocated based on the number of shares of Capital Stock sold to the Prospective Transferee by each Participating Investor and the selling Key Holder as provided in Subsection 2.2(b), provided that if a Participating Investor wishes to sell Preferred Stock, the price set forth in the Proposed Transfer Notice shall be appropriately adjusted based on the conversion ratio of the Preferred Stock into Common Stock.

(ii) In the event that the Proposed Key Holder Transfer constitutes a Change of Control, the terms of the Purchase and Sale Agreement shall provide that the aggregate consideration from such transfer shall be allocated to the Participating Investors and the selling Key Holder in accordance with Sections 2.1 and 2.2 of Article IV(B) of the Restated Certificate as if (A) such transfer were a Deemed Liquidation Event and (B) the Capital Stock sold in accordance with the Purchase and Sale Agreement were the only Capital Stock outstanding. In the event that a portion of the aggregate consideration payable to the Participating Investor(s) and selling Key Holder is placed into escrow and/or is payable only upon satisfaction of contingencies, the Purchase and Sale Agreement shall provide that (x) the portion of such consideration that is not placed in escrow and is not subject to contingencies (the "**Initial Consideration**") shall be allocated in accordance with Sections 2.1 and 2.2 of Article IV(B) of the Restated Certificate as if the Initial Consideration were the only consideration payable in connection with such transfer, and (y) any additional consideration which becomes payable to the Participating Investor(s) and selling Key Holder upon release from escrow or satisfaction of such contingencies shall be allocated in accordance with Sections 2.1 and 2.2 of Article IV(B) of the Restated Certificate after taking into account the previous payment of the Initial Consideration as part of the same transfer.

(e) Purchase by Selling Key Holder; Deliveries. Notwithstanding Subsection 2.2(c) above, if any Prospective Transferee(s) refuse(s) to purchase securities subject to the Right of Co-Sale from any Participating Investor or Investors or upon the failure to negotiate in good faith a Purchase and Sale Agreement reasonably satisfactory to the Participating Investors, no Key Holder may sell any Transfer Stock to such Prospective Transferee(s) unless and until, simultaneously with such sale, such Key Holder purchases all securities subject to the Right of Co-Sale from such Participating Investor or Investors on the same terms and conditions (including the proposed purchase price) as set forth in the Proposed Transfer Notice and as provided in Subsection 2.2(d)(i); provided, however, if such sale constitutes a Change of Control, the portion of the aggregate consideration paid by the selling Key Holder to such Participating Investor or Investors shall be made in accordance with the first sentence of Subsection 2.2(d)(ii). In connection with such purchase by the selling Key Holder, such Participating Investor or Investors shall deliver to the selling Key Holder any stock certificate or certificates, properly endorsed for transfer, representing the Capital Stock being purchased by the selling Key Holder (or request that the Company effect such transfer in the name of the selling Key Holder). Any such shares transferred to the selling Key Holder will be transferred to the Prospective Transferee against payment therefor in consummation of the sale of the Transfer Stock pursuant to the terms and conditions specified in the Proposed Transfer Notice, and the selling Key Holder shall concurrently therewith remit or direct payment to each such Participating Investor the portion of the aggregate consideration to which each such Participating Investor is entitled by reason of its participation in such sale as provided in this Subsection 2.2(e).

(f) Additional Compliance. If any Proposed Key Holder Transfer is not consummated within **[***]** after receipt of the Proposed Transfer Notice by the Company, the Key Holders proposing the Proposed Key Holder Transfer may not sell any Transfer Stock unless they first comply in full with each provision of this Section 2. The exercise or election not to exercise any right by any Investor hereunder shall not adversely affect its right to participate in any other sales of Transfer Stock subject to this Subsection 2.2.

1.3 Effect of Failure to Comply.

(a) Transfer Void; Equitable Relief. Any Proposed Key Holder Transfer not made in compliance with the requirements of this Agreement shall be null and void ab initio, shall not be recorded on the books of the Company or its transfer agent and shall not be recognized by the Company. Each party hereto acknowledges and agrees that any breach of this Agreement would result in substantial harm to the other parties hereto for which monetary damages alone could not adequately compensate. Therefore, the parties hereto unconditionally and irrevocably agree that any non-breaching party hereto shall be entitled to seek protective orders, injunctive relief and other remedies available at law or in equity (including, without limitation, seeking specific performance or the rescission of purchases, sales and other transfers of Transfer Stock not made in strict compliance with this Agreement).

(b) Violation of First Refusal Right. If any Key Holder becomes obligated to sell any Transfer Stock to the Company or any Investor under this Agreement and fails to deliver such Transfer Stock in accordance with the terms of this Agreement, the Company and/or such Investor may, at its option, in addition to all other remedies it may have, send to such Key Holder the purchase price for such Transfer Stock as is herein specified and transfer to the name of the Company or such Investor (or request that the Company effect such transfer in the name of an Investor) on the Company's books any certificates, instruments, or book entry representing the Transfer Stock to be sold.

(c) Violation of Co-Sale Right. If any Key Holder purports to sell any Transfer Stock in contravention of the Right of Co-Sale (a "**Prohibited Transfer**"), each Participating Investor who desires to exercise its Right of Co-Sale under Subsection 2.2 may, in addition to such remedies as may be available by law, in equity or hereunder, require such Key Holder to purchase from such Participating Investor the type and number of shares of Capital Stock that such Participating Investor would have been entitled to sell to the Prospective Transferee had the Prohibited Transfer been effected in compliance with the terms of Subsection 2.2. The sale will be made on the same terms, including, without limitation, as provided in Subsection 2.2(d)(i) and the first sentence of Subsection 2.2(d)(ii), as applicable, and subject to the same conditions as would have applied had the Key Holder not made the Prohibited Transfer, except that the sale (including, without limitation, the delivery of the purchase price) must be made within **[***]** after the Participating Investor learns of the Prohibited Transfer, as opposed to the timeframe proscribed in Subsection 2.2. Such Key Holder shall also reimburse each Participating Investor for any and all reasonable and documented out-of-pocket fees and expenses, including reasonable legal fees and expenses, incurred pursuant to the exercise or the attempted exercise of the Participating Investor's rights under Subsection 2.2.

3. Exempt Transfers.

1.1 Exempted Transfers. Notwithstanding the foregoing or anything to the contrary herein, the provisions of Subsections 2.1 and 2.2 shall not apply (a) in the case of a Key Holder that is an entity, upon a transfer by such Key Holder to its stockholders, members, partners or other equity holders, (b) to a repurchase of Transfer Stock from a Key Holder by the Company at a price no greater than that originally paid by such Key Holder for such Transfer Stock and pursuant to an agreement containing vesting and/or repurchase provisions approved by

a majority of the Board of Directors, or (c) in the case of a Key Holder that is a natural person, upon a transfer of Transfer Stock by such Key Holder made for bona fide estate planning purposes, either during his or her lifetime or on death by will or intestacy to his or her spouse, including any life partner or similar statutorily-recognized domestic partner, child (natural or adopted), or any other direct lineal descendant of such Key Holder (or his or her spouse, including any life partner or similar statutorily-recognized domestic partner) (all of the foregoing collectively referred to as "family members"), or any other relative/person approved by the Board of Directors, or any custodian or trustee of any trust, partnership or limited liability company for the benefit of, or the ownership interests of which are owned wholly by such Key Holder or any such family members; provided that in the case of clause(s) (a), or (c), the Key Holder shall deliver prior written notice to the Investors of such pledge, gift or transfer and such shares of Transfer Stock shall at all times remain subject to the terms and restrictions set forth in this Agreement and such transferee shall, as a condition to such issuance, deliver a counterpart signature page to this Agreement as confirmation that such transferee shall be bound by all the terms and conditions of this Agreement as a Key Holder (but only with respect to the securities so transferred to the transferee), including the obligations of a Key Holder with respect to Proposed Key Holder Transfers of such Transfer Stock pursuant to Section 2.

1.2 Exempted Offerings. Notwithstanding the foregoing or anything to the contrary herein, the provisions of Section 2 shall not apply to the sale of any Transfer Stock (a) to the public in an offering pursuant to an effective registration statement under the Securities Act of 1933, as amended; or (b) pursuant to a Deemed Liquidation Event.

1.3 Prohibited Transferees. Notwithstanding the foregoing, no Key Holder shall transfer any Transfer Stock to (a) any entity which, in the determination of the Board of Directors, directly or indirectly competes with the Company; or (b) any customer, distributor or supplier of the Company, if the Board of Directors should determine that such transfer would result in such customer, distributor or supplier receiving information that would place the Company at a competitive disadvantage with respect to such customer, distributor or supplier.

4. Legend. Each certificate, instrument, or book entry representing shares of Transfer Stock held by the Key Holders or issued to any permitted transferee in connection with a transfer permitted by Subsection 3.1 hereof shall be notated with the following legend:

> THE SALE, PLEDGE, HYPOTHECATION, OR TRANSFER OF THE SECURITIES REPRESENTED HEREBY IS SUBJECT TO, AND IN CERTAIN CASES PROHIBITED BY, THE TERMS AND CONDITIONS OF A CERTAIN RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT BY AND AMONG THE STOCKHOLDER, THE CORPORATION AND CERTAIN OTHER HOLDERS OF STOCK OF THE CORPORATION. COPIES OF SUCH AGREEMENT MAY BE OBTAINED UPON WRITTEN REQUEST TO THE SECRETARY OF THE CORPORATION.

Each Key Holder agrees that the Company may instruct its transfer agent to impose transfer restrictions on the shares notated with the legend referred to in this Section 4 above to enforce the provisions of this Agreement, and the Company agrees to promptly do so. The legend shall be removed upon termination of this Agreement at the request of the holder.

5. Lock-Up.

1.1 Agreement to Lock-Up. Each Key Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the Company's initial public offering (the "**IPO**") and ending on the date specified by the Company and the managing underwriter (such period not to

exceed **[***]**) or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports; and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in applicable FINRA rules, or any successor provisions or amendments thereto), (a) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Capital Stock held immediately prior to the effectiveness of the registration statement for the IPO; or (b) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Capital Stock, whether any such transaction described in clause (a) or (b) above is to be settled by delivery of Capital Stock or other securities, in cash or otherwise. **[***]**. The underwriters in connection with the IPO are intended third-party beneficiaries of this Section 5 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Key Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in the IPO that are consistent with this Section 5 or that are necessary to give further effect thereto.

1.2 Stop Transfer Instructions. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to the shares of Capital Stock of each Key Holder (and transferees and assignees thereof) until the end of such restricted period.

6. Miscellaneous.

1.1 Term. This Agreement shall automatically terminate upon the earlier of **[***]**.

1.2 Stock Split. All references to numbers of shares in this Agreement shall be appropriately adjusted to reflect any stock dividend, split, combination or other recapitalization affecting the Capital Stock occurring after the date of this Agreement.

1.3 Ownership. Each Key Holder represents and warrants that such Key Holder is the sole legal and beneficial owner of the shares of Transfer Stock subject to this Agreement and that no other person or entity has any interest in such shares (other than a community property interest as to which the holder thereof has acknowledged and agreed in writing to the restrictions and obligations hereunder).

1.4 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state and federal courts located in Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state and federal courts located in Delaware and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS

TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

1.5 Notices.

(a) All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their address as set forth on Schedule A or Schedule B hereof, as the case may be, or to such email address, facsimile number or address as subsequently modified by written notice given in accordance with this Section 6.5. If notice is given to the Company, it shall be sent to **[***]**.

(b) Consent to Electronic Notice. Each Investor and Key Holder consents to the delivery of any stockholder notice pursuant to the Delaware General Corporation Law (the "**DGCL**"), as amended or superseded from time to time, by electronic transmission pursuant to Section 232 of the DGCL (or any successor thereto) at the electronic mail address or the facsimile number as on the books of the Company. To the extent that any notice given by means of electronic transmission is returned or undeliverable for any reason, the foregoing consent shall be deemed to have been revoked until a new or corrected electronic mail address has been provided, and such attempted electronic notice shall be ineffective and deemed to not have been given. Each Investor and Key Holder agrees to promptly notify the Company of any change in its electronic mail address, and that failure to do so shall not affect the foregoing.

1.6 Entire Agreement. This Agreement (including, the Exhibits and Schedules hereto) constitutes the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties are expressly canceled. Upon the effectiveness of this Agreement, the Prior Agreement shall be deemed amended and restated and superseded and replaced in its entirety by this Agreement, and shall be of no further force or effect.

1.7 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either

under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

1.8 Amendment; Waiver and Termination. This Agreement may be amended, modified or terminated (other than pursuant to Section 6.1 above) and the observance of any term hereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only by a written instrument executed by (a) the Company, (b) the Key Holders holding **[***]** and (c) **[***]**. Any amendment, modification, termination or waiver so effected shall be binding upon the Company, the Investors, the Key Holders and all of their respective successors and permitted assigns whether or not such party, assignee or other shareholder entered into or approved such amendment, modification, termination or waiver. Notwithstanding the foregoing, (i) this Agreement may not be amended, modified or terminated and the observance of any term hereunder may not be waived with respect to any Investor or Key Holder without the written consent of such Investor or Key Holder unless such amendment, modification, termination or waiver applies to all Investors and Key Holders, respectively, in the same fashion, (ii) this Agreement may not be amended, modified or terminated and the observance of any term hereunder may not be waived with respect to any Investor without the written consent of such Investor, if such amendment, modification, termination or waiver would adversely affect the rights of such Investor in a manner disproportionate to any adverse effect such amendment, modification, termination or waiver would have on the rights of the other Investors under this Agreement, (iii) the consent of the Key Holders shall not be required for any amendment, modification, termination or waiver if such amendment, modification, termination or waiver does not apply to the Key Holders, and (iv) Schedule A hereto may be amended by the Company from time to time in accordance with the Purchase Agreement to add information regarding Additional Purchasers (as defined in the Purchase Agreement) without the consent of the other parties hereto. The Company shall give prompt written notice of any amendment, modification or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, modification, termination or waiver. No waivers of or exceptions to any term, condition or provision of this Agreement, in any one or more instances, shall be deemed to be, or construed as, a further or continuing waiver of any such term, condition or provision.

1.9 Assignment of Rights.

(a) The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

(b) Any successor or permitted assignee of any Key Holder, including any Prospective Transferee who purchases shares of Transfer Stock in accordance with the terms hereof, shall deliver to the Company and the Investors, as a condition to any transfer or assignment, a counterpart signature page hereto pursuant to which such successor or permitted assignee shall confirm their agreement to be subject to and bound by all of the provisions set forth in this Agreement that were applicable to the predecessor or assignor of such successor or permitted assignee.

(c) The rights of the Investors hereunder are not assignable without the Company's written consent (which shall not be unreasonably withheld, delayed or conditioned), except (i) by an Investor to any Affiliate, or (ii) to an assignee or transferee who acquires at least 1,000,000 shares of Capital Stock (as adjusted for any stock combination, stock split, stock dividend, recapitalization or other similar transaction), it being acknowledged and agreed that any such assignment, including an assignment contemplated by the preceding clauses (i) or (ii)

shall be subject to and conditioned upon any such assignee's delivery to the Company and the other Investors of a counterpart signature page hereto pursuant to which such assignee shall confirm their agreement to be subject to and bound by all of the provisions set forth in this Agreement that were applicable to the assignor of such assignee.

(d) Except in connection with an assignment by the Company by operation of law to the acquirer of the Company, the rights and obligations of the Company hereunder may not be assigned under any circumstances.

1.10 Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

1.11 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Series B Preferred Stock after the date hereof, any purchaser of such shares of Series B Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement and thereafter shall be deemed an "Investor" for all purposes hereunder.

1.12 Governing Law. This Agreement shall be governed by the internal law of the State of Delaware, without regard to conflict of law principles that would result in the application of any law other than the law of the State of Delaware.

1.13 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

1.14 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

1.15 Aggregation of Stock. All shares of Capital Stock held or acquired by Affiliated entities or persons shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

1.16 Specific Performance. In addition to any and all other remedies that may be available at law in the event of any breach of this Agreement, each Investor shall be entitled to specific performance of the agreements and obligations of the Company and the Key Holders hereunder and to such other injunction or other equitable relief as may be granted by a court of competent jurisdiction.

1.17 Additional Key Holders. In the event that after the date of this Agreement, the Company issues shares of Common Stock, or options to purchase Common Stock, to any employee or consultant, which shares or options would collectively constitute with respect to such employee or consultant (taking into account all shares of Common Stock, options and other purchase rights held by such employee or consultant) **[***]** or more of the Company's then outstanding Common Stock (treating for this purpose all shares of Common Stock issuable upon exercise of or conversion of outstanding options, warrants or convertible securities, as if exercised or converted), the Company shall, as a condition to such issuance, cause such employee or consultant to execute a counterpart signature page hereto as a Key Holder, and such

person shall thereby be bound by, and subject to, all the terms and provisions of this Agreement applicable to a Key Holder.

1.18 Consent of Spouse. If any Key Holder is a natural person married on the date of this Agreement, such Key Holder's spouse shall execute and deliver to the Company a Consent of Spouse in the form of Exhibit A hereto ("**Consent of Spouse**"), effective on the date hereof. Notwithstanding the execution and delivery thereof, such consent shall not be deemed to confer or convey to the spouse any rights in such Key Holder's shares of Transfer Stock that do not otherwise exist by operation of law or the agreement of the parties. If any Key Holder should marry or remarry subsequent to the date of this Agreement, such Key Holder shall within thirty (30) days thereafter obtain his/her new spouse's acknowledgement of and consent to the existence and binding effect of all restrictions contained in this Agreement by causing such spouse to execute and deliver a Consent of Spouse acknowledging the restrictions and obligations contained in this Agreement and agreeing and consenting to the same.

1.19 No Presumption against Drafter. The parties have participated jointly in negotiating and drafting this agreement. In the event that an ambiguity or a question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provision of this Agreement.

[*Signature Pages Follow; Remainder of Page Intentionally Left Blank*]

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Right of First Refusal and Co-Sale Agreement as of the date first written above.

SONDE HEALTH, INC.

By: /s/ David Liu
Name: David Liu
Title: Chief Executive Officer

KEY HOLDERS:

Signature: /s/[***]
Name: [***]

Signature: /s/[***]
Name: [***]

Signature: /s/[***]
Name: [***]

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Right of First Refusal and Co-Sale Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/[***]
Name: [***]
Title: [***]

Signature Page To Amended and Restated Right Of First Refusal And Co-Sale Agreement

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Right of First Refusal and Co-Sale Agreement as of the date first written above.

INVESTORS:

PURETECH HEALTH LLC

By: /s/ Bharatt Chowrira
Name: Bharatt Chowrira
Title: President

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Right of First Refusal and Co-Sale Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/[***]__
Name: [***]
Title: [***]

By: /s/[***]__
Name: [***]
Title: [***]

Signature Page To Amended and Restated Right Of First Refusal And Co-Sale Agreement

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Right of First Refusal and Co-Sale Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/[***]__
Name: [***]
Title: [***]

Signature Page To Amended and Restated Right Of First Refusal And Co-Sale Agreement

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Right of First Refusal and Co-Sale Agreement as of the date first written above.

INVESTORS:

[***]

By: [***]

By: /s/[***]
Name: [***]
Title: [***]

Signature Page To Amended and Restated Right Of First Refusal And Co-Sale Agreement

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Right of First Refusal and Co-Sale Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/[***]__
Name: [***]
Title: [***]

Signature Page To Amended and Restated Right Of First Refusal And Co-Sale Agreement

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Right of First Refusal and Co-Sale Agreement as of the date first written above.

INVESTORS:

/s/[***]__
[***]

Signature Page To Amended and Restated Right Of First Refusal And Co-Sale Agreement

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Right of First Refusal and Co-Sale Agreement as of the date first written above.

INVESTORS:

/s/[***]__
[***]

Signature Page To Amended and Restated Right Of First Refusal And Co-Sale Agreement

Signature Page To Amended and Restated Right Of First Refusal And Co-Sale Agreement

SCHEDULE A
INVESTORS

[***]

SCHEDULE B
KEY HOLDERS

[***]

EXHIBIT A
CONSENT OF SPOUSE

I, [_____], spouse of [_____], acknowledge that I have read the Amended and Restated Right of First Refusal and Co-Sale Agreement, dated as of May [●], 2022, to which this Consent is attached as Exhibit A (the "**Agreement**"), and that I know the contents of the Agreement. I am aware that the Agreement contains provisions regarding certain rights to certain other holders of Capital Stock of the Company upon a Proposed Key Holder Transfer of shares of Transfer Stock of the Company which my spouse may own including any interest I might have therein.

I hereby agree that my interest, if any, in any shares of Transfer Stock of the Company subject to the Agreement shall be irrevocably bound by the Agreement and further understand and agree that any community property interest I may have in such shares of Transfer Stock of the Company shall be similarly bound by the Agreement.

I am aware that the legal, financial and related matters contained in the Agreement are complex and that I am free to seek independent professional guidance or counsel with respect to this Consent. I have either sought such guidance or counsel or determined after reviewing the Agreement carefully that I will waive such right.

Dated as of the [__] day of [_____, _____].

_____
Signature

_____
Print Name

Exhibit 4.24

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED (INDICATED BY: [***]) FROM THE EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) THE TYPE OF INFORMATION THAT THE REGISTRANT CUSTOMARILY AND ACTUALLY TREATS AS PRIVATE OR CONFIDENTIAL.

EXECUTION VERSION

AKILI INTERACTIVE LABS, INC.
THIRD AMENDED AND RESTATED
INVESTORS' RIGHTS AGREEMENT

THIS THIRD AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (the "Agreement") is made as of the 25th day of May, 2021, by and among Akili Interactive Labs, Inc., a Delaware corporation (the "Company"), the holders of the Company's Series A-1 Preferred Stock, par value $0.0001 per share (the "Series A-1 Preferred Stock"), the holders of the Company's Series A-2 Preferred Stock, par value $0.0001 per share (the "Series A-2 Preferred Stock"), the holders of the Company's Series B Preferred Stock, par value $0.0001 per share (the "Series B Preferred Stock"), the holders of the Company's Series C Preferred Stock, par value $0.0001 per share (the "Series C Preferred Stock"), the holders of the Company's Series D Preferred Stock, par value $0.0001 per share (the "Series D Preferred Stock", and together with the Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, the "Preferred Stock"), listed on Schedule A hereto (the "Investors") and the holders of the Company's Common Stock, par value $0.0001 per share (the "Common Stock"), or options to purchase Common Stock, listed on the Schedule of Key Holders attached as Schedule B hereto (the "Key Holders"). The Investors and the Key Holders are individually referred to herein as a "Stockholder" and are collectively referred to herein as the "Stockholders" (and, together with the Company, the "Parties").

RECITALS

WHEREAS, certain of the Investors (the "Existing Investors") hold shares of the Company's Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and/or shares of Common Stock issued upon conversion thereof and possess registration rights, information rights, rights of first offer and other rights pursuant to that certain Amended and Restated Investors' Rights Agreement dated [***] by and among the Company, certain holders of Common Stock and such Existing Investors (the "Prior Agreement");

WHEREAS, the Prior Agreement may be amended, and any provision therein waived, with the consent of the Company and the holders of [***] of the outstanding Preferred Stock (as such term is defined in the Prior Agreement);

WHEREAS, the Existing Investors as holders of [***] of the outstanding Preferred Stock (as such term is defined in the Prior Agreement) of the Company desire to terminate the Prior Agreement and to accept the rights created pursuant hereto in lieu of the rights granted to them under the Prior Agreement; and

WHEREAS, certain Investors are parties to that certain Series D Preferred Stock Purchase Agreement of even date herewith by and among the Company and certain of the

Investors (the "Series D Agreement"), which provides that as a condition to the closing of the sale of the Series D Preferred Stock, this Agreement must be executed and delivered by such Investors, Existing Investors holding [***] of the outstanding Preferred Stock (as such term is defined in the Prior Agreement) of the Company, and the Company.

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth herein, the Company and the Existing Investors hereby agree that the Prior Agreement shall be superseded and replaced in its entirety by this Agreement, and the parties hereto further agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 The term "1934 Act" means the Securities Exchange Act of 1934, as amended.

1.2 The term "Act" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.3 The term "Affiliate" means, (i) with respect to any specified Person, any other Person who or which, directly or indirectly, controls, is controlled by, or is under common control with such specified Person, including, without limitation, any general partner, officer, director, member, manager or stockholder of such Person and any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or is under common investment management with, such Person, in each case where the term "control" means ownership of at least 50% of the voting securities of an entity [***].

1.4 The term "Board" means the Company's Board of Directors, as constituted from time to time.

1.5 The term "Form S-3" means such form under the Act as in effect on the date hereof or any registration form under the Act subsequently adopted by the SEC that permits inclusion or incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.6 The term "Free Writing Prospectus" means a free-writing prospectus, as defined in Rule 405.

1.7 The term "Holder" means any Person owning Registrable Securities who is a party to this Agreement.

1.8 The term "Initial Offering" means the Company's first firm commitment underwritten public offering of its Common Stock under the Act.

1.9 The term "Person" shall mean any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.10 The terms "register," "registered," and "registration" refer to a registration effected by preparing and filing a registration statement or similar document in compliance with the Act, and the declaration or ordering of effectiveness of such registration statement or document.

1.11 The term "Registrable Securities" means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock and (ii) any Common Stock of the Company issued as (or issuable upon the conversion or exercise of any warrant, right or other

security that is issued as) a dividend or other distribution with respect to, or in exchange for, or in replacement of, the shares referenced in (i) above or any other Common Stock held by a holder of Preferred Stock, excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which such Person's rights under Section 2 of this Agreement are not assigned. In addition, the number of shares of Registrable Securities outstanding shall equal the aggregate of the number of shares of Common Stock outstanding that are, and the number of shares of Common Stock issuable pursuant to then exercisable or convertible securities that are, Registrable Securities.

1.12 The term "Restated Certificate" means the Company's Amended and Restated Certificate of Incorporation, as amended from time to time.

1.13 The term "Rule 144" shall mean Rule 144 under the Act.

1.14 The term "Rule 144(b)(1)(i)" shall mean subsection (b)(1)(i) of Rule 144 under the Act as it applies to Persons who have held shares for more than one (1) year.

1.15 The term "Rule 405" shall mean Rule 405 under the Act.

1.16 The term "SEC" shall mean the Securities and Exchange Commission.

1.17 The term "Shares" shall mean any shares of, or securities convertible into or exchangeable or exercisable for any shares of, the Company's capital stock.

2. Registration Rights.

2.1 Request for Registration.

(a) Subject to the conditions of this Section 2.1, if the Company shall receive at any time after the earlier of (i) [***] of the date of this Agreement; or (ii) [***] following the effective date of the Initial Offering, a written request from any Holders of the Registrable Securities (for purposes of this Section 2.1, the "Initiating Holders"), including Neuberger or Temasek for clause (i), that the Company file two (2) registration statements under the Act covering the registration of Registrable Securities with an anticipated aggregate offering price of at least [***], then the Company shall, within [***] of the receipt thereof, give written notice of such request to all Holders, and subject to the limitations of this Section 2.1, use its commercially reasonable efforts to effect, as soon as practicable, the registration under the Act of all Registrable Securities that the Holders request to be registered in a written request received by the Company within [***] of the mailing of the Company's notice pursuant to this Section 2.1(a).

(b) If the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to this Section 2.1, and the Company shall include such information in the written notice referred to in Section 2.1(a). In such event the right of any Holder to include its Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting (unless otherwise mutually agreed by [***] of the Initiating Holders and such Holder) to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by the Company (which underwriter or underwriters shall be reasonably acceptable to those Initiating Holders holding [***] of the Registrable Securities then held by all Initiating Holders).

Notwithstanding any other provision of this Section 2.1, if the underwriter advises the Company that marketing factors require a limitation on the number of securities underwritten (including Registrable Securities), then the Company shall so advise all Holders of Registrable Securities that would otherwise be underwritten pursuant hereto, and the number of shares that may be included in the underwriting shall be allocated to the Holders of such Registrable Securities pro rata based on the number of Registrable Securities held by all such Holders (including the Initiating Holders). In no event shall any Registrable Securities be excluded from such underwriting unless all other securities are first excluded. Any Registrable Securities excluded or withdrawn from such underwriting shall be withdrawn from the registration.

(c) Notwithstanding the foregoing, the Company shall not be required to effect a registration pursuant to this Section 2.1:

(i) in any particular jurisdiction in which the Company would be required to execute a general consent to service of process in effecting such registration, unless the Company is already subject to service in such jurisdiction and except as may be required under the Act; or

(ii) after the Company has effected [***] registrations pursuant to this Section 2.1, and such registrations have been declared or ordered effective; or

(iii) during the period starting with the date [***] prior to the Company's good faith estimate of the date of the filing of and ending on a date [***] following the effective date of a Company initiated registration subject to Section 2.2 below, provided that the Company is actively employing in good faith its commercially reasonable efforts to cause such registration statement to become effective; or

(iv) if the Initiating Holders propose to dispose of Registrable Securities that may be registered on Form S-3 pursuant to Section 2.3 hereof; or

(v) if the Company shall furnish to Holders requesting a registration statement pursuant to this Section 2.1 a certificate signed by the Company's Chief Executive Officer or Chairman of the Board stating that in the good faith judgment of the Board, it would be seriously detrimental to the Company and its stockholders for such registration statement to be effected at such time, in which event the Company shall have the right to defer such filing for a period of not more than [***] after receipt of the request of the Initiating Holders; provided that such right shall be exercised by the Company not more than [once] in any [***] period.

2.2 Company Registration.

(a) If (but without any obligation to do so) the Company proposes to register (including for this purpose a registration effected by the Company for stockholders other than the Holders) any of its stock or other securities under the Act in connection with the public offering of such securities (other than (i) a registration relating to a demand pursuant to Section 2.1 of this Agreement, (ii) a registration relating solely to the sale of securities of participants in a Company stock plan, (iii) a registration relating to a corporate reorganization or transaction under Rule 145 of the Act, (iv) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities, or (v) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered), the Company shall, at such time, promptly give each Holder written notice of such registration. Upon the written request of each Holder given within [***] after mailing of such notice by the Company in accordance with Section 5.5 of this

Agreement, the Company shall, subject to the provisions of Section 2.2(c) of this Agreement, use its commercially reasonable efforts to cause to be registered under the Act all of the Registrable Securities that each such Holder requests to be registered.

(b) Right to Terminate Registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.2 prior to the effectiveness of such registration whether or not any Holder has elected to include securities in such registration. The expenses of such withdrawn registration shall be borne by the Company in accordance with Section 2.6 hereof.

(c) Underwriting Requirements. In connection with any offering involving an underwriting of shares of the Company's capital stock, the Company shall not be required under this Section 2.2 to include any of the Holders' securities in such underwriting unless they accept the terms of the underwriting as agreed upon between the Company and the underwriters selected by the Company (or by other Persons entitled to select the underwriters) and enter into an underwriting agreement in customary form with such underwriters, and then only in such quantity as the underwriters determine in their sole discretion will not jeopardize the success of the offering by the Company. If the total amount of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the amount of securities sold other than by the Company that the underwriters determine in their sole discretion is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, that the underwriters determine in their sole discretion will not jeopardize the success of the offering. In the event that the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be apportioned pro rata among the selling Holders based on the number of Registrable Securities held by all selling Holders or in such other proportions as shall mutually be agreed to by all such selling Holders. Notwithstanding the foregoing, in no event shall any Registrable Securities be excluded from such offering unless all other stockholders' securities have been first excluded from the offering. For purposes of the preceding sentence concerning apportionment, for any selling stockholder that is a Holder of Registrable Securities and that is a venture capital fund, partnership or corporation, the affiliated venture capital funds, partners, members, retired partners and stockholders of such Holder, or the estates and family members of any such partners, members and retired partners and any trusts for the benefit of any of the foregoing Persons, or any Person who shares an investment advisor with the Holder, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate amount of Registrable Securities owned by all such related entities and individuals.

2.3 Form S-3 Registration. In case the Company shall receive from any Holders of the Registrable Securities (for purposes of this Section 2.3, the "S-3 Initiating Holders") a written request or requests that the Company effect a registration on Form S-3 covering the registration of Registrable Securities with an anticipated aggregate offering price of at least [***] and any related qualification or compliance with respect to all or a part of the Registrable Securities owned by such Holder or Holders, the Company shall:

(a) promptly give written notice of the proposed registration, and any related qualification or compliance, to all other Holders; and

(b) use its commercially reasonable efforts to effect, as soon as practicable, such registration and all such qualifications and compliances as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Holders' Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any other Holders joining in such request as are specified in a written

request given within [***] after receipt of such written notice from the Company; provided, however, that the Company shall not be obligated to effect any such registration, qualification or compliance, pursuant to this Section 2.3:

(i) if Form S-3 is not available for such offering by the Holders;

(ii) if the Holders, together with the holders of any other securities of the Company entitled to inclusion in such registration, propose to sell Registrable Securities and such other securities (if any) at an aggregate price to the public (net of any underwriters' discounts or commissions) of less than [***];

(iii) if the Company shall furnish to all Holders requesting a registration statement pursuant to this Section 2.3 a certificate signed by the Company's Chief Executive Officer or Chairman of the Board stating that in the good faith judgment of the Board, it would be seriously detrimental to the Company and its stockholders for such registration statement to be effected at such time, in which event the Company shall have the right to defer such filing for a period of not more than [***] after receipt of the request of the S-3 Initiating Holders; provided that such right shall be exercised by the Company not more than [***] in any [***] period;

(iv) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance;

(v) if the Company, within [***] of receipt of the request of such S-3 Initiating Holders, gives notice of its bona fide intention to effect the filing of a registration statement with the SEC within [***] of receipt of such request (other than a registration effected solely to qualify an employee benefit plan or to effect a business combination pursuant to Rule 145), provided that the Company is actively employing in good faith its commercially reasonable efforts to cause such registration statement to become effective; or

(vi) during the period starting with the date [***] prior to the Company's good faith estimate of the date of the filing of and ending on a date [***] following the effective date of a Company initiated registration subject to Section 2.2 of this Agreement, provided that the Company is actively employing in good faith its commercially reasonable efforts to cause such registration statement to become effective.

(c) If the S-3 Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to this Section 2.3 and the Company shall include such information in the written notice referred to in Section 2.3(a). The provisions of Section 2.1(b) of this Agreement shall be applicable to such request (with the substitution of Section 2.3 for references to Section 2.1).

(d) Subject to the foregoing, the Company shall file a registration statement covering the Registrable Securities and other securities so requested to be registered as soon as practicable after receipt of the request or requests of the S-3 Initiating Holders. Registrations effected pursuant to this Section 2.3 shall not be counted as requests for registration effected pursuant to Section 2.1 of this Agreement.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a)

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective, and, upon the request of the Holders of [***] of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to [***] or, if earlier, until the distribution contemplated in the Registration Statement has been completed;

(b) prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the Act with respect to the disposition of all securities covered by such registration statement;

(c) furnish to the Holders such number of copies of a prospectus, including a preliminary prospectus and any Free Writing Prospectus, in conformity with the requirements of the Act, and such other documents as they may reasonably request in order to facilitate the disposition of Registrable Securities owned by them;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by the Holders, provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering;

(f) notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus or Free Writing Prospectus (to the extent prepared by or on behalf of the Company) relating thereto is required to be delivered under the Act of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing, and, at the request of any such Holder, the Company will, as soon as reasonably practicable, file and furnish to all such Holders a supplement or amendment to such prospectus or Free Writing Prospectus (to the extent prepared by or on behalf of the Company) so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus will not contain an untrue statement of a material fact or omit to state any fact necessary to make the statements therein not misleading in light of the circumstances under which they were made;

(g) cause all such Registrable Securities registered pursuant to this Section 2 to be listed on a national exchange or trading system and on each securities exchange and trading system on which similar securities issued by the Company are then listed;

(h) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such

underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith; and

(i) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration.

Notwithstanding the provisions of this Section 2, the Company shall be entitled to postpone or suspend, for a reasonable period of time, the filing, effectiveness or use of, or trading under, any registration statement if the Company shall determine that any such filing or the sale of any securities pursuant to such registration statement would in the good faith judgment of the Board:

(i) materially impede, delay or interfere with any material pending or proposed financing, acquisition, corporate reorganization or other similar transaction involving the Company for which the Board has authorized negotiations;

(ii) materially and adversely impair the consummation of any pending or proposed material offering or sale of any class of securities by the Company; or

(iii) require disclosure of material nonpublic information that, if disclosed at such time, would be materially harmful to the interests of the Company and its stockholders; provided, however, that during any such period all executive officers and directors of the Company are also prohibited from selling securities of the Company (or any security of any of the Company's subsidiaries or affiliates).

In the event of the suspension of effectiveness of any registration statement pursuant to this Section 2.4, the applicable time period during which such registration statement is to remain effective shall be extended by that number of days equal to the number of days the effectiveness of such registration statement was suspended.

2.5 Information from Holder. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses other than underwriting discounts, stock transfer taxes and commissions incurred in connection with registrations, filings or qualifications pursuant to Sections 2.1, 2.2 and 2.3 of this Agreement, including, without limitation, all registration, filing and qualification fees, printers' and accounting fees, fees and disbursements of counsel for the Company and the reasonable fees and disbursements of one counsel for the selling Holders (not to exceed [***]) shall be borne by the Company. Notwithstanding the foregoing, the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 2.1 of this Agreement if the registration request is subsequently withdrawn at the request of the Holders of [***] of the Registrable Securities to be registered (in which case all participating Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration); provided, however, that if at the time of such withdrawal, the Holders have learned

of a material adverse change in the condition, business or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness following disclosure by the Company of such material adverse change, then the Holders shall not be required to pay any of such expenses and shall retain their rights pursuant to Section 2.1 of this Agreement.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. In the event any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each Holder, the partners, members, officers, directors and stockholders of each Holder, legal counsel and accountants for each Holder, any underwriter (as defined in the Act) for such Holder and each Person, if any, who controls such Holder or underwriter within the meaning of the Act or the 1934 Act, against any losses, claims, damages or liabilities (joint or several) to which they may become subject under the Act, the 1934 Act, any state securities laws or any rule or regulation promulgated under the Act, the 1934 Act or any state securities laws, insofar as such losses, claims, damages, or liabilities (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively, a "Violation"): (i) any untrue or alleged untrue statement of a material fact contained in such registration statement, including any preliminary prospectus, final prospectus, or Free Writing Prospectus contained therein or any amendments or supplements thereto, any issuer information (as defined in Rule 433 of the Act) filed or required to be filed pursuant to Rule 433(d) under the Act or any other document incident to such registration prepared by or on behalf of the Company or used or referred to by the Company, (ii) the omission or alleged omission of a material fact required to be stated in such registration statement, or necessary to make the statements therein not misleading or (iii) any violation or alleged violation by the Company of the Act, the 1934 Act, any state securities laws or any rule or regulation promulgated under the Act, the 1934 Act or any state securities laws, and the Company will reimburse each such Holder, underwriter, controlling Person or other aforementioned Person for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability, action or proceeding as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, action or proceeding if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld), nor shall the Company be liable in any such case for any such loss, claim, damage, liability, action or proceeding to the extent that it arises out of or is based upon a Violation that occurs in reliance upon, and in conformity with, written information furnished expressly for use in connection with such registration by such Holder, underwriter, controlling Person or other aforementioned Person.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, each of its directors, each of its officers who has signed the registration statement, each Person, if any, who controls the Company within the meaning of the Act, legal counsel and accountants for the Company, any underwriter, any other Holder selling securities in such registration statement and any controlling Person of any such underwriter or other Holder, against any losses, claims, damages or liabilities (joint or several) to which any of the foregoing Persons may become subject, under the Act, the 1934 Act, any state securities laws or any rule or regulation promulgated under the Act, the 1934

Act or any state securities laws, insofar as such losses, claims, damages or liabilities (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by such Holder expressly for use in connection with such registration; and each such Holder will reimburse any Person intended to be indemnified pursuant to this Section 2.8(b) for any legal or other expenses reasonably incurred by such Person in connection with investigating or defending any such loss, claim, damage, liability, action or proceeding as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, action or proceeding if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and provided that in no event shall any indemnity under this Section 2.8(b) exceed the gross proceeds from the offering received by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 2.8 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) for which a party may be entitled to indemnification, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.8, deliver to the indemnifying party a written notice of the commencement thereof and the indemnifying party shall have the right to participate in and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one (1) separate counsel, with the fees and expenses to be paid by the indemnifying party, if (i) representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding, (ii) the indemnifying party does not deliver to the indemnified party within sixty (60) days of receipt of notice of such action or proceeding an acknowledgement that, if the facts as alleged by the claimant in such action or proceeding are true, the indemnifying party would have an indemnity obligation for the expenses, losses, claims, damages and liabilities resulting from such action or proceeding as provided hereunder, (iii) the action or proceeding relates to or arises in connection with any criminal proceeding, action, indictment or allegation, (iv) the indemnified party reasonably believes an adverse determination with respect to the action or proceeding would be detrimental to the reputation or future business prospects of the indemnified party or any of its affiliates or (v) the action or proceeding seeks an injunction or equitable relief against the indemnified party or any of its affiliates. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action or proceeding, if prejudicial to its ability to defend such action or proceeding, shall relieve such indemnifying party of liability to the indemnified party under this Section 2.8 to the extent of such prejudice, but the omission to so deliver written notice to the indemnifying party will not relieve such indemnifying party of any liability that it may have to any indemnified party otherwise than under this Section 2.8.

(d) If the indemnification provided for in this Section 2.8 is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss, liability, claim, damage or expense referred to herein, then the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage or expense in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and the indemnified party on the other hand in connection with the statements or omissions that resulted in such loss, liability, claim, damage or expense, as well as any other relevant equitable considerations; provided, however, that (i) no contribution by any Holder, when combined with any amounts paid by such Holder pursuant to Section 2.8(b), shall exceed the

gross proceeds from the offering received by such Holder and (ii) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Section 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Section 2.8(b), exceed the proceeds from the offering received by such Holder (net of any expenses paid by such Holder). The relative fault of the indemnifying party and the indemnified party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) The obligations of the Company and Holders under this Section 2.8 shall survive the completion of any offering of Registrable Securities in a registration statement under this Section 2 and otherwise.

2.9 Reports Under the 1934 Act. With a view to making available to the Holders the benefits of Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company agrees to:

(a)

(b) make and keep public information available, as those terms are understood and defined in Rule 144, at all times after the effective date of the Initial Offering;

(c) file with the SEC in a timely manner all reports and other documents required of the Company under the Act and the 1934 Act; and

(d) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of Rule 144 (at any time after ninety (90) days after the effective date of the first registration statement filed by the Company), the Act and the 1934 Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after it so qualifies), (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company and (iii) such other information as may be reasonably requested to avail any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration or pursuant to such form.

2.10 Assignment of Registration Rights. The rights to cause the Company to register Registrable Securities pursuant to this Section 2 may be assigned (but only with all related obligations) by a Holder to a transferee or assignee of such securities that after such assignment or transfer, holds at least [***] of Registrable Securities (appropriately adjusted for any stock split, dividend, combination or other recapitalization), provided: (i) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned; (ii) such transferee or assignee agrees in writing to be bound by and

subject to the terms and conditions of this Agreement, including, without limitation, the provisions of Section 2.12 of this Agreement; and (iii) such assignment shall be effective only if immediately following such transfer the further disposition of such securities by the transferee or assignee is restricted under the Act.

2.11 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders holding [***] of the Registrable Securities then held by all Holders, enter into any agreement with any holder or prospective holder of any securities of the Company that would allow such holder or prospective holder (a) to include any of such securities in any registration filed under Section 2.1, Section 2.2 or Section 2.3 of this Agreement, unless under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the amount of the Registrable Securities of the Holders that are included or (b) to demand registration of their securities.

2.12 "Market Stand-Off" Agreement. Each Stockholder hereby agrees that he, she or it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the Initial Offering and ending on the date specified by the Company and the managing underwriter (such period not to exceed [one hundred eighty (***]) (i) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock held immediately prior to the effectiveness of the registration statement for such offering, or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise. The foregoing provisions of this Section 2.12 shall apply only to the Initial Offering, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, and shall only be applicable to the Holders if all officers, directors and greater than [***] stockholders of the Company enter into similar agreements. Provided that PureTech, as defined below, may dispose of shares of Common Stock during the applicable period only after consultation with its outside counsel and only as it deems necessary in its reasonable judgement to comply with the Investment Company Act of 1940 (the "1940 Act") and provided further that PureTech shall (i) only dispose of so many shares of Common Stock as it deems reasonably necessary in its reasonable judgement to ensure it shall remain compliant with the 1940 Act and (ii) have provided to the lead underwriter in the Initial Offering notice of the intention to make a disposal as contemplated in this Section 2.12 at least two (2) business days prior to such disposal. The underwriters in connection with the Initial Offering are intended third-party beneficiaries of this Section 2.12 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Stockholder further agrees to execute such agreements as may be reasonably requested by the underwriters in the Initial Offering that are consistent with this Section 2.12 or that are necessary to give further effect thereto. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply to all Holders subject to such agreements pro rata based on the number of shares subject to such agreements.

In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to the securities of each Stockholder (and the shares or securities of every other Person subject to the foregoing restriction) until the end of such period. Notwithstanding the foregoing, if (i) during the last [***] of the [***] restricted period, the Company issues an earnings release or material news or a material event relating to the Company occurs; or (ii) prior to the expiration of the [***] period, the Company announces that it will

release earnings results during the sixteen (16)-day period beginning on the last day of the one hundred eighty (180)-day period, the restrictions imposed by this Section 2.12 shall continue to apply until the expiration of the eighteen (18)-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event).

2.13 Legends. Each Stockholder agrees that a legend reading substantially as follows shall be placed on all certificates representing all securities of each Stockholder (and the shares or securities of every other Person subject to the restrictions contained in Section 2.12), as needed:

(a) "THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED OR UNLESS SOLD PURSUANT TO RULE 144 OF SUCH ACT."

(b) "THE SECURITIES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A LOCK-UP PERIOD AFTER THE EFFECTIVE DATE OF THE ISSUER'S REGISTRATION STATEMENT FILED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AS SET FORTH IN AN AGREEMENT BETWEEN THE COMPANY AND THE ORIGINAL HOLDER OF THESE SECURITIES, A COPY OF WHICH MAY BE OBTAINED AT THE ISSUER'S PRINCIPAL OFFICE. SUCH LOCK-UP PERIOD IS BINDING ON TRANSFEREES OF THESE SECURITIES.

(c) Any legend required by applicable state "blue sky" securities laws, rules and regulations.

2.14 Termination of Registration Rights. No Holder shall be entitled to exercise any right provided for in this Section 2: [***]

3. Covenants of the Company.

3.1 Delivery of Financial Statements. The Company shall, upon request, deliver to each Investor (or transferee of an Investor) that holds Preferred Stock:

(a) as soon as practicable, but in any event within [***] after the end of each fiscal year of the Company, an income statement for such fiscal year, a balance sheet of the Company and statement of stockholders' equity as of the end of such year, and a statement of cash flows for such year, such year-end financial reports to be in reasonable detail, prepared in accordance with generally accepted accounting principles ("GAAP") and audited and certified by independent public accountants of nationally recognized standing selected by the Company;

(b) as soon as practicable, but in any event within [***]after the end of each of the first three quarters of each fiscal year of the Company, an income statement and a statement of cash flows for such fiscal quarter and an unaudited balance sheet as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event at least [***] prior to the end of each fiscal year, a budget and business plan for the next fiscal year, prepared on a monthly basis, including balance sheets, income statements and statements of cash flows for such

months and, as soon as prepared, any other budgets or revised budgets prepared by the Company; and

(d) such other information relating to the financial condition, business or corporate affairs of the Company as such Investor may from time to time reasonably request, provided, however, that the Company shall not be obligated under this subsection (d) or any other subsection of Section 3.1 to provide information (i) that it deems in good faith to be a trade secret or similar confidential information or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

(e) Notwithstanding anything else in this Section 3.1 to the contrary, the Company may cease providing the information set forth in this Section 3.1 during the period starting with the date [***] before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Section 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective. If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

3.2 Inspection. The Company shall permit each Investor that holds Preferred Stock, at such Investor's expense, to visit and inspect the Company's properties, to examine its books of account and records and to discuss the Company's affairs, finances and accounts with its officers, all at such reasonable times as may be requested by the Investor; provided, however, that the Company shall not be obligated pursuant to this Section 3.2 to provide access to any information that (i) it reasonably considers to be a trade secret or similar confidential information or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Board Observer. [***]; provided, however, that such representative shall agree to hold in confidence and trust all information so provided; and provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of highly confidential proprietary information or a conflict of interest.

3.4 Termination of Information, Inspection and Board Observer Rights. The covenants set forth in Sections 3.1, 3.2 and 3.3 shall terminate and be of no further force or effect upon the earlier to occur of (a) immediately before the consummation of the Initial Offering or a SPAC merger, (b) when the Company first becomes subject to the periodic reporting requirements of Sections 12(g) or 15(d) of the 1934 Act, or (c) the consummation of a Deemed Liquidation Event, as that term is defined in the Restated Certificate.

3.5 Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor or make decisions with respect to its investment in the Company) any confidential information obtained from the Company (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Section 3.5 by such Investor), (b) is or has been independently developed or conceived by such Investor without use of, or reference to, the Company's confidential information, or (c) is or has been made known or disclosed to such

Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent reasonably necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Section 3.5; (iii) to any existing Affiliate, partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information or such person is bound by agreement to maintain such confidentiality; or (iv) as may otherwise be required by law, regulation, rule, court order or subpoena, provided that such Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure; and provided further, however, that that each Investor shall be responsible to Company for the failure of any person or entity described in clause (i), (ii), or (iii) above to comply with the provisions of this Section 3.5.

3.6 Right of First Offer. Subject to the terms and conditions specified in this Section 3.6, the Company hereby grants to each Investor a right of first offer with respect to future issuances by the Company of its Shares (as hereinafter defined). For purposes of this Section 3.6, the term "Investor" includes any Affiliates of an Investor. An Investor shall be entitled to apportion the right of first offer hereby granted it among itself and its Affiliates in such proportions as it deems appropriate.

Each time the Company proposes to issue any additional Shares ("New Shares"), the Company shall first make an offering of such New Shares to each Investor in accordance with the following provisions:

(a) The Company shall deliver a notice in accordance with Section 5.5 ("Notice") to each Investor stating (i) its bona fide intention to issue such New Shares, (ii) the number of such New Shares to be issued and (iii) the price and terms upon which it proposes to issue such New Shares. If the consideration to be paid by others for the New Shares is not cash, the fair market value of the consideration shall be determined in good faith by the Board and a reasonably detailed explanation of the Board's determination of such value shall be included in the Notice. All Investors electing to participate in the issuance of the New Shares shall pay the cash equivalent thereof as so determined.

(b) By written notification received by the Company within [***] after the giving of Notice, each Investor may elect to purchase, at the price and on the terms specified in the Notice, up to that portion of such New Shares that equals the proportion that the number of shares of Common Stock that are Registrable Securities issued and held by such Investor (assuming full conversion and exercise of all convertible and exercisable securities then held by such Investor) bears to the total number of shares of Common Stock of the Company then outstanding (assuming full conversion and exercise of all convertible and exercisable securities then outstanding). The Company shall promptly, in writing, inform each Investor that elects to purchase all the New Shares available to it (a "Fully-Exercising Investor") of any other Investor's failure to do likewise. During the [***] period commencing after such information is given, each Fully-Exercising Investor may elect to purchase that portion of the New Shares for which Investors were entitled to subscribe, but which were not subscribed for by the Investors, that is equal to the proportion that the number of Registrable Securities issued and held by such Fully-Exercising Investor bears to the total number of Registrable Securities held by all Fully-Exercising Investors desiring to purchase such unsubscribed New Shares.

(c) If all New Shares that Investors are entitled to obtain pursuant to Section 3.6(b) are not elected to be obtained as provided in Section 3.6(b) hereof, the

Company may, during the [***] period following the expiration of the period provided in Section 3.6(b) hereof, offer the remaining unsubscribed portion of such New Shares to any Person or Persons at a price not less than that, and upon terms no more favorable to the offeree than those, specified in the Notice. If the Company does not enter into an agreement for the sale of the New Shares within such period, or if such agreement is not consummated within [***] of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Shares shall not be offered unless first reoffered to the Investors in accordance with this Section 3.6.

(d) The right of first offer in this Section 3.6 shall not be applicable to (i) the issuance of Series D Preferred Stock pursuant to the Series D Agreement, (ii) Exempted Securities (as such term is defined in the Restated Certificate), and (iii) shares of capital stock issued by the Company in connection with the Initial Offering. In addition to the foregoing, the right of first offer in this Section 3.5 shall not be applicable with respect to any Investor in any subsequent offering of New Shares if (i) at the time of such offering, the Investor is not an "accredited investor," as that term is then defined in Rule 501(a) of the Act and (ii) such offering of New Shares is otherwise being offered only to accredited investors.

(e) The rights provided in this Section 3.6 may not be assigned or transferred by any Investor, except as provided in the first paragraph of this Section 3.6; provided, however, that (i) an Investor that is an investment fund may assign or transfer such rights to an affiliated investment fund, [***]

(f) The rights set provided in this Section 3.6 shall terminate and be of no further force or effect (i) immediately before the consummation of the Initial Offering or (ii) upon the consummation of a Deemed Liquidation Event (as such term is defined in the Restated Certificate) or a SPAC merger.

4. Voting Provisions.

4.1 Agreement to Vote. Each Investor, as a holder of Preferred Stock, hereby agrees on behalf of itself and any transferee or assignee of any such shares of Preferred Stock, to hold all of the shares of Preferred Stock registered in its name and any other securities of the Company now held or subsequently acquired by such Investor in the future (and any securities of the Company issued with respect to, upon conversion of, or in exchange or substitution for such shares or other securities) (hereinafter collectively referred to as the "Investor Shares") subject to, and to vote the Investor Shares at a regular or special meeting of stockholders (or by written consent) in accordance with, the provisions of this Agreement. Each Key Holder, as a holder of Common Stock, hereby agrees on behalf of itself and any transferee or assignee of any such shares of Common Stock, to hold all of such shares registered in its name and any other securities of the Company now held or subsequently acquired by such Key Holder in the future (and any securities of the Company issued with respect to, upon conversion of, or in exchange or substitution for such shares or other securities) (hereinafter collectively referred to as the "Key Holder Shares") subject to, and to vote the Key Holder Shares at a regular or special meeting of stockholders (or by written consent) in accordance with, the provisions of this Agreement. The Investor Shares and the Key Holder Shares are hereinafter collectively referred to as the "Voting Shares".

4.2 Board Size. Each Stockholder shall vote, or cause to be voted, at a regular or special meeting of stockholders (or by written consent) all Voting Shares owned by such Stockholder (or as to which such Stockholder has voting power) to ensure that the size of the Board shall be set and remain at nine (9) directors; provided, however, that such Board size may be subsequently increased or decreased pursuant to an amendment of this Agreement in accordance with Section 5.7 hereof.

4.3 Election of Directors.

(a) In any election of directors of the Company, Stockholders holding Voting Shares shall each vote at any regular or special meeting of stockholders (or by written consent) all Voting Shares then owned by them (or as to which they then have voting power) to elect:

(i) one (a) director nominated by PureTech Health LLC ("PureTech" and a "PureTech Director"), so long as PureTech continues to hold not less than 1,129,098 shares of Series A-1 Preferred Stock and Series A-2 Preferred Stock (appropriately adjusted for any stock split, dividend, combination or recapitalization) who shall initially be Bharatt Chowrira;

[***]

(b) In the absence of any nomination from the Persons with the right to nominate a director as specified above, the director or directors previously nominated by such Persons and then serving shall be reelected if still eligible to serve as provided herein.

(c) To the extent that the application of Section 4.3(a) above shall result in the designation of less than all of the authorized directors, then any remaining directors shall be nominated and elected by the stockholders of the Company entitled to vote thereon in accordance with, and pursuant to, the Restated Certificate.

4.4 Removal; Vacancies. Any director of the Company may be removed from the Board in the manner allowed by law and the Restated Certificate and Bylaws, but with respect to any director nominated pursuant to Section 4.3(a) above, only upon the vote or written consent of the Stockholders (or other Persons) entitled to nominate such director. Any vacancy created by the resignation, removal or death of a director elected pursuant to Section 4.3 above shall be filled pursuant to the provisions of Section 4.3.

4.5 Failure to Designate a Board Member. In the absence of any designation from the Persons or groups with the right to designate a director as specified above, the director previously designated by them and then serving shall be reelected if willing to serve unless such individual has been removed as provided herein, and otherwise such Board seat shall remain vacant until otherwise filled as provided above.

4.6 Vote to Increase Authorized Stock. Each Stockholder agrees to vote or cause to be voted all Voting Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to increase the number of authorized shares of Common Stock from time to time to ensure that there will be sufficient shares of Common Stock available for conversion of all of the shares of Preferred Stock outstanding at any given time. Without derogating from the foregoing, and in addition thereto, each Stockholder further agrees to vote or cause to be voted all Voting Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time, upon the reasonable request of the Board, in whatever manner as shall be necessary to increase the number of authorized shares of Series D Preferred Stock to ensure that there will be sufficient shares of Series D Preferred Stock available for the Company to declare and pay the Series D Accruing Dividends (as such term is defined in the Restated Certificate).

4.7 Drag Along Right.

(a) Definitions.

(b) A "Sale of the Company" shall mean either: (a) a transaction or series of related transactions in which a Person, or a group of related Persons, acquires from stockholders of the Company shares representing more than [***] of the outstanding voting power of the Company (a "Stock Sale") or (b) a transaction that qualifies as a "Deemed Liquidation Event" as defined in the Restated Certificate.

(b) Actions to be Taken.

In the event that [***] approve a Sale of the Company, then each Stockholder hereby agrees with respect to all Shares which it own(s) or over which it otherwise exercises voting or dispositive authority:

(i) in the event such transaction is to be brought to a vote at a stockholder meeting, after receiving proper notice of any meeting of stockholders of the Company, to vote on the approval of a Sale of the Company, to be present, in person or by proxy, as a holder of shares of voting securities, at all such meetings and to be counted for the purposes of determining the presence of a quorum at such meetings;

(ii) to vote (in person, by proxy or by action by written consent, as applicable) all Shares in favor of such Sale of the Company and in opposition to any and all other proposals that could reasonably be expected to delay or impair the ability of the Company to consummate such Sale of the Company;

(iii) to waive all dissenters' rights and rights of appraisal under applicable law at any time with respect to such Sale of the Company (in each such case, whether before or after the consummation of the Sale of the Company) and refrain from asserting any claim or commencing any suit (x) challenging the Sale of the Company or this Agreement, or (y) alleging a breach of any fiduciary duty of the Selling Investors or any affiliate or associate thereof (including, without limitation, aiding and abetting breach of fiduciary duty) in connection with the evaluation, negotiation or entry into the Sale of the Company or the consummation of the transactions contemplated thereby;

(iv) to execute and deliver all related documentation and take such other action in support of the Sale of the Company as shall reasonably be requested by the Company or the Requisite Parties (in each such case, whether before or after the consummation of the Sale of the Company);

(v) if the Sale of the Company is structured as a Stock Sale, to sell the same proportion of his, her or its Shares as is being sold by the Requisite Parties;

(vi) not to deposit, and to cause their Affiliates not to deposit, except as provided in this Agreement, any Shares owned by such Stockholder or Affiliate in a voting trust or subject any such Shares to any arrangement or agreement with respect to the voting of such Shares, unless specifically requested to do so by the acquirer in connection with the Sale of the Company;

(vii) if the consideration to be paid in exchange for the Shares pursuant to this Section 4 includes any securities and due receipt thereof by any Stockholder would require under applicable law (i) the registration or qualification of such securities or of any Person as a broker or dealer or agent with respect to such securities or (ii) the provision to any Stockholder of any information other than such information as a prudent issuer would generally furnish in an offering made solely to "accredited investors" as defined in

Regulation D promulgated under the Act, the Company may cause to be paid to any such Stockholder in lieu thereof, against surrender of the Shares which would have otherwise been sold by such Stockholder, an amount in cash equal to the fair value (as determined in good faith by the Company) of the securities which such Stockholder would otherwise receive as of the date of the issuance of such securities in exchange for the Shares; and

(viii) unless, if any portion of the consideration payable to the stockholders of the Company in connection with such transaction consists of securities unlisted on a public stock exchange, then upon receipt from a Stockholder, of written notice that, based on the advice of legal counsel, the payment or distribution of such securities to the Stockholder, would cause the Stockholder to be in violation of any law, regulation, material contractual obligation or written policy of the Stockholder, the Company shall cause the purchase agreement, merger agreement or related transaction documents to provide the Stockholder with certain stockholder rights to the extent necessary to enable the Stockholder to hold such securities without violating such contract or policy, and if the Company is unable to satisfy such requirements, then the Company shall cause to be paid to the Stockholder, in lieu thereof, against surrender of the Company's shares which would have otherwise been sold by the Stockholder an amount in cash equal to the fair value (as determined in good faith by the Company) of the securities which the Stockholder would otherwise receive as of the date of the issuance of such securities in exchange for the capital stock.

(c) Exceptions. Notwithstanding the foregoing, a Stockholder will not be required to comply with Section 4.7(b) above in connection with any proposed Sale of the Company (the "Proposed Sale") unless the Stockholder shall not be liable for the inaccuracy of any representation or warranty made by any other Person in connection with the Proposed Sale, other than the Company (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any stockholder of any identical representations, warranties and covenants provided by all stockholders);

(i) the liability for indemnification, if any, of such Stockholder in the Proposed Sale and for the inaccuracy of any representations and warranties made by the Company or its stockholders in connection with such Proposed Sale, is several and not joint with any other Person (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any stockholder of any identical representations, warranties and covenants provided by all stockholders);

(ii) liability of such Stockholder shall be limited to the amount of consideration otherwise payable to such Stockholder in connection with such Proposed Sale in accordance with the provisions of the Restated Certificate, except with respect to claims related to fraud by such Stockholder, the liability for which need not be limited as to such Stockholder;

(iii) upon the consummation of the Proposed Sale, (i) each holder of each series of the Company's stock will receive the same form of consideration for their shares of such series as is received by other holders in respect of their shares of such same series of stock, (ii) each holder of a series of Preferred Stock will receive the same amount of consideration per share of such series of Preferred Stock as is received by other holders in respect of their shares of such same series, (iii) each holder of Common Stock will receive the same amount of consideration per share of Common Stock as is received by other holders in respect of their shares of Common Stock, and (iv) the net consideration (i.e. the aggregate consideration less all reductions for purchase price adjustments, indemnification claims and other adjustments) receivable by all holders of the Preferred Stock and Common Stock shall be

allocated among the holders of Preferred Stock and Common Stock on the basis of the relative liquidation preferences to which the holders of each respective series of Preferred Stock and the holders of Common Stock are entitled in a Deemed Liquidation Event (assuming for this purpose that the Proposed Sale is a Deemed Liquidation Event) in accordance with the Restated Certificate in effect immediately prior to the Proposed Sale;

(iv) subject to Section 4.7(c)(iv) above, requiring the same form of consideration to be available to the holders of any single class or series of capital stock, if any holders of a series of Preferred Stock or the holders of Common Stock are given an option as to the form and amount of consideration to be received as a result of the Proposed Sale, all holders of such series of Preferred Stock or the holders of Common Stock will be given the same option; provided, however, that nothing in this Section 4.7(c)(v) shall entitle any holder to receive any form of consideration that such holder would be ineligible to receive as a result of such holder's failure to satisfy any condition, requirement or limitation that is generally applicable to the Company's stockholders;

(v) no Stockholder will be required to agree (unless such Stockholder is an officer or employee of the Company) to any non-competition or non-solicitation agreement; and

(vi) no Stockholder or its Affiliates will be required to amend, extend or terminate any contractual or other relationship with the Company, the acquirer or their respective Affiliates.

4.8 Bad Actor Representations and Covenants. Each Stockholder hereby represents and warrants to the Company that such Stockholder has not been convicted of any of the felonies or misdemeanors or has been subject to any of the orders, judgments, decrees or other conditions set forth in Rule 506(d) of Regulation D promulgated by the SEC. Each Stockholder covenants to provide immediate written notice to the Company in the event such Stockholder is convicted of any felony or misdemeanor or becomes subject to any order, judgment, decree or other condition set forth in Rule 506(d) of Regulation D promulgated by the SEC, as may be amended from time to time. Each Stockholder covenants to provide such information to the Company as the Company may reasonably request in order to comply with the disclosure obligations set forth in Rule 506(e) of Regulation D promulgated by the SEC, as may be amended from time to time.

4.9 Legend on Share Certificates. Each certificate representing any Voting Shares shall be endorsed by the Company with a legend reading substantially as follows:

"THE SHARES EVIDENCED HEREBY ARE SUBJECT TO AN AGREEMENT (A COPY OF WHICH MAY BE OBTAINED UPON WRITTEN REQUEST FROM THE ISSUER) CONTAINING PROVISIONS REGARDING VOTING RIGHTS AND OBLIGATIONS, AND BY ACCEPTING ANY INTEREST IN SUCH SHARES THE PERSON ACCEPTING SUCH INTEREST SHALL BE DEEMED TO AGREE TO AND SHALL BECOME BOUND BY ALL SUCH VOTING PROVISIONS OF SAID AGREEMENT."

4.10 Covenant of the Company. The Company will not, by any voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be performed by the Company under this Section 4.

4.11 No Liability for Election of Recommended Directors. Neither any Party to this Agreement, nor any officer, director, stockholder, partner, employee or agent of any such Party, makes any representation or warranty as to the fitness or competence of the nominee

of any Party hereunder to serve on the Board by virtue of such Party's execution of this Agreement or by the act of such Party in voting for such nominee pursuant to this Agreement.

4.12 Remedies.

(a) Grant of Proxy and Power of Attorney; No Conflicting Agreements. Each Stockholder hereby constitutes and appoints as the proxies of such Stockholder, and hereby grants a power of attorney, to (a) the President of the Company and (b) a stockholder or other Person designated by the Board, and each of them, with full power and substitution, with respect to the matters set forth herein, and hereby authorizes each of them to represent and to vote, if and only if such Stockholder (i) fails to vote or (ii) attempts to vote (whether by proxy, in person or by written consent) in a manner which is inconsistent with the terms of this Agreement, all of such Stockholder's Voting Shares in the manner provided in Section 4 hereof, and hereby authorizes each of them to take any action necessary to give effect to the provisions contained in Section 4 hereof. Each of the proxy and power of attorney granted in this Section 4.12 is given in consideration of the agreements and covenants of the Parties in connection with the transactions contemplated by this Agreement and, as such, each is coupled with an interest and shall be irrevocable until this Agreement terminates pursuant to its terms or this Section 4.12 is amended to remove such grant of proxy and power of attorney in accordance with Section 5.7 hereof. Each Stockholder hereby revokes any and all previous proxies or powers of attorney with respect to such Stockholder's Voting Shares and shall not hereafter, until this Agreement terminates pursuant to its terms or this Section 4.12 is amended to remove this provision in accordance with Section 5.7 hereof, grant, or purport to grant, any other proxy or power of attorney with respect to such Voting Shares, deposit any of such Voting Shares into a voting trust or enter into any agreement (other than this Agreement), arrangement or understanding with any Person, directly or indirectly, to vote, grant any proxy or power of attorney or give instructions with respect to the voting of any of such Voting Shares, in each case, with respect to any of the matters set forth in this Agreement. [***]

(b) Specific Enforcement. It is agreed and understood that monetary damages would not adequately compensate an injured Party for the breach of this Agreement by any other Party, that this Agreement shall be specifically enforceable, and that any breach or threatened breach of this Agreement shall be the proper subject of a temporary or permanent injunction or restraining order. Further, each Party hereto waives any claim or defense that there is an adequate remedy at law for such breach or threatened breach.

(c) Remedies Cumulative. All remedies, either under this Section 3 or by law or otherwise afforded to any Party, shall be cumulative and not alternative.

4.13 Directors' Expenses. The Company shall reimburse the directors on the Board for all reasonable and documented out-of-pocket expenses incurred by them in connection with attendance at all meetings of the Board (including any meetings of committees of the Board) and the board of directors of each of the Company's subsidiaries (including any meetings of committees thereof) or attending to other matters requested by the Company.

4.14 Subsidiary Boards. The Company shall cause the composition of the board of directors of each subsidiary of the Company and of each committee thereof to, where the appropriate individuals are willing to serve, be consistent with the composition of the Board and each corresponding committee thereof.

4.15 Committees. [***]

4.16 Insurance. To the extent not already obtained, the Company and, to the extent applicable, its subsidiaries shall obtain, within [ninety (90) days] of the date hereof,

a general liability and directors' and officers' liability insurance policies, in each case on terms and conditions that are acceptable to the Board. The Company (and its subsidiaries, to the extent that such subsidiaries obtain such policies) shall maintain such policies in full force and effect at all times.

4.17 Stock Sale. No Stockholder shall enter into any transaction or series of related transactions resulting in a Deemed Liquidation Event (as such term is defined in the Restated Certificate) unless the terms of such transaction or transactions provide that the consideration to be paid to the stockholders of the Company is to be allocated in accordance with the preferences and priorities set forth in the Restated Certificate.

4.18 [***]h

4.19 Matters Requiring Investor Director Approval. The Company hereby covenants and agrees with each of the Stockholders that it shall not, without approval of the Board, [***]

4.20 Notice of Board Meetings. [***]

4.21 Termination of Covenants. The covenants set forth in this Section 4 (other than those set forth in Section 4.8 and Section 4.11) shall terminate upon the earliest to occur of: (i) immediately before the consummation of the Initial Offering, (ii) a Sale of the Company or a SPAC merger, provided that the provisions of Section 4.7 and Section 4.12 shall continue after the closing of any Sale of the Company to the extent necessary to enforce the provisions of Section 4.7 with respect to such Sale of the Company, and (iii) termination of this Agreement in accordance with Section 5.7.

5. Miscellaneous.

5.1 Successors and Assigns. Except as otherwise provided herein, the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties (including transferees of any shares of Registrable Securities) provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Section 2.12. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

5.2 Governing Law. This Agreement shall be governed by and construed under the laws of the State of Delaware as applied to agreements among Delaware residents entered into and to be performed entirely within Delaware, without regard to its principles of conflicts of laws.

5.3 Counterparts. This Agreement may be executed and delivered by facsimile or electronic signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

5.4 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

5.5 Notices. All notices and other communications given or made pursuant hereto shall be in writing and shall be deemed effectively given: (i) upon personal delivery to the party to be notified, (ii) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient; if not, then on the next business day, (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (iv) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the respective parties at the addresses set forth on the signature pages attached hereto (or at such other addresses as shall be specified by notice given in accordance with this Section 5.5). If notice is sent to the Company, a copy (which shall not constitute notice) shall also be sent to [***].

5.6 Expenses. If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

5.7 Entire Agreement; Amendments and Waivers. This Agreement (including the Exhibits hereto, if any) constitutes the full and entire understanding and agreement among the parties with regard to the subjects hereof and thereof and supersedes all other agreements of the parties hereto relating to the subject matter hereof and thereof (including, without limitation, the Prior Agreement). Any term of this Agreement may be amended, modified or terminated, and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Company and the holders of a majority of the outstanding Series D Preferred Stock which majority must include [***]. Notwithstanding the foregoing, [***]. Any amendment, modification, termination or waiver so effected shall be binding upon all the Parties hereto and all Parties' respective successors and permitted assigns, whether or not any such Party, successor or assign entered into or approved such amendment, modification, termination or waiver. Notwithstanding the foregoing, any provision hereof may be waived by the waiving Party on such Party's behalf, without the written consent of any other Party. Notwithstanding the foregoing, (i) this Agreement may not be amended, modified or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, termination, or waiver applies to all Investors in the same fashion, (ii) no amendment or modification to, or waiver or termination of, this Agreement, (by merger, consolidation or otherwise) shall be effective as to any Investor without that Investor's written consent if such amendment, modification, waiver or termination would impose or would reasonably be expected to impose, any non-competition or non-solicitation covenant on such Investor or would otherwise restrict, or would reasonably be expected to otherwise restrict, such Investor from conducting any business or commercial activity [***].

5.8 Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be held to be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

5.9 Aggregation of Stock. All Registrable Securities held or acquired by Affiliates (including affiliated venture capital funds) or persons shall be aggregated together for the purpose of determining the availability of any rights under this Agreement.

5.10 Additional Parties.

(a) Notwithstanding Section 5.7 no consent shall be necessary to add additional Investors as signatories to this Agreement, provided that such Investors have purchased Series D Preferred Stock pursuant to the Series D Agreement, as may be amended from time to time, and have signed a counterpart signature page hereto. Schedule A to this Agreement shall be updated without any action of the Investors to reflect such additional Investors.

(b) In the event that after the date of this Agreement, the Company enters into an agreement with any Person to issue shares of capital stock to such Person (other than to a purchaser of Series D Preferred described in Section 5.10(a) above), following which such Person would hold Shares representing [***] or more of the Company's then outstanding capital stock (treating for this purpose all shares of Common Stock issuable upon exercise or conversion of all then outstanding options, warrants or convertible securities (whether or not then exercisable or convertible) as outstanding), then (i) the Company shall cause such Person, as a condition precedent to the issuance of such capital stock, to become a party to this Agreement by executing an adoption agreement agreeing to be bound by and subject to the terms of this Agreement as a Key Holder and Stockholder hereunder and thereafter such Person shall be deemed a Key Holder and Stockholder for all purposes under this Agreement and (ii) notwithstanding Section 5.7, no consent shall be necessary to add such Person as a signatory to this Agreement.

5.11 Effect on Prior Agreement. Upon the effectiveness of this Agreement, the Prior Agreement automatically shall terminate and be of no further force and effect and shall be amended and restated in its entirety as set forth in this Agreement.

5.12 FIRPTA. Upon request of Investor, the Company shall provide (i) a statement (in such form as may be reasonably requested by Investor) conforming to the requirements of Section 1.897-2(h)(1)(i) and 1.1445-2(c)(3)(i) of the Treasury Regulations certifying that interests in the Company do not constitute "United States real property interests" under Section 897(c) of the Internal Revenue Code of 1986, as amended, and (ii) evidence in form and substance satisfactory to Investor that the Company has delivered to the Internal Revenue Service the notification required under Section 1.897-2(h)(2) of the Treasury Regulations.

(*Remainder of page intentionally left blank*)

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Investors' Rights Agreement as of the date first above written.

COMPANY:

AKILI INTERACTIVE LABS, INC.

By: /s/ W. Edward Martucci, Ph.D.

Name: W. Edward Martucci, Ph.D.

Title: Chief Executive Officer

Address: 125 Broad Street, 5th Floor

Boston, MA 02110

IN WITNESS WHEREOF, the parties have executed this Third Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTORS:

[***]

Exhibit 4.25

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED (INDICATED BY: [***] FROM THE EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) THE TYPE OF INFORMATION THAT THE REGISTRANT CUSTOMARILY AND ACTUALLY TREATS AS PRIVATE OR CONFIDENTIAL.

Execution Version

AKILI INTERACTIVE LABS, INC.
AMENDED AND RESTATED FIRST REFUSAL AND CO-SALE AGREEMENT

This **AMENDED AND RESTATED FIRST REFUSAL AND CO-SALE AGREEMENT** (the "Agreement") is entered into as of the 25th day of May, 2021 by and among **AKILI INTERACTIVE LABS, INC.**, a Delaware corporation (the "Company"), the holders of Common Stock of the Company (the "Common Stock"), or of options to purchase Common Stock, listed on Exhibit A attached hereto (each a "Common Holder" and, together, the "Common Holders") and the holders of Preferred Stock of the Company (the "Preferred Shares") listed on Exhibit B attached hereto (each an "Investor" and together, the "Investors").

RECITALS

WHEREAS, the Company and certain of the Investors are parties to that certain Series D Preferred Stock Purchase Agreement of even date herewith (the "Series D Agreement"), pursuant to which certain of the Investors are purchasing shares of the Company's Series D Preferred Stock;

WHEREAS, each Common Holder is the beneficial owner of the number of shares of Common Stock or options to purchase Common Stock set forth opposite his/her name on Schedule A attached hereto;

WHEREAS, the Company, certain of the Common Holders and certain of the Investors previously entered into a First Refusal and Co-Sale Agreement, dated January 20, 2016 and an Amended and Restated First Refusal and Co-Sale Agreement, dated [***] (the "Prior Agreement");

WHEREAS, the parties to the Prior Agreement desire to amend and restate the Prior Agreement in its entirety and accept the rights and obligations created pursuant to this Agreement in lieu of their rights and obligations under the Prior Agreement;

WHEREAS, the stockholders of the Company signatory hereto hold the requisite shares of capital stock in order to amend and restate the Prior Agreement in accordance with the terms thereof (subject to the execution of this Agreement by the Company); and

WHEREAS, each Common Holder wishes to provide further inducement to the Investors to purchase the Preferred Shares.

NOW, THEREFORE, in consideration of the foregoing premises and certain other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree that the Prior Agreement shall be amended and restated in the entirety by this Agreement and further agree as follows:

1. Definitions.

(a) Affiliate. For purposes of this Agreement, the term "Affiliate" shall mean, (i) with respect to any Person, any other Person who or which, directly or indirectly, controls, is controlled by, or is under common control with such specified Person, including, without limitation, any general partner, officer, director or manager of such Person and any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or is under common investment management with, such Person, (ii) with respect of TLS Beta Pte. Ltd. ("Temasek"), Temasek's ultimate holding company, Temasek Holdings (Private) Limited ("Temasek Holdings"), and Temasek Holdings' direct and indirect wholly owned companies whose boards of directors or equivalent governing bodies comprise solely of nominees or employees of (a) Temasek Holdings; (b) Temasek Pte. Ltd; and/or (c) wholly owned direct or indirect subsidiaries of Temasek Pte. Ltd.; (iii) with respect to Edinburgh Worldwide Investment Trust plc, any person that receives, directly or indirectly, investment management or management advisory services from Baillie Gifford & Co. or Baillie Gifford Overseas Limited or any of their affiliates and (iv) with respect to Neuberger Berman Principal Strategies PRIMA Fund LP ("Neuberger"), any person that receives, directly or indirectly, investment management or management advisory services from Neuberger Berman Investment Advisers LLC and/or NB Alternatives Advisers LLC or any successor or affiliated registered investment advisor of such firms.

(b) Delivery. For purposes of this Agreement, the term "Delivery" shall have the meaning set forth in Section 6 below.

(c) Equity Securities. For purposes of this Agreement, the term "Equity Securities" shall mean any securities now or hereafter owned or held by a Common Holder (or a transferee who receives such securities subject to the rights of the Company and the Holders under Section 2.1 and Section 2.2) having voting rights in the election of the Board of Directors of the Company, or any securities evidencing an ownership interest in the Company, or any securities convertible into, exchangeable for or exercisable for any shares of the foregoing.

(d) Holders. For purposes of this Agreement, the term "Holders" shall mean the Investors or persons who have acquired shares from any of such persons or their transferees or assignees in accordance with the provisions of this Agreement.

(e) Person. For purposes of this Agreement, the term "Person" shall mean any individual, corporation, partnership, trust, limited liability company, association or other entity.

(f) Transfer. For purposes of this Agreement, the term "Transfer" shall include any sale, assignment, encumbrance, hypothecation, pledge, conveyance in trust, gift, transfer by bequest, devise or descent, or other transfer or disposition of any kind, including, without limitation, transfers pursuant to divorce or legal separation, transfers to receivers, levying creditors, trustees or receivers in bankruptcy proceedings or general assignees for the benefit of creditors, whether voluntary, involuntarily or by operation of law, directly or indirectly, of any of the Equity Securities.

2. Agreements Among the Company, the Holders and the Common Holders.

2.1 Rights of Refusal.

(a) Transfer Notice. If at any time a Common Holder proposes to Transfer Equity Securities (a "Selling Common Holder"), then the Selling Common Holder shall promptly give the Company and each Holder written notice of the Selling Common Holder's

intention to make the Transfer (the "Transfer Notice"). The Transfer Notice shall include (i) a description of the Equity Securities to be Transferred (the "Offered Shares"), (ii) the name(s) and address(es) of the prospective transferee(s), (iii) the purchase price and form of consideration proposed to be paid for the Offered Shares and (iv) the other material terms and conditions upon which the proposed Transfer is to be made. The Transfer Notice shall certify that the Selling Common Holder has received a firm offer from the prospective transferee(s) and in good faith believes a binding agreement for the Transfer is obtainable on the terms set forth in the Transfer Notice. The Transfer Notice shall also include a copy of any written proposal, term sheet or letter of intent or other agreement relating to the proposed Transfer. In the event that the transfer is being made pursuant to the provisions of Section 2.4, the Transfer Notice shall state under which specific clause of Section 2.4 the Transfer is being made.

(b) Company's Right of First Refusal. The Company shall have an option for a period of [***] from Delivery of the Transfer Notice to elect to purchase the Offered Shares at the same price and subject to the same material terms and conditions as described in the Transfer Notice. The Company may exercise such purchase option and purchase all or any portion of the Offered Shares by notifying the Selling Common Holder in writing before expiration of such [ten (10) day] period as to the number of such shares that it wishes to purchase. If the Company gives the Selling Common Holder notice that it desires to purchase such shares, then payment for the Offered Shares shall be made by check or wire transfer against delivery of the Offered Shares to be purchased at a time and place agreed upon between the parties, which time shall be no later than [***] after Delivery to the Company of the Transfer Notice, unless the Transfer Notice contemplated a later closing with the prospective third-party transferee(s) or unless the value of the consideration to be paid for the Offered Shares has not yet been established pursuant to Section 2.1(e)(ii). If the Company fails to purchase any or all of the Offered Shares by exercising the option granted in this Section 2.1(b) within the period provided, the remaining Offered Shares shall be subject to the options granted to the Holders pursuant to Section 2.1(c)-(d).

(c) Additional Transfer Notice. Subject to the Company's option set forth in Section 2.1(b), if at any time the Selling Common Holder proposes a Transfer, then, within [***] after the Company has declined to purchase all, or a portion, of the Offered Shares or the Company's option to so purchase the Offered Shares has expired, the Selling Common Holder shall give each Holder an "Additional Transfer Notice" that shall include all of the information and certifications required in a Transfer Notice and shall additionally identify the Offered Shares that the Company has declined to purchase (the "Remaining Shares") and reference the Holders' rights of first refusal and co-sale rights with respect to the proposed Transfer contained in this Agreement.

(d) Holders' Right of First Refusal.

(i) Each Holder shall have an option for a period of [***] from the Delivery of the Additional Transfer Notice from the Selling Common Holder set forth in Section 2.1(c) to elect to purchase its respective pro rata share of the Remaining Shares at the same price and subject to the same material terms and conditions as described in the Additional Transfer Notice. Each Holder may exercise such purchase option and purchase all or any portion of its pro rata share of the Remaining Shares (a "Participating Holder" for the purposes of this Section 2.1(d) and Section 2.1(e)), by notifying the Selling Common Holder and the Company in writing, before expiration of the [***] period as to the number of such shares that it wishes to purchase (the "Participating Holder Notice"). Each Holder's pro rata share of the Remaining Shares shall be a fraction of the Remaining Shares, the numerator of which shall be the number of shares of Common Stock (including shares of Common Stock issuable upon conversion of Preferred Shares) owned by such Holder on the date of the Transfer Notice and denominator of which shall be the total number of shares of Common Stock (including shares of Common Stock

issuable upon conversion of Preferred Shares) held by all Holders on the date of the Transfer Notice.

(ii) In the event any Holder elects not to purchase its pro rata share of the Remaining Shares available pursuant to its option under Section 2.1(d)(i) within the time period set forth therein, then the Selling Common Holder shall promptly give written notice (the "Overallotment Notice") to each Participating Holder that has elected to purchase all of its pro rata share of the Remaining Shares (each a "Fully Participating Holder"), which notice shall set forth the number of Remaining Shares not purchased by the other Holders ("Unsubscribed Shares"), and shall offer the Fully Participating Holders the right to acquire the Unsubscribed Shares. Each Fully Participating Holder shall have [***] after Delivery of the Overallotment Notice to deliver a written notice to the Selling Common Holder (the "Participating Holders Overallotment Notice") of its election to purchase its pro rata share of the Unsubscribed Shares on the same terms and conditions as set forth in the Additional Transfer Notice, which such Participating Holders Overallotment Notice shall also indicate the maximum number of the Unsubscribed Shares that such Fully Participating Holder will purchase in the event that any other Fully Participating Holder elects not to purchase its pro rata share of the Unsubscribed Shares. For the purposes of determining a Fully Participating Holder's pro rata share of the Unsubscribed Shares under this Section 2.1(d)(ii), the numerator shall be the same as that used in Section 2.1(d)(i) above and the denominator shall be the total number of shares of Common Stock (including shares of Common Stock issuable upon conversion of Preferred Shares) owned by all Fully Participating Holders on the date of the Transfer Notice.

(iii) Each Participating Holder shall be entitled to apportion Remaining Shares to be purchased among its partners and Affiliates, provided that such Participating Holder notifies the Selling Common Holder of such allocation.

(e) Payment.

(i) The Participating Holders shall effect the purchase of the Remaining Shares with payment by check or wire transfer against delivery of the Remaining Shares to be purchased at a time and place agreed upon between the parties, which time shall be no later than [***] after Delivery to the Company of the Transfer Notice, unless the Transfer Notice contemplated a later closing with the prospective third-party transferee(s) or unless the value of the consideration to be paid for the Offered Shares has not yet been established pursuant to Section 2.1(e)(ii).

(ii) Should the purchase price specified in the Transfer Notice or Additional Transfer Notice be payable in a form of consideration other than cash or evidences of indebtedness, the Company (and the Participating Holders) shall have the right to pay such purchase price in an amount of cash equal to the fair market value of such consideration. If the Selling Common Holder and the Company (or the Participating Holders) cannot agree on such fair market value within [***] after Delivery to the Company of the Transfer Notice (or the Delivery of the Additional Transfer Notice to the Holders), the valuation shall be made by an appraiser of recognized standing selected by the Selling Common Holder and the Company (or [***] of the Participating Holders) or, if they cannot agree on an appraiser within [***] after Delivery to the Company of the Transfer Notice (or the Delivery of the Additional Transfer Notice to the Holders), each shall select an appraiser of recognized standing and those appraisers shall designate a third appraiser of recognized standing, whose appraisal shall be determinative of such value. The cost of such appraisal shall be shared equally by the Selling Common Holder, on the one hand, and the Company (and, to the extent there are any, the Participating Holders, on the other hand, with that half of the cost to be borne by the Company and the Participating Holders to be apportioned on a pro rata basis based on the number of shares each such party has expressed an interest in purchasing pursuant to this Section 2). If the time for the closing of the

Company's purchase or the Participating Holders' purchase has expired but the determination of the value of the purchase price offered by the prospective transferee(s) has not been finalized, then such closing shall be held on or prior to the [***] after such valuation shall have been made pursuant to this Section 2.1(e)(ii).

2.2 Right of Co-Sale.

(a) To the extent the Company and the Holders do not exercise their respective rights of refusal as to all of the Offered Shares pursuant to Section 2.1, then each Holder (a "Selling Holder" for purposes of this Section 2.2 and Section 2.6) that notifies the Selling Common Holder in writing within [***] after Delivery of the Additional Transfer Notice referred to in Section 2.1(c) shall have the right to participate in such sale of Equity Securities on the same terms and conditions as specified in the Transfer Notice. Such Selling Holder's notice to the Selling Common Holder shall indicate the number of shares of capital stock of the Company that the Selling Holder desires to sell. To the extent one or more Selling Holders exercise such right of participation in accordance with the terms and conditions of this Section 2.2, the number of shares of Equity Securities that the Selling Common Holder may sell in the Transfer shall be correspondingly reduced.

(b) Each Selling Holder may sell all or any part of that number of shares of Common Stock (or capital stock of the Company convertible into such number of shares of Common Stock) equal in the aggregate to the product obtained by multiplying (i) the aggregate number of shares of Equity Securities covered by the Transfer Notice that have not been subscribed for pursuant to Section 2.1 by (ii) a fraction, the numerator of which is the number of shares of Common Stock (including shares of Common Stock issuable upon conversion of Preferred Shares) owned by such Selling Holder on the date of the Transfer Notice and the denominator of which is the total number of shares of Common Stock (including shares of Common Stock issuable upon conversion of Preferred Shares) owned by the Selling Common Holder and all of the Selling Holders on the date of the Transfer Notice.

(c) Each Selling Holder shall effect its participation in the sale by promptly delivering to the Selling Common Holder for transfer to the prospective purchaser one or more certificates, properly endorsed for transfer, which represent:

(i) the number of shares of Common Stock that such Selling Holder elects to sell; or

(ii) that number of shares of capital stock of the Company that are at such time convertible into the number of shares of Common Stock that such Selling Holder elects to sell; provided, however, that if the prospective third-party purchaser objects to the delivery of shares of capital stock of the Company other than Common Stock, such Selling Holder shall convert such shares of capital stock of the Company into Common Stock and deliver Common Stock as provided in this Section 2.2. The Company agrees to make any such conversion concurrent with the actual transfer of such shares to the purchaser and contingent on such transfer.

(d) The stock certificate or certificates that each Selling Holder delivers to the Selling Common Holder pursuant to Section 2.2(c) shall be transferred to the prospective purchaser in consummation of the sale of the Equity Securities pursuant to the terms and conditions specified in the Transfer Notice, and such Selling Common Holder shall concurrently therewith remit to such Selling Holder that portion of the sale proceeds to which such Selling Holder is entitled by reason of its participation in such sale. To the extent that any prospective purchaser or purchasers prohibits such assignment or otherwise refuses to purchase shares or other securities from a Selling Holder exercising its rights of co-sale hereunder, the

Selling Common Holder shall not sell to such prospective purchaser or purchasers any Equity Securities unless and until, simultaneously with such sale, the Selling Common Holder shall purchase such shares or other securities from such Selling Holder for the same consideration and on the same terms and conditions as the proposed transfer described in the Transfer Notice.

2.3 Non-Exercise of Rights. To the extent that the Company and the Holders have not exercised their rights to purchase the Offered Shares or the Remaining Shares within the time periods specified in Section 2.1 and the Holders have not exercised their rights to participate in the sale of the Remaining Shares within the time periods specified in Section 2.2, the Selling Common Holder shall have a period of [***] from the expiration of such rights in which to sell the Offered Shares or the Remaining Shares, as the case may be, upon terms and conditions (including the purchase price) no more favorable than those specified in the Transfer Notice, to the third-party transferee(s) identified in the Transfer Notice. The Company's first refusal rights and the Holders' first refusal rights and co-sale rights shall continue to be applicable to any subsequent disposition of the Offered Shares or the Remaining Shares acquired by the third-party transferee(s) until such rights lapse in accordance with the terms of this Agreement. In the event the Selling Common Holder does not consummate the sale or disposition of the Offered Shares and Remaining Shares within the [***] period from the expiration of these rights, the Company's first refusal rights and the Holders' first refusal rights and co-sale rights shall continue to be applicable to any subsequent disposition of the Offered Shares or the Remaining Shares by the Selling Common Holder until such rights lapse in accordance with the terms of this Agreement. Furthermore, the exercise or non-exercise of the rights of the Company and the Holders under this Section 2 to purchase Equity Securities from the Selling Common Holder or participate in sales of Equity Securities by the Selling Common Holder shall not adversely affect their rights to make subsequent purchases from the Selling Common Holder of Equity Securities or subsequently participate in sales of Equity Securities by the Selling Common Holder.

2.4 Limitations to Rights of Refusal and Co-Sale. Notwithstanding the provisions of Sections 2.1 and 2.2 of this Agreement, the first refusal rights of the Company and first refusal and co-sale rights of the Holders shall not apply to (i) the Transfer of Equity Securities by a Common Holder for estate planning purposes, either during such Common Holder's lifetime or on death by will or intestacy to such Common Holder's spouse or other member of a Common Holder's immediate family, or to a custodian, trustee (including a trustee of a voting trust), executor or other fiduciary for the account of the Common Holder's spouse or members of the Common Holder's immediate family, or to a trust for the Common Holder's own self, or a charitable remainder trust, (ii) a repurchase of Equity Securities from a Common Holder by the Company at cost and pursuant to an agreement containing vesting and/or repurchase provisions, (iii) any sale of Equity Securities pursuant to the exercise of the bring-along right set forth in Section 4.6 of that certain Second Amended and Restated Investors' Rights Agreement of even date herewith by and among the Company and the other parties thereto, as may be amended from time to time, (iv) any sale of Equity Securities to the public pursuant to a registration statement filed with, and declared effective by, the Securities and Exchange Commission under the Securities Act of 1933, as amended, (v) any pledge of Equity Securities held by a Common Holder made pursuant to a bona fide loan transaction that creates a mere security interest or (vi) any bona fide gift to any charitable organization described in Section 501(c)(3) of the Internal Revenue Code; provided, however, that in the event of any transfer made pursuant to one of the exemptions provided by clause(s) (i) or (vi), (A) the Common Holder shall inform the Holders of such Transfer prior to effecting it and (B) each such transferee or assignee, prior to the completion of the Transfer, shall have executed documents assuming the obligations of Common Holder under this Agreement with respect to the transferred Equity Securities. Such transferred Equity Securities shall remain "Equity Securities" hereunder, and such pledgee, transferee or donee shall be treated as a "Common Holder" for purposes of this Agreement.

2.5 Prohibited Transfers.

(a) Except as otherwise provided in this Agreement, each Common Holder will not sell, assign, transfer, pledge, hypothecate or otherwise encumber or dispose of in any way, all of, any part of or any interest in such Common Holder's Equity Securities. Any sale, assignment, transfer, pledge, hypothecation or other encumbrance or disposition of Equity Securities not made in conformance with this Agreement shall be null and void, shall not be recorded on the books of the Company and shall not be recognized by the Company.

(b) In the event a Common Holder should sell any Equity Securities in contravention of the co-sale rights of the Holders under Section 2.2 (a "Prohibited Transfer"), the Holders, in addition to such other remedies as may be available at law, in equity or hereunder, shall have the put option provided below under Section 2.5(c), and such Common Holder shall be bound by the applicable provisions of such option.

(c) In the event of a Prohibited Transfer, each Holder shall have the right to sell to the Common Holder making such Prohibited Transfer the type and number of shares of Equity Securities equal to the number of shares each Holder would have been entitled to transfer to the third-party transferee(s) under Section 2.2 hereof had the Prohibited Transfer been effected pursuant to and in compliance with the terms hereof. Such sale shall be made on the following terms and conditions:

(i) The price per share at which the shares are to be sold to the Common Holder shall be equal to the price per share paid by the third-party transferee(s) to the Common Holder in the Prohibited Transfer. The Common Holder shall also reimburse each Holder for any and all fees and expenses, including legal fees and expenses, incurred pursuant to the exercise or the attempted exercise of the Holder's rights under Section 2.2.

(ii) Within [***] after the later of (A) the date on which the Holder receives notice of the Prohibited Transfer and (B) the date on which the Holder otherwise becomes aware of the Prohibited Transfer, each Holder shall, if exercising the option created hereby, deliver to the Common Holder the certificate or certificates representing shares to be sold, each certificate to be properly endorsed for transfer.

(iii) The Common Holder shall, upon receipt of the certificate or certificates for the shares to be sold by a Holder pursuant to this Section 2.5, pay the aggregate purchase price therefor and the amount of fees and expenses reimbursable under Section 2.5(c)(i) in cash or by other means acceptable to the Holder.

2.6 Violation of First Refusal Right. If any Common Holder becomes obligated to sell any Equity Securities to the Company or any Holder under this Agreement and fails to deliver such Equity Securities in accordance with the terms of this Agreement, the Company and/or such Holder may, at its option, in addition to all other remedies it may have, send to such Common Holder the purchase price for such Equity Securities as is herein specified and transfer to the name of the Company or such Holder (or request that the Company effect such transfer in the name of a Holder) on the Company's books the certificate or certificates representing the Equity Securities to be sold.

2.7 Status of Shares. Holders that have exercised their rights to purchase the Offered Shares and/or the Remaining Shares pursuant to Section 2.1 shall acquire the Offered Shares and/or the Remaining Shares free and clear of subsequent rights of first refusal and co-sale rights under this Agreement.

3. Assignments and Transfers; No Third-Party Beneficiaries.

3.1 Assignment of Rights. This Agreement and the rights and obligations of the parties hereunder shall inure to the benefit of, and be binding upon, their respective successors, assigns and legal representatives, but shall not otherwise be for the benefit of any third party.

3.2 Condition to Transfer. Any successor or permitted assignee of any Common Holder, including any prospective transferee who purchases any Equity Securities in accordance with the terms hereof, shall deliver to the Company and the Holders, as a condition to any transfer or assignment, a counterpart signature page hereto pursuant to which such successor or permitted assignee shall confirm their agreement to be subject to and bound by all of the provisions set forth in this Agreement that were applicable to the predecessor or assignor of such successor or permitted assignee.

3.3 Restrictions on Assignment. The rights of the Holders hereunder are only assignable (a) to any other Holder, (b) to a partner, member or Affiliate of such Holder or (c) to an assignee or transferee who acquires all of the Equity Securities held by a particular Holder or at least [***] shares of Common Stock (including shares of Common Stock issuable upon conversion of Preferred Shares) (as adjusted for stock splits, combinations, dividends, recapitalizations and the like); provided, that any such assignment shall be subject to and conditioned upon any such assignee's delivery to the Company a counterpart signature page hereto pursuant to which such assignee shall confirm his, her or its agreement to be subject to and bound by all of the provisions set forth in this Agreement that were applicable to the assignor of such assignee. Notwithstanding Section 10 of this Agreement, no consent shall be necessary to update Schedule B to add any such assignee as an "Investor" hereunder.

4. Legend. Each existing or replacement certificate for shares now owned or hereafter acquired by a Common Holder shall bear the following legend upon its face:

"THE SALE, PLEDGE, HYPOTHECATION, ASSIGNMENT OR TRANSFER OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE IS SUBJECT TO THE TERMS AND CONDITIONS OF A CERTAIN AMENDED AND RESTATED FIRST REFUSAL AND CO-SALE AGREEMENT BY AND BETWEEN THE STOCKHOLDER, THE CORPORATION AND CERTAIN HOLDERS OF STOCK OF THE CORPORATION, AS MAY BE AMENDED AND/OR RESTATED FROM TIME TO TIME. COPIES OF SUCH AGREEMENT MAY BE OBTAINED UPON WRITTEN REQUEST TO THE SECRETARY OF THE CORPORATION."

5. Effect of Change in Company's Capital Structure. If, from time to time, the Company pays a stock dividend or effects a stock split or other change in the character or amount of any of the outstanding stock of the Company, then in such event any and all new, substituted or additional securities to which a Common Holder is entitled by reason of such Common Holder's ownership of Equity Securities shall be immediately subject to the rights and obligations set forth in this Agreement with the same force and effect as the stock subject to such rights immediately before such event.

6. Notices. All notices and other communications given or made pursuant hereto shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient; if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. The occurrence of the events set forth in clauses (a) through (d) above shall constitute "Delivery" of notice. All notices and other communications

shall be sent to the Company at and to the other parties at the addresses set forth on the signature pages and/or Schedule A or Schedule B hereto, as applicable (or at such other addresses as shall be specified by notice given in accordance with this Section 6).

7. Further Instruments and Actions. The parties agree to execute such further instruments and to take such further action as may reasonably be necessary to carry out the intent of this Agreement. Each Common Holder agrees to cooperate affirmatively with the Company, the Investors and the Holders to enforce rights and obligations pursuant hereto.

8. Term. This Agreement shall terminate and be of no further force or effect upon [***]

9. Entire Agreement. This Agreement contains the entire understanding of the parties hereto with respect to the subject matter hereof and supersedes all other agreements between or among any of the parties with respect to the subject matter hereof, including without limitation the Prior Agreement. This Agreement shall be interpreted under the laws of the State of Delaware without reference to Delaware conflicts of law provisions.

10. Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of [***] Notwithstanding the foregoing, (i) this Agreement may not be amended or terminated and the observance of any term hereof may not be waived with respect to any Holder without the written consent of such Holder, unless such amendment, termination, or waiver applies to all Holders in the same fashion. [***].

11. Severability. If one or more provisions of this Agreement is held to be unenforceable under applicable law, such provision shall be excluded from this Agreement and the balance of the Agreement shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms.

12. Attorneys' Fees. In the event that any dispute among the parties to this Agreement should result in litigation, the prevailing party in such dispute shall be entitled to recover from the losing party all fees, costs and expenses of enforcing any right of such prevailing party under or with respect to this Agreement, including, without limitation, such reasonable fees and expenses of attorneys and accountants, which shall include, without limitation, all fees, costs and expenses of appeals.

13. Aggregation of Stock. For the purposes of determining the availability of any rights under this Agreement, the holdings of any transferee and assignee of an individual or a partnership who is a spouse, ancestor, lineal descendant or siblings of such individual or partners or retired partners of such partnership or Affiliates of such partnership (including spouses and ancestors, lineal descendants and siblings of such partners or spouses who acquire Common Stock by gift, will or intestate succession) shall be aggregated together with the individual or partnership, as the case may be, for the purpose of exercising any rights or taking any action under this Agreement.

14. Conflict with Other Rights of First Refusal. Each Common Holder has entered into a stock purchase agreement or stock restriction agreement with the Company on the Company's standard form (together with any additional stock purchase agreements, stock restriction agreements or option agreements that a Common Holder may enter into with the Company, the "Purchase Agreements"), which agreement contains a right of first refusal provision in favor of the Company. For so long as this Agreement remains in existence, the right of first refusal provisions contained in this Agreement shall supersede the right of first refusal

provisions contained in the Common Holder's Purchase Agreements; provided, however, that the other provisions of the Common Holder's Purchase Agreements shall remain in full force and effect. If, however, this Agreement shall terminate, the right of first refusal provisions contained in the Common Holder's Purchase Agreements shall be in full force and effect in accordance with its terms.

15. Additional Investors. Notwithstanding Section 10 of this Agreement, no consent shall be necessary to add additional Investors as signatories to this Agreement and to update Schedule B accordingly, provided that such Investors have purchased Series D Preferred Stock pursuant to the Series D Agreement.

16. Specific Performance. In addition to any and all other remedies that may be available at law in the event of any breach of this Agreement, each Holder shall be entitled to specific performance of the agreements and obligations of the Company, the Common Holder and the other Holders hereunder and to such other injunction or other equitable relief as may be granted by a court of competent jurisdiction.

17. Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered by facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

18. Additional Common Holders. In the event that after the date of this Agreement, the Company issues shares of Common Stock to any officer of the Company or to any other individual, which shares would collectively constitute with respect to such individual (taking into account all shares of Common Stock, options and other purchase rights held by such individual) [***] or more of the Company's then outstanding Common Stock (treating for this purpose all shares of Common Stock issuable upon exercise of or conversion of outstanding options, warrants or convertible securities, as if exercised or converted), the Company shall, as a condition to such issuance, cause such officer of the Company or such other individual to execute a counterpart signature page hereto as a Common Holder, and such person shall thereby be bound by, and subject to, all the terms and provisions of this Agreement applicable to a Common Holder. Notwithstanding Section 10 of this Agreement, no consent shall be necessary to add such additional Common Holders as signatories to this Agreement and update Schedule A accordingly.

19. Effect on Prior Agreement. Upon the effectiveness of this Agreement, the Prior Agreement automatically shall terminate and be of no further force and effect and shall be amended and restated in its entirety as set forth in this Agreement.

[*Remainder of page intentionally left blank*]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.

COMPANY:

AKILI INTERACTIVE LABS, INC.

By: /s/ W. Edward Martucci

Name: W. Edward Martucci, Ph.D.

Title: Chief Executive Officer

Address: 125 Broad Street, 5th Floor

Boston, MA 02110

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.

INVESTORS:

[***]

Exhibit 4.26

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED (INDICATED BY: [***]) FROM THE EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) THE TYPE OF INFORMATION THAT THE REGISTRANT CUSTOMARILY AND ACTUALLY TREATS AS PRIVATE OR CONFIDENTIAL.

AMENDED AND RESTATED
INVESTORS' RIGHTS AGREEMENT

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AMENDED AND RESTATED
INVESTORS' RIGHTS AGREEMENT

THIS AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (this "**Agreement**"), is made as of the 1st day of March, 2023, by and among Vedanta Biosciences, Inc., a Delaware corporation (the "**Company**") each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an "**Investor**", each of the noteholders listed on Schedule B hereto, each of which is referred to in this Agreement as a "**Noteholder**" and each other person who becomes party to this Agreement as a Key Holder pursuant to Section 12.9(c).

RECITALS

WHEREAS, the Investors hold shares of the Company's Series A-1 Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series C-2 Preferred Stock and/or Series D Preferred Stock and possess certain rights to cause the Company to register shares of Common Stock issuable to the Investors, to receive certain information from the Company, to participate in future equity offerings by the Company, and certain other rights pursuant to that certain Amended and Restated Investors' Rights Agreement, dated as of July 14, 2021, as such was amended, by and among the Company and such Investors (the "**Prior Agreement**");

WHEREAS, the Investors holding at least **[***]** of the Preferred Stock outstanding as of the date hereof required to amend the Prior Agreement desire to amend and restate the Prior Agreement in its entirety and to accept the rights created pursuant to this Agreement in lieu of the rights granted under the Prior Agreement;

WHEREAS, the Company and the Noteholders are parties to that certain Secured Convertible Promissory Note Purchase Agreement of even date herewith (as may be amended from time to time, the "**Purchase Agreement**") for the purchase and sale of secured convertible promissory notes thereunder (each, a "**Note**"), and it is a condition to the closing of the sale of the Notes that such Investors and the Company execute and deliver this Agreement adding the Noteholders as party to the Agreement.

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth herein, and other consideration, the receipt and adequacy of which is hereby acknowledged, the Investors hereby agree that the Prior Agreement shall be amended and restated and the parties to this Agreement further agree as follows:

1. Definitions. For purposes of this Agreement:

(i) "**Affiliate**" means with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital or investment fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person. **[***]**.

(ii) **[***]**.

(iii) **[***]**.

(iv) "**Board**" means the board of directors of the Company.

(v) "**Code**" means the U.S. Internal Revenue Code of 1986, as amended.

(vi) "**Common Stock**" means shares of the Company's common stock, par value $0.0001 per share.

(vii) "**Competitor**" means **[***]**.

(viii) "**Damages**" means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

(ix) "**Derivative Securities**" means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly)**,** Common Stock, including the Notes, options and warrants.

(x) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(xi) "**Excluded Registration**" means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

(xii) "**FOIA Party**" means a Person that, in the reasonable determination of the Board, may be subject to, and thereby required to disclose nonpublic information furnished by or relating to the Company under, the Freedom of Information Act, 6 U.S.C. 552 ("**FOIA**"), any state public records access law, any state or other jurisdiction's laws similar in intent or effect to FOIA, or any other similar statutory or regulatory requirement.

(xiii) "**Form S-1**" means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

(xiv) "**Form S-3**" means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

(xv) "**GAAP**" means generally accepted accounting principles in the United States.

(xvi) **[***]**.

(xvii) **[***]**.

(xviii) "**Holder**" means an Investor, a Noteholder and any holder of Registrable Securities who is a party to this Agreement.

(xix) "**Immediate Family Member**" means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including, adoptive relationships, of a natural person referred to herein.

(xx) "**Initiating Holders**" means collectively, Holders who properly initiate a registration request under this Agreement.

(xxi) "**IPO**" means (1) the Company's first underwritten public offering of its Common Stock under the Securities Act or (2) a SPAC Transaction (as defined in the Restated Certificate (as defined in the Purchase Agreement).

(xxii) "**Key Employee**" means **[***]**.

(xxiii) "**Lead Investor Majority**" has the meaning given to it in the Purchase Agreement.

(xxiv) **[***]**.

(xxv) "**New Securities**" means collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

(xxvi) "**Noteholders**" means the holders of Notes set forth in Schedule B.

(xxvii) "**Permitted Transferee**" means (i) with respect to any Holder that is a discretionary managed fund or its nominee: (A) any partner, member, trustee, manager, beneficiary, shareholder, investor or other participant in such fund which is or whose nominee is the transferor (but only in connection with the dissolution of such fund or any distribution of assets of the fund pursuant to the operation of the fund in the ordinary course), (B) any other fund whose business is managed or advised by the same investment manager as manages or advises the fund which is or whose nominee is the transferor or another investment manager in the same group of companies as such first investment manager, (C) the investment manager who manages the business of the fund which is or whose nominee is the transferor, (D) any directors or employees of such Holder or any of the foregoing or any trust or carried interest or similar partnership in which they or any of them participate and/or (E) any nominee or custodian of the foregoing; (ii) with respect to any Holder that is an investment manager or its nominee: (A) any partner, member, trustee, manager, beneficiary, shareholder, investor or other participant in any investment fund in respect of which the shares to be transferred are held (but only in connection with the dissolution of such investment fund or any distribution of assets of the investment fund pursuant to the operation of the investment fund in the ordinary course), (B) any investment fund whose business is managed by the investment manager who is or whose nominee is the transferor, (C) any other investment manager who manages the business of the investment fund in respect of which the shares are held, (D) any directors or employees of such Holder or any of the foregoing or any trust or carried interest or similar partnership in which they or any of them participate and/or (E) any nominee or

custodian of the foregoing; (iii) with respect to the Gates Foundation (A) any successor charitable organization of the Gates Foundation from time to time that is a tax-exempt organization as described in Section 501(c)(3) of the Code, or (b) any tax-exempt organization as described in Section 501(c)(3) of the Code controlled by one or more trustees of the Gates Foundation and (iv) with respect to the Magnetar Group: (A) any partner, member, trustee, manager, beneficiary, shareholder, investor or other participant in such entity which is or whose nominee is the transferor (but only in connection with the dissolution of such entity or any distribution of assets of the entity pursuant to the operation of such entity in the ordinary course), (B) any other entity whose business is managed or advised by the same investment manager as manages or advises such entity which is or whose nominee is the transferor or another investment manager in the same group of companies as such first investment manager, (C) the investment manager who manages the business of such entity which is or whose nominee is the transferor, (D) any directors, managers or employees of such Holder or any of the foregoing or any trust or carried interest or similar partnership in which they or any of them participate and/or (E) any nominee or custodian of the foregoing.

(xxviii)"**Person**" means any individual, corporation, partnership, trust, limited liability company, association or other entity.

(xxix) "**Preferred Stock**" means collectively, shares of the Company's Series A-1 Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series C-2 Preferred Stock and Series D Preferred Stock.

(xxx) "**Preferred Director**" means **[***]**

(xxxi) "**Registrable Securities**" means (i) Common Stock issuable or issued upon conversion of the Preferred Stock and (ii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clause (i) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Subsection 13.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Subsection 2.13 of this Agreement.

(xxxii) "**Registrable Securities then outstanding**" means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

(xxxiii)"**Restricted Securities**" means the securities of the Company required to be notated with the legend set forth in Subsection 2.12(b) hereof.

(xxxiv)"**Rock Springs**" means Rock Springs Capital Master Fund LP, Four Pines Master Fund LP, and their Affiliates.

(xxxv) "**SEC**" means the Securities and Exchange Commission.

(xxxvi)"**SEC Rule 144**" means Rule 144 promulgated by the SEC under the Securities Act.

(xxxvii) "**SEC Rule 145**" means Rule 145 promulgated by the SEC under the Securities Act.

(xxxviii) "**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

(xxxix)"**Selling Expenses**" means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Subsection 2.6.

(xl) **[***]**

(xli) **[***]**

(xlii) "**Series A-1 Preferred Stock**" means shares of the Company's Series A-1 Preferred Stock, par value $0.0001 per share.

(xliii) "**Series B Preferred Stock**" means shares of the Company's Series B Preferred Stock, par value $0.0001 per share.

(xliv) "**Series C Preferred Stock**" means shares of the Company's Series C Preferred Stock, par value $0.0001 per share.

(xlv) "**Series C-2 Preferred Stock**" means shares of the Company's Series C-2 Preferred Stock, par value $0.0001 per share.

(xlvi) "**Series D Preferred Stock**" means shares of the Company's Series D Preferred Stock, par value $0.0001 per share.

(xlvii) **[***]**.

(xlviii) "**Stockholder**" means a Holder , a Key Holder, and each other person who becomes party to this Agreement pursuant to Section 12.9.

2. Registration Rights. The Company covenants and agrees as follows:

1.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the earlier of (i) **[***]** after the date of this Agreement or (ii) **[***]** after the effective date of the registration statement for the IPO, the Company receives a request from Holders of at least **[***]** of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to at least **[***]** of the Registrable Securities then outstanding (or a lesser percent if the anticipated aggregate offering price, net of Selling Expenses, would exceed **[***]**), then the Company shall (x) within **[***]** after the date such request is given, give notice thereof (the "**Demand Notice**") to all Holders other than the Initiating Holders; and (y) as soon as practicable, and in any event within **[***]** after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within **[***]** of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least **[***]** of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to

outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least **[***]**, then the Company shall (i) within **[***]** after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within **[***]** after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within **[***]** of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Subsection 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Board it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than **[***]** after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than **[***]** in any **[***]** period; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such **[***]** period other than an Excluded Registration.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(a) (i) during the period that is **[***]** before the Company's good faith estimate of the date of filing of, and ending on a date that is **[***]** after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected **[***]** registrations pursuant to Subsection 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Subsection 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(b) (i) during the period that is **[***]** before the Company's good faith estimate of the date of filing of, and ending on a date that is **[***]** after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to Subsection 2.1(b) within the **[***]** period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Subsection 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Subsection 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Subsection 2.1(d).

1.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its Common Stock under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within **[***]** after such notice is given by the Company, the Company shall, subject to the provisions of Subsection 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Subsection 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Subsection 2.6.

1.3 Underwriting Requirements.

(a) If, pursuant to Subsection 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Subsection 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Subsection 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Subsection 2.3, if the managing underwriter advises the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Subsection 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine in good faith will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine in good faith that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, or (ii) the number of Registrable Securities included in the offering be reduced below **[***]** of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Subsection 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

1.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to **[***]** or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such **[***]** period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such **[***]** period shall be extended for up to **[***]**, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

1.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

1.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements of one counsel for the selling Holders ("Selling Holder Counsel"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Subsection 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b), as the case may be. All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

1.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

1.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Subsections 2.8(b) and (d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Subsection 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Subsection 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Subsection 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Subsection 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Subsection 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within

the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Subsection 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Subsection 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

1.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company; and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

1.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of **[***]** of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that would allow such holder or prospective holder to include such securities in any registration unless, under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the number of the Registrable Securities of the Holders that are included; provided that this limitation shall not apply to any additional Investor who becomes a party to this Agreement in accordance with Subsection 12.9 **[***]**.

1.11 "Market Stand-off" Agreement. Subject to the provisions of Subsection 12.1, each Holder, to the extent permitted by applicable laws and regulations, hereby agrees that it will not,

without the prior written consent of the managing underwriter (any such consent received, a "**Lock-Up Waiver**"), during the period commencing on the date of the final prospectus relating to the registration by the Company for its own behalf of shares of its Common Stock under the Securities Act on a registration statement on Form S-1, and ending on the date specified by the Company and the managing underwriter (such period not to exceed **[***]**), (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock held immediately before the effective date of the registration statement for such offering or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise; *provided* that the obligations described in this Subsection 2.11 shall not apply to any transfer that such Holder is required to make in order to comply with laws or regulations applicable to it (including those that have been established in accordance with the UCITS (Undertakings for Collective Investment in Transferable Securities) Directive). **[***]**. The foregoing provisions of this Subsection 2.11 shall apply only to the IPO and shall not apply to (i) the sale of any shares to an underwriter pursuant to an underwriting agreement, (ii) shares acquired by any Holder in an IPO or subsequent to an IPO in the open market, (iii) the transfer of any shares to any Affiliate or limited partner (or equivalent) of a Holder, provided that such transferee agrees to be bound in writing by the restrictions set forth herein or (iv) the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the immediate family of the Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value, and shall be applicable to the Holders only if all officers and directors are subject to the same restrictions and the Company uses commercially reasonable efforts to obtain a similar agreement from all stockholders individually owning more than **[***]** of the Company's outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Preferred Stock). The Company and PureTech hereby agree, and all of the Investors hereby acknowledge, that PureTech shall, without in any way limiting the obligations of any Investor other than PureTech under this Subsection 2.11, be granted additional exceptions to the application of this Subsection 2.11, as agreed upon in good faith by the Company and PureTech, to the extent reasonably necessary for PureTech to maintain exemption from registration under the Investment Company Act of 1940; provided, however, that to the extent that PureTech is granted any such additional exception, each other Holder shall, unless otherwise determined in writing by a Lead Investor Majority, also be granted an additional such exception so that the same pro rata portion of PureTech's and each such other Holder's Registrable Securities will not be subject to the foregoing restrictions of this Subsection 2.11. The underwriters in connection with such registration are intended third-party beneficiaries of this Subsection 2.11 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Subsection 2.11 or that are necessary to give further effect thereto.

1.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

(b) Each certificate, instrument, or book entry representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Subsection 2.12(c)) be notated with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Subsection 2.12.

(c) The holder of such Restricted Securities, by acceptance of ownership thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144; or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that each transferee agrees in writing to be subject to the terms of this Subsection 2.12. Each certificate, instrument, or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Subsection 2.12(b), except that such certificate instrument, or book entry shall not be notated with such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

1.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Subsections 2.1 or 2.2 shall terminate upon the earliest to occur of: **[***]**.

3. Voting Provisions Regarding Board of Directors.

1.1 Size of the Board. Each Stockholder agrees to vote, or cause to be voted, all Shares (as defined below) owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that the size of the Board shall be set and remain at eleven (11) directors and so long as at least **[***]** of the Preferred Stock outstanding as of the date hereof remain outstanding, may be increased only with the written consent of Investors holding a majority of the Preferred Stock then outstanding. For purposes of this Section 3, the term "Shares" shall mean and include any securities of the Company the holders of which are entitled to vote for members of the Board, including without limitation, all shares of Common

Stock, Series A-1 Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series C-2 Preferred Stock and Series D Preferred Stock, by whatever name called, now owned or subsequently acquired by a Stockholder, however acquired, whether through stock splits, stock dividends, reclassifications, recapitalizations, similar events or otherwise.

1.2 Board Composition. Each Stockholder agrees to vote, or cause to be voted, all Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that at each annual or special meeting of stockholders at which an election of directors is held or pursuant to any written consent of the stockholders, the following persons shall be elected to the Board:

(a) Two persons designated by a majority of the holders of the Series A-1 Preferred Stock then outstanding, one of which individuals shall initially be Bennett Shapiro (the "**Series A-1 Designees**"), and one seat shall be vacant as of the date hereof, for so long as such Stockholders and their Affiliates continue to own beneficially any shares of Series A-1 Preferred Stock.

(b) Two persons designated by a majority of the holders of the Series B Preferred Stock then outstanding, which individuals shall initially be John LaMattina and one vacancy (the "**Series B Designees**"), for so long as such Stockholders and their Affiliates continue to own beneficially any shares of Series B Preferred Stock.

(c) **[*******]**.

(d) **[*******]**.

(e) **[*******]**.

(f) **[*******]**.

(g) **[*******]**.

(h) **[*******]**.

(i) **[*******]**.

To the extent that any of clauses (a) through (i) above shall not be applicable, any member of the Board who would otherwise have been designated in accordance with the terms thereof shall instead be voted upon by all the stockholders of the Company entitled to vote thereon in accordance with, and pursuant to, the Restated Certificate.

1.3 Failure to Designate a Board Member. In the absence of any designation from the Persons or groups with the right to designate a director as specified above, the director previously designated by them and then serving shall be reelected if still eligible to serve as provided herein.

1.4 Removal of Board Members. Each Stockholder also agrees to vote, or cause to be voted, all Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that:

(a) no director elected pursuant to Subsections 3.2 or 3.3 of this Agreement may be removed from office other than for cause unless (i) such removal is directed or approved by the affirmative vote of the Person, or of the holders of a majority of the shares of stock, entitled under Subsections 3.2 to designate that director; or (ii) the Person(s) originally entitled to designate or approve such director pursuant to Subsections 3.2 is no longer so entitled to designate or approve such director;

(b) any vacancies created by the resignation, removal or death of a director elected pursuant to Subsections 3.2 or 3.3 shall be filled pursuant to the provisions of this Section 3; and

(c) upon the request of any party entitled to designate a director as provided in Subsection 3.2 to remove such director, such director shall be removed.

All Stockholders agree to execute any written consents required to perform the obligations of this Agreement, and the Company agrees at the request of any party entitled to designate directors to call a special meeting of stockholders for the purpose of electing directors.

1.5 No Liability for Election of Recommended Directors. No Stockholder, nor any Affiliate of any Stockholder, shall have any liability as a result of designating a person for election as a director for any act or omission by such designated person in his or her capacity as a director of the Company, nor shall any Stockholder have any liability as a result of voting for any such designee in accordance with the provisions of this Agreement.

1.6 No "Bad Actor" Designees. Each Person with the right to designate or participate in the designation of a director as specified above hereby represents and warrants to the Company that, to such Person's knowledge, none of the "bad actor" disqualifying events described in Rule 506(d)(1)(i)-(viii) promulgated under the Securities Act (each, a "**Disqualification Event**"), is applicable to such Person's initial designee named above except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable. Any director designee to whom any Disqualification Event is applicable, except for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable, is hereinafter referred to as a "**Disqualified Designee**". Each Person with the right to designate or participate in the designation of a director as specified above hereby covenants and agrees (A) not to designate or participate in the designation of any director designee who, to such Person's knowledge, is a Disqualified Designee and (B) that in the event such Person becomes aware that any individual previously designated by any such Person is or has become a Disqualified Designee, such Person shall as promptly as practicable take such actions as are necessary to remove such Disqualified Designee from the Board and designate a replacement designee who is not a Disqualified Designee.

4. Information.

1.1 Delivery of Financial Statements. The Company shall deliver to each Holder who so requests, provided that the Board has not reasonably determined that such Holder is a Competitor:

(a) as soon as practicable, but in any event within **[***]** after the end of each fiscal year of the Company (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year and (iii) a statement of stockholders' equity as of the end of such year, all such financial statements audited and certified by independent public accountants selected by the Company;

(b) as soon as practicable, but in any event within **[***]** after the end of each quarter of each fiscal year of the Company, unaudited statements of income and cash flows for such fiscal quarter, an unaudited balance sheet and a statement of stockholders' equity as of the end of such fiscal quarter, and an up-to-date capitalization table in sufficient detail so as to permit the Holders to calculate their respective percentage of equity ownership in the Company;

(c) such other information relating to the financial condition, annual budget, business, prospects, or corporate affairs of the Company as any Holder may from time to time reasonably request; provided, however, that the Company shall not be obligated under this Subsection 4.1 to provide information (i) that the Company reasonably determines in good faith to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in a form acceptable to the Company); or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel; and

(d) as soon as practicable, but in any event **[***]** before the end of each fiscal year, budget and business plan for the next fiscal year (such budget and business plan that is approved by the Board is collectively referred to herein as the "**Budget**"), approved by the Board and prepared on a **[***]** basis, including balance sheets, income statements, and statements of cash flow for such **[***]** and, promptly after prepared, any other budgets or revised budgets prepared by the Company.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period, the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Subsection 4.1 to the contrary, the Company may cease providing the information set forth in this Subsection 4.1 during the period starting with the date **[***]** before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Subsection 4.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

1.2 Inspection Rights. The Company shall permit each Holder who so requests, provided that the Board has not reasonably determined that such Holder is a Competitor, at such Holder's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Holder; provided, however, that the Company shall not be obligated pursuant to this Subsection 4.2 to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

1.3 Observer Rights.

(a) **[***]**.

(b) **[***]**.

1.4 Termination of Information Rights. The covenants set forth in Subsections 4.1, 4.2 and 4.3 shall terminate and be of no further force or effect **[***]**.

1.5 Confidentiality. Each Holder agrees that such Holder will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Subsection 4.5 by such Holder), (b) is or has been independently developed or conceived by the Holder without use of the Company's confidential information, or (c) is or has been made known or disclosed to the Holder by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Holder may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring and/or making decisions with respect to its investment in the Company; (ii) to any prospective purchaser of any Note(s) and/or Registrable Securities from such Holder, if such prospective purchaser agrees to be bound by the provisions of this Subsection 4.5; (iii) to any Affiliate, partner, member, stockholder, or wholly owned subsidiary of such Holder in the ordinary course of business, provided that such Holder informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be

required by law, provided that the Holder promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

5. Rights to Future Stock Issuances.

1.1 Right of First Offer. Subject to the terms and conditions of this Subsection 5.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Holder. A Holder shall be entitled to apportion the right of first offer hereby granted to it, in such proportions as it deems appropriate, among (i) itself, (ii) its Affiliates and (iii) its beneficial interest holders, such as limited partners, members or any other Person having "beneficial ownership," as such term is defined in Rule 13d-3 promulgated under the Exchange Act, of such Holder ("**Holder Beneficial Owners**"); provided that each such Affiliate or Holder Beneficial Owner (x) is not a Competitor or FOIA Party, unless such party's purchase of New Securities is otherwise consented to by the Board, (y) agrees to enter into this Agreement (provided that any Competitor or FOIA Party shall not be entitled to any rights as an Holder under Subsections 4.1, 4.2 and 5.1 hereof), and (z) agrees to purchase at least such number of New Securities as are allocable hereunder to the Holder holding the fewest number of Preferred Stock and any other Derivative Securities.

(a) The Company shall give notice (the "**Offer Notice**") to each Holder, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within **[***]** after the Offer Notice is given, each Holder may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock then held by such Holder (including all shares of Common Stock then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by such Holder) bears to the total Common Stock of the Company then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities). At the expiration of such **[***]** period, the Company shall promptly notify each Holder that elects to purchase or acquire all the shares available to it (each, a "**Fully Exercising Holder**") of any other Holder's failure to do likewise. During the **[***]** period commencing after the Company has given such notice, each Fully Exercising Holder may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Holders were entitled to subscribe but that were not subscribed for by the Holders which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Holder bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Holders who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Subsection 5.1(b) shall occur within the later of **[***]** of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Subsection 5.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Subsection 5.1(b), the Company may, during the **[***]** period following the expiration of the periods provided in Subsection 5.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within **[***]** of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Holder s in accordance with this Subsection 5.1.

(d) The right of first offer in this Subsection 5.1 shall not be applicable to (i) Exempted Securities (as defined in the Restated Certificate); (ii) shares of Common Stock issued in the IPO; and (iii) the issuance of Notes pursuant to the Purchase Agreement.

1.2 Termination. The covenants set forth in Subsection 5.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a distribution of the proceeds of a Deemed Liquidation Event, as such term is defined in the Restated Certificate, whichever event occurs first.

6. Additional Covenants.

1.1 Insurance. If the Board deems it appropriate, the Company shall use its commercially reasonable efforts to maintain, from financially sound and reputable insurers, Directors and Officers liability insurance and term "key-person" insurance on **[***]**, in an amount and on terms and conditions satisfactory to the Board, until such time as the Board determines that such insurance should be discontinued. The key-person policy shall name the Company as loss payee, and neither policy shall be cancelable by the Company without prior approval by the Board. **[***]**.

1.2 Employee Agreements. The Company will cause each person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement in the form attached hereto as Exhibit A. The Company shall cause each grant of equity securities to its employees to be subject to (i) vesting of shares over a four (4) year period, with the first twenty-five percent (25%) of such shares vesting following twelve (12) months of continued employment or service, and the remaining shares vesting in equal monthly installments over the following thirty-six (36) months, subject to acceleration provisions and/or alternative vesting schedules approved by the Board, and (ii) a market stand-off provision substantially similar to that in Section 2.11. Without the prior approval by the Board, the Company shall not amend, modify, terminate, waive or otherwise alter, in whole or in part, any stock purchase, stock restriction or option agreement with any existing employee or service provider if such amendment would cause it to be inconsistent with this Section 6.2. In addition, unless otherwise approved by the Board, the Company (x) shall not offer or allow any acceleration of vesting, and (y) shall retain (and not waive) a "right of first refusal" on employee transfers until the Company's IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock (if any).

1.3 Board Matters. The Company shall reimburse the nonemployee directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board (or any applicable committee thereof). Each Preferred Director shall be entitled in such person's discretion to be a member of any committee of the Board other than committees constituted under criteria of independence or disinterestedness unmet by such Preferred Director.

1.4 Expenses of Counsel. In the event of a transaction which is a Sale Transaction (as defined in the Note), the reasonable fees and disbursements, not to exceed $**[***]**, of one counsel for some or all of the Lead Investors ("**Investor Counsel**"), in their capacities as stockholders and/or noteholders (as applicable), shall be borne and paid by the Company. At the outset of considering a transaction which, if consummated would constitute a Sale Transaction, the Company shall obtain the ability to share with the Investor Counsel (and such counsel's clients) and shall share the confidential information (including, without limitation, the initial and all subsequent drafts of memoranda of understanding, letters of intent and other transaction documents and related noncompete, employment, consulting and other compensation agreements and plans) pertaining to and memorializing any of the transactions which, individually or when aggregated with others would constitute the Sale Transaction. The Company shall be obligated to share (and cause the Company's counsel and investment bankers to share) such materials when distributed to the Company's executives and/or any one (1) or more of the other parties to such transaction(s). In the event that Investor Counsel deems it appropriate, in its reasonable discretion, to enter into a joint defense (or common interest) agreement or other arrangement to enhance the ability of the parties to protect their communications and other reviewed materials under the attorney client privilege, the Company shall, and shall direct its counsel to, execute and deliver to Investor Counsel and its clients such an agreement in form and substance reasonably acceptable to

Investor Counsel and the Company's counsel. In the event that one (1) or more of the other party or parties to such transactions require the clients of Investor Counsel to enter into a confidentiality agreement and/or joint defense (or common interest) agreement in order to receive such information, then the Company shall share whatever information can be shared without entry into such agreement and shall, at the same time, in good faith work expeditiously to enable Investor Counsel and its clients to negotiate and enter into the appropriate agreement(s) without undue burden to the clients of Investor Counsel.

1.5 Indemnification Matters. The Company hereby acknowledges that one or more of the Preferred Directors nominated to serve on the Board by (or with the participation of) one or more Investors may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Lead Investors and certain of their Affiliates (collectively, the "**Investor Indemnitors**"). The Company hereby agrees (a) that it is the indemnitor of first resort (*i.e.*, its obligations to any such Preferred Director are primary and any obligation of the Investor Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such Preferred Director are secondary), (b) that it shall be required to advance the full amount of expenses incurred by such Preferred Director and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such Preferred Director to the extent legally permitted and as required by the Restated Certificate or the Bylaws of the Company (or any agreement between the Company and such Preferred Director), without regard to any rights such Preferred Director may have against the Investor Indemnitors, and, (c) that it irrevocably waives, relinquishes and releases the Investor Indemnitors from any and all claims against the Investor Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Investor Indemnitors on behalf of any such Preferred Director with respect to any claim for which such Preferred Director has sought indemnification from the Company shall affect the foregoing and the Investor Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Preferred Director against the Company. The Preferred Directors and the Investor Indemnitors are intended third-party beneficiaries of this Section 6.5 and shall have the right, power and authority to enforce the provisions of this Section 6.5 as though they were a party to this Agreement.

1.6 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, the Restated Certificate, or elsewhere, as the case may be.

1.7 Right to Conduct Activities. **[***]**.

1.8 FCPA. The Company represents that it shall not (and shall not permit any of its subsidiaries or affiliates or any of its or their respective directors, officers, managers, employees, independent contractors, representatives or agents to) promise, authorize or make any payment to, or otherwise contribute any item of value to, directly or indirectly, to any third party, including any Non-U.S. Official (as such term is defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "**FCPA**")), in each case, in violation of the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. The Company further represents that it shall (and shall cause each of its subsidiaries and affiliates to) cease all of its or their respective activities, as well as remediate any actions taken by the Company, its subsidiaries or affiliates, or any of their respective directors, officers, managers, employees, independent contractors, representatives or agents in violation of the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. Upon request, the Company agrees to provide responsive information and/or certifications concerning its compliance with applicable anti-corruption laws. The Company shall promptly notify each Holder if the Company becomes aware of any Enforcement Action (as defined in the Purchase Agreement). The Company shall, and shall cause any direct or indirect subsidiary or entity controlled by it, whether now in existence or formed in the future, to comply with the FCPA.

1.9 Stock Plan Amendments. At each of the closings following the Initial Closing pursuant to the Purchase Agreement, the aggregate number of shares of Common Stock reserved for issuance under the 2020 Employee, Director and Consultant Equity Incentive Plan, as amended (the "Plan"), shall be proportionally increased above 2,981,823 shares (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations) based on the principal amount of the Notes to be issued and sold at the applicable closing, up to 4,576,988 shares (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations) for all closings (including the Initial Closing) in the aggregate so that the number of shares of Common Stock reserved for issuance at each Closing equals (and in no event shall exceed) 14% of the fully diluted capitalization. The Company shall not create, adopt, amend, terminate or repeal the Plan or any other equity (or equity-linked) compensation plan (except for immaterial amendments without dilutive or other economic effect that are approved by the Board) without the prior written consent of the holders of a majority in voting power of the Company's outstanding preferred stock and common stock, voting together as a single class.

1.10 Termination of Covenants. The covenants set forth in this Section 6, except for Subsection 6.4, 6.5, 6.6 and 6.7, shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a distribution of the proceeds of a Deemed Liquidation Event, as such term is defined in the Restated Certificate, whichever event occurs first.

7. Vote to Increase Authorized Common Stock. Each Investor agrees to vote or cause to be voted all Shares owned by such Investor, or over which such Investor has voting control, from time to time and at all times, in whatever manner as shall be necessary to increase the number of authorized shares of Common Stock from time to time to ensure that there will be sufficient shares of Common Stock available for conversion of all of the shares of Preferred Stock outstanding (or that would be outstanding upon conversion of the Notes) at any given time.

8. Drag-Along Right.

1.1 Actions to be Taken. In the event that (i) the Lead Investor Majority (the "**Selling Investors**") and (ii) the Board approve a Sale Transaction (which approval of the Selling Investors must be in writing), specifying that this Section 8 shall apply to such transaction, then, subject to satisfaction of each of the conditions set forth in Section 8.2 below, each Stockholder and the Company hereby agree:

(a) if such transaction requires stockholder approval, with respect to all Shares that such Stockholder owns or over which such Stockholder otherwise exercises voting power, to vote (in person, by proxy or by action by written consent, as applicable) all Shares in favor of, and adopt, such Sale Transaction and to vote in opposition to any and all other proposals that could reasonably be expected to delay or impair the ability of the Company to consummate such Sale Transaction;

(b) if such transaction is a transaction or series of related transactions in which a Person, or a group of related Persons, acquires from stockholders of the Company shares representing more than fifty percent (50%) of the outstanding voting power of the Company (collectively, a "**Stock Sale**"), to sell the same proportion of shares of capital stock of the Company beneficially held by such Stockholder as is being sold by the Selling Investors to the Person to whom the Selling Investors propose to sell their Shares, and, except as permitted in Section 8.2 below, on the same terms and conditions as the other stockholders of the Company;

(c) to execute and deliver all related documentation and take such other action in support of the Sale Transaction as shall reasonably be requested by the Company or the Selling Investors in order to carry out the terms and provision of this Section 8, including, without limitation, executing and delivering instruments of conveyance and transfer, and any purchase agreement, merger agreement, any associated indemnity agreement, or escrow agreement, any associated voting, support, or

joinder agreement, consent, waiver, governmental filing, share certificates duly endorsed for transfer (free and clear of impermissible liens, claims and encumbrances), and any similar or related documents;

(d) not to deposit, and to cause their Affiliates not to deposit, except as provided in this Agreement, any Shares owned by such party or Affiliate in a voting trust or subject any Shares to any arrangement or agreement with respect to the voting of such Shares, unless specifically requested to do so by the acquirer in connection with the Sale Transaction;

(e) to refrain from (i) exercising any dissenters' rights or rights of appraisal under applicable law at any time with respect to such Sale of the Company, or (ii) asserting any claim or commencing any suit (x) challenging the Sale Transaction or this Agreement, or (y) alleging a breach of any fiduciary duty of the Selling Investors or any affiliate or associate thereof (including, without limitation, aiding and abetting breach of fiduciary duty) in connection with the evaluation, negotiation or entry into the Sale Transaction, or the consummation of the transactions contemplated thereby;

(f) if the consideration to be paid in exchange for the Shares pursuant to this Section 8 includes any securities and due receipt thereof by any Stockholder would require under applicable law (x) the registration or qualification of such securities or of any person as a broker or dealer or agent with respect to such securities; or (y) the provision to any Stockholder of any information other than such information as a prudent issuer would generally furnish in an offering made solely to "accredited investors" as defined in Regulation D promulgated under the Securities Act, the Company may cause to be paid to any such Stockholder in lieu thereof, against surrender of the Shares which would have otherwise been sold by such Stockholder, an amount in cash equal to the fair value (as determined in good faith by the Board) of the securities which such Stockholder would otherwise receive as of the date of the issuance of such securities in exchange for the Shares; and

(g) in the event that the Selling Investors, in connection with such Sale Transaction, appoint a stockholder representative (the "**Stockholder Representative**") with respect to matters affecting the Stockholder under the applicable definitive transaction agreements following consummation of such Sale Transaction, (x) to consent to (i) the appointment of such Stockholder Representative, (ii) the establishment of any applicable escrow, expense or similar fund in connection with any indemnification or similar obligations, and (iii) the payment of such Stockholder's pro rata portion (from the applicable escrow or expense fund or otherwise) of any and all reasonable fees and expenses to such Stockholder Representative in connection with such Stockholder Representative's services and duties in connection with such Sale Transaction and its related service as the representative of the Stockholders, and (y) not to assert any claim or commence any suit against the Stockholder Representative or any other Stockholder with respect to any action or inaction taken or failed to be taken by the Stockholder Representative, within the scope of the Stockholder Representative's authority, in connection with its service as the Stockholder Representative, absent fraud, bad faith, gross negligence or willful misconduct.

1.2 Conditions. Notwithstanding anything to the contrary set forth herein, a Stockholder will not be required to comply with Section 8.1 above in connection with any proposed Sale Transaction (the "**Proposed Sale**"), unless:

(a) any representations and warranties to be made by such Stockholder in connection with the Proposed Sale are limited to representations and warranties related to authority, ownership and the ability to convey title to such Shares, including, but not limited to, representations and warranties that (i) the Stockholder holds all right, title and interest in and to the Shares such Stockholder purports to hold, free and clear of all liens and encumbrances, (ii) the obligations of the Stockholder in connection with the transaction have been duly authorized, if applicable, (iii) the documents to be entered into by the Stockholder have been duly executed by the Stockholder and delivered to the acquirer and are enforceable (subject to customary limitations) against the Stockholder in accordance with their respective terms; and (iv) neither the execution and delivery of documents to be entered into by the Stockholder in connection with the transaction, nor the performance of the Stockholder obligations thereunder, will cause

a breach or violation of the terms of any agreement to which the Stockholder is a party, or any law or judgment, order or decree of any court or governmental agency that applies to the Stockholder;

(b) such Stockholder is not required to agree (unless such Stockholder is a Company officer or employee) to any restrictive covenant in connection with the Proposed Sale (including, without limitation, any covenant not to compete or covenant not to solicit customers, employees or suppliers of any party to the Proposed Sale) or any release of claims other than a release in customary form of claims arising solely in such Stockholder's capacity as a stockholder of the Company;

(c) such Stockholder and its Affiliates are not required to amend, extend or terminate any contractual or other relationship with the Company, the acquirer or their respective Affiliates, except that the Stockholder may be required to agree to terminate the investment-related documents between or among such Stockholder, the Company and/or other stockholders of the Company;

(d) the Stockholder is not liable for the breach of any representation, warranty or covenant made by any other Person in connection with the Proposed Sale, other than the Company (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any stockholder of any of identical representations, warranties and covenants provided by all stockholders);

(e) liability shall be limited to such Stockholder's applicable share (determined based on the respective proceeds payable to each Stockholder in connection with such Proposed Sale in accordance with the provisions of the Restated Certificate) of a negotiated aggregate indemnification amount that applies equally to all Stockholders but that in no event exceeds the amount of consideration otherwise payable to such Stockholder in connection with such Proposed Sale, except with respect to claims related to fraud by such Stockholder, the liability for which need not be limited as to such Stockholder;

(f) upon the consummation of the Proposed Sale (i) each holder of each class or series of the capital stock of the Company will receive the same form of consideration for their shares of such class or series as is received by other holders in respect of their shares of such same class or series of stock, (ii) each holder of a series of Preferred Stock will receive the same amount of consideration per share of such series of Preferred Stock as is received by other holders in respect of their shares of such same series, (iii) each holder of Common Stock will receive the same amount of consideration per share of Common Stock as is received by other holders in respect of their shares of Common Stock, and (iv) unless waived pursuant to the terms of the Restated Certificate and as may be required by law, the aggregate consideration receivable by all holders of the Preferred Stock and Common Stock shall be allocated among the holders of Preferred Stock and Common Stock on the basis of the relative liquidation preferences to which the holders of each respective series of Preferred Stock and the holders of Common Stock are entitled in a Deemed Liquidation Event (assuming for this purpose that the Proposed Sale is a Deemed Liquidation Event) in accordance with the Company's Restated Certificate in effect immediately prior to the Proposed Sale; provided, however, that, notwithstanding the foregoing provisions of this Section 8.2(f), if the consideration to be paid in exchange for the Shares held by a Stockholder pursuant to this Section 8.2(f) includes any securities and due receipt thereof by any Stockholder would require under applicable law (x) the registration or qualification of such securities or of any person as a broker or dealer or agent with respect to such securities; or (y) the provision to any Stockholder of any information other than such information as a prudent issuer would generally furnish in an offering made solely to "accredited investors" as defined in Regulation D promulgated under the Securities Act, the Company may cause to be paid to any such Stockholder in lieu thereof, against surrender of the Shares held by the Stockholder, which would have otherwise been sold by such Stockholder, an amount in cash equal to the fair value (as determined in good faith by the Board) of the securities which such Stockholder would otherwise receive as of the date of the issuance of such securities in exchange for the Shares held by the Stockholder; and

(g) subject to clause (f) above requiring the same form of consideration to be available to the holders of any single class or series of capital stock, if any holders of any capital stock of

the Company are given an option as to the form and amount of consideration to be received as a result of the Proposed Sale, all holders of such capital stock will be given the same option; provided, however, that nothing in this Section 8.2(g) shall entitle any holder to receive any form of consideration that such holder would be ineligible to receive as a result of such holder's failure to satisfy any condition, requirement or limitation that is generally applicable to the Company's stockholders.

9. Restrictions on Sales of Control of the Company. No Stockholder shall be a party to any Stock Sale unless (a) all holders of Preferred Stock are allowed to participate in such transaction(s) and (b) the consideration received pursuant to such transaction(s) is allocated among the parties thereto in the manner specified in the Restated Certificate in effect immediately prior to the Stock Sale (as if such transaction(s) were a Deemed Liquidation Event), unless the holders of at least the requisite percentage required to waive treatment of the transaction(s) as a Deemed Liquidation Event pursuant to the terms of the Restated Certificate elect to allocate the consideration differently by written notice given to the Company at least 10 days prior to the effective date of any such transaction or series of related transactions.

10. Remedies.

1.1 Covenants of the Company. The Company agrees to use its best efforts, within the requirements of applicable law, to ensure that the rights granted under Sections 3, 7, 8 and 9 of this Agreement (collectively, the "**VA Provisions**") are effective and that the parties enjoy the benefits of the provisions of such sections of this Agreement. Such actions include, without limitation, the use of the Company's best efforts to cause the nomination and election of the directors as provided in this Agreement.

1.2 Irrevocable Proxy and Power of Attorney. Each party to this Agreement hereby constitutes and appoints as the proxies of the party and hereby grants a power of attorney to the Chief Executive Officer of the Company, and a designee of the Selling Investors, and each of them, with full power of substitution, with respect to the matters set forth herein, including, without limitation, votes regarding the size and composition of the Board pursuant to Section 3 hereof, votes to increase authorized shares pursuant to Section 7 hereof and votes regarding any Sale Transaction pursuant to Section 8 hereof, and hereby authorizes each of them to represent and vote, if and only if the party (i) fails to vote, or (ii) attempts to vote (whether by proxy, in person or by written consent), in a manner which is inconsistent with the terms of this Agreement, any of such party's Shares in favor of the election of persons as members of the Board determined pursuant to and in accordance with the terms and provisions of this Agreement or the increase of authorized shares or approval of any Sale Transaction pursuant to and in accordance with the terms and provisions of this Agreement or to take any action reasonably necessary to effect the VA Provisions. The power of attorney granted hereunder shall authorize the Chief Executive Officer of the Company, and a designee of the Selling Investors, and each of them, to execute and deliver the documentation referred to in Section 8.1 on behalf of any party failing to do so within five (5) business days of a request by the Company. Each of the proxy and power of attorney granted pursuant to this Section 10.2 is given in consideration of the agreements and covenants of the Company and the parties in connection with the transactions contemplated by this Agreement and, as such, each is coupled with an interest and shall be irrevocable unless and until all of the VA Provisions terminate or expire pursuant to Section 11 hereof. Each party hereto hereby revokes any and all previous proxies or powers of attorney with respect to the Shares and shall not hereafter, unless and until all of the VA Provisions terminate or expire pursuant to Section 11 hereof, purport to grant any other proxy or power of attorney with respect to any of the Shares, deposit any of the Shares into a voting trust or enter into any agreement (other than this Agreement), arrangement or understanding with any person, directly or indirectly, to vote, grant any proxy or give instructions with respect to the voting of any of the Shares, in each case, with respect to any of the matters set forth herein.

11. Term of VA Provisions. The VA Provisions shall be effective as of the date hereof and shall continue in effect until and shall terminate upon the earliest to occur of (a) the consummation of the Company's first underwritten public offering of its Common Stock (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to its stock option, stock purchase or similar plan or an SEC Rule 145 transaction); and (b) the consummation of a Sale Transaction and distribution of proceeds to or escrow for the benefit of the Stockholders in accordance with the Restated Certificate, provided that the provisions of Section 8 hereof will continue after the closing of any Sale Transaction to the extent necessary to enforce the provisions of Section 8 with respect to such Sale Transaction.

12. Miscellaneous.

1.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; (iii) after such transfer, holds at least 100,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); or (iv) is a Permitted Transferee; provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Subsection 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein. Notwithstanding anything in the contrary contained in this Subsection 12.1, a Holder shall be permitted to make any such transfer that is required in order for such Holder to comply with laws or regulations applicable to it (including those that have been established in accordance with the UCITS (Undertakings for Collective Investment in Transferable Securities) Directive).

1.2 Governing Law. This Agreement shall be governed by the internal law of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of law.

1.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

1.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

1.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the

recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A or Schedule B hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Subsection 12.5. If notice is given to the Company, a copy shall also be sent to **[***]**.

1.6 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company, the holders of **[***]** of the Preferred Stock, voting together as a single class on an as converted basis, then outstanding, **[***]**; (x) the Company may in its sole discretion waive compliance with Subsection 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Subsection 2.12(c) shall be deemed to be a waiver); (xi) any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party; (xii) **[***]** Notwithstanding the foregoing, this Agreement may not be amended or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 5 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction). The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination, or waiver. Any amendment, termination, or waiver effected in accordance with this Subsection 12.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

1.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

1.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate. For the avoidance of doubt, all shares of capital stock held or acquired by AXA IM, AXA Opportunities Fund and any of their Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement.

1.9 Additional Holders.

(a) Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Preferred Stock after the date hereof, any purchaser of such shares of Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

(b) Notwithstanding anything to the contrary contained herein, if the Company issues additional Notes after the date hereof, any purchaser of such Notes may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement,

and thereafter shall be deemed a "Noteholder" for all purposes hereunder. No action or consent by the Investors or Noteholders shall be required for such joinder to this Agreement by such additional Noteholder, so long as such additional Noteholder has agreed in writing to be bound by all of the obligations as a "Noteholder" hereunder

(c) In the event that after the date of this Agreement, the Company enters into an agreement with any Person to issue shares of capital stock to such Person (other than to a purchaser of Preferred Stock described in Section 12.9(a) above or to a purchaser of Notes described in Section 12.9(b) above), following which such Person shall hold Shares constituting one percent (1%) or more of the then outstanding capital stock of the Company (treating for this purpose all shares of Common Stock issuable upon exercise of or conversion of outstanding options, warrants or convertible securities, as if exercised and/or converted or exchanged), then, the Company shall cause such Person (each such Person, a "**Key Holder**"), as a condition precedent to entering into such agreement, to become bound by the VA Provisions by executing an instrument, in a form approved by the Board, agreeing to be bound by and subject to the terms of the VA Provisions as a Key Holder and Stockholder and thereafter such person shall be deemed a Key Holder and Stockholder for all purposes under the VA Provisions.

1.10 Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled. Notwithstanding the foregoing, however, each Investor and Noteholder (a) acknowledges receipt of a copy of the relevant provisions of the Note and of the Purchase Agreement, and (b) in the event of a Maturity Conversion (as defined in the Note), agrees to execute and deliver such amendments and/or restatements (in each case, whether one or more) of this Agreement, and to take such other and further actions (including, without limitation, to vote, or cause to be voted, all Shares and Notes owned by such Person, or over which such Person has voting control, from time to time and at all times, and in whatever manner), as the Lead Investor Majority may reasonably request in order to effectuate the provisions of clauses (iii), (iv) and (v) of Section 4(e) of the Note.

1.11 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware or the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

Each party will bear its own costs in respect of any disputes arising under this Agreement. Each of the parties to this Agreement consents to personal jurisdiction for any equitable action sought in the U.S. District Court for the District of Delaware or any court of the State of Delaware having subject matter jurisdiction.

1.12 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above

VEDANTA BIOSCIENCES, INC.

By: /s/ **[***]**
Name: **[***]**
Title: **[***]**

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/ **[***]**
Name: **[***]**
Title: **[***]**

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/ **[***]**
Name: **[***]**
Title: **[***]**

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/ **[***]**
Name: **[***]**
Title: **[***]**

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/ **[***]**
Name: **[***]**
Title: **[***]**

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

PURETECH HEALTH LLC

By:/s/ Bharatt Chowrira
Name: Bharatt Chowrira
Title: President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/ **[***]**
Name: **[***]**
Title: **[***]**

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]
Address: [***]

[***]
By: [***]

By: /s/ [***]
Name: [***]
Title: [***]
Address: [***]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]

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INVESTORS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]

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[***]

By: [***]

By: /s/ [***]
Name: [***]
Title: [***]

[***]

By: [***]

By: /s/ [***]
Name: [***]
Title: [***]

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INVESTORS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]

Address: [***]

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INVESTORS:

[***]
By: [***]

By: /s/ [***]
Name: [***]
Title: [***]

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INVESTORS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]

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INVESTORS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]

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INVESTORS:

[***]

By: /s/ [***]
Name: [***]
Its: [***]
Address: [***]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]

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INVESTORS:

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Title: [***]

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[***]

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Name: [***]
Title: [***]

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INVESTORS:

[***]
By: /s/ [***]
Name: [***]
Title: [***]

Email: [***]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

NOTEHOLDERS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]

[***]

By: /s/ [***]
Name: [***]
Title: [***]

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NOTEHOLDERS:

[***]

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Title: [***]

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Title: [***]

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Name: [***]
Title: [***]

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Name: [***]
Title: [***]

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NOTEHOLDERS:

[***]

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[***]

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Name: [***]
Title: [***]

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Name: [***]
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NOTEHOLDERS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]

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NOTEHOLDERS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

NOTEHOLDERS:

[***]

By: /s/ [***]
Name: [***]
Title: [***]

[***]

By: /s/ [***]
Name: [***]
Title: [***]

SCHEDULE A
Investors

[***]

ACTIVE/119579555.22

SCHEDULE B
Noteholders

[***]

EXHIBIT A
Form of Noncompetition and Nonsolicitation Agreement

[***]

ACTIVE/119579555.22

Exhibit 4.37

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED (INDICATED BY: [***]) FROM THE EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) THE TYPE OF INFORMATION THAT THE REGISTRANT CUSTOMARILY AND ACTUALLY TREATS AS PRIVATE OR CONFIDENTIAL.

Execution Version

Royalty Purchase Agreement

By and Between

PureTech Health LLC, as the Seller, and

Solely for purposes of Article 4 and Section 10.13, PureTech Health PLC, as the Seller Parent, on the one hand

and

Royalty Pharma Investments 2019 ICAV, as the Buyer, on the other hand

Dated as of March 22, 2023

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ROYALTY PURCHASE AGREEMENT

This ROYALTY PURCHASE AGREEMENT, dated as of March 22, 2023 (this "Agreement"), is made and entered into by and between PureTech Health LLC, a Delaware limited liability company (the "Seller"), and solely for purposes of Article 4 and Section 10.13, PureTech Health PLC, a company incorporated under the laws of England and Wales (the "Seller Parent"), on the one hand; and Royalty Pharma Investments 2019 ICAV, an Irish collective asset-management vehicle (the "Buyer"), on the other hand. Unless otherwise defined in this Agreement, capitalized terms have the meanings ascribed to them in Section 1.1 below.

RECITALS:

WHEREAS, pursuant to the License Agreement, the Seller granted to Licensee a license with respect to the Licensed Patents to exploit the Licensed Products, and Licensee, in partial consideration thereof, agreed to pay specified royalties to the Seller with respect to Net Sales of the Licensed Products; and

WHEREAS, the Buyer desires to purchase the Purchased Royalty from the Seller, and the Seller desires to sell the Purchased Royalty to the Buyer.

NOW THEREFORE, in consideration of the representations, warranties, covenants and agreements set forth herein and for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Seller and the Buyer hereby agree as follows:

Article 1

DEFINED TERMS AND RULES OF CONSTRUCTION

Section 1.1 Definitions. As used in this Agreement, the following terms shall have the following meanings:

"Additional Purchase Price Payment" is defined in Section 2.1(b).

"Affiliate" means, with respect to any particular Person, any other Person directly or indirectly, and whether by contract or otherwise, controlling, controlled by or under common control with such Person. For purposes of this definition, the word "control" (including, with correlative meaning, the terms "controlled by" or "under common control with") means the actual power, either directly or indirectly through one or more intermediaries, to direct or cause the direction of the management and policies of such entity, whether by the ownership of at least fifty percent (50%) of the voting securities of such entity, or by contract or otherwise. For the avoidance of doubt, Licensee shall not be considered an "Affiliate" of the Seller.

"Agreement" is defined in the preamble.

"Applicable Percentage" means, on a calendar year-by-calendar year basis, 100%, until the portion of aggregate Purchased Royalties received by the Buyer with respect to Net Sales of Licensed Products occurring during such calendar year equals at least $60,000,000, and thereafter 33.33% with respect to Net Sales of Licensed Products occurring during such calendar year after the occurrence of the Net Sales which resulted in such $60,000,000 in Purchased Royalties received by the Buyer.

"Bankruptcy Laws" means, collectively, bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, fraudulent transfer or other similar laws affecting the enforcement of creditors' rights generally.

"Bilateral Common Interest and Joint Privilege Agreement" means that certain common interest and joint privilege agreement, dated as of the Closing Date, executed by the Seller and the Buyer, substantially in the form attached hereto as Exhibit D-1.

"Bill of Sale" is defined in Section 3.2.

"Business Day" means any day other than (i) a Saturday or Sunday or (ii) a day on which banking institutions located in New York or Massachusetts are permitted or required by applicable law or regulation to remain closed.

"Buyer" is defined in the preamble.

"Buyer Indemnified Parties" is defined in Section 8.1(a).

"Closing" is defined in Section 3.1.

"Closing Date" means the date on which the Closing occurs.

"Confidential Information" is defined in Section 7.1.

"Contracts" is defined in Section 4.9(a).

"Credit Event" means any insolvency, bankruptcy, receivership, assignment for the benefit of creditors, similar proceeding, or financial distress of Licensee, as a result of which Licensee fails to pay, or is delayed in paying, all or a portion of the Royalty.

"Disclosing Party" is defined in Section 7.1.

"Disclosure Schedule" means the Disclosure Schedule, dated as of the date hereof, delivered to the Buyer by the Seller concurrently with the execution of this Agreement.

"Eli Lilly Agreement" means that certain License Agreement by and between Eli Lilly and Company and Licensee dated May 9, 2012.

"Escrow Account" means the escrow account created pursuant to the Escrow Agreement.

"Escrow Agent" means US. Bank National Association, as escrow agent.

"Escrow Agreement" means that certain escrow agreement, dated as of the Closing Date, executed by the Seller, the Buyer and the Escrow Agent, substantially in the form attached hereto as Exhibit E.

"Existing Confidentiality Agreement" is defined in Section 7.3.

"FDA" means the U.S. Food and Drug Administration, or a successor federal agency thereto in the United States.

"FDA Approval of an NDA" means the FDA's approval of an NDA, including all licenses, registrations, and pricing or reimbursement approvals, that are necessary for the sale and marketing of a pharmaceutical product in the United States.

"FDA Approval of an NDA or sNDA" means the FDA's approval of an NDA or sNDA, including all licenses, registrations, and pricing or reimbursement approvals, that are necessary for the sale and marketing of a pharmaceutical product in the United States.

"First Commercial Sale" means the first commercial sale in an arms' length transaction of KarXT to a Third Party by Licensee or any of its Affiliates or (sub)licensees in any country worldwide following receipt of applicable regulatory approval of KarXT in such country. For clarity, First Commercial Sale shall not include any distribution or other sale solely for patient assistance, named patient use, compassionate use, or test marketing programs or non-registrational studies or similar programs or studies where KarXT is supplied without charge or at the actual manufacturing cost thereof (without allocation of indirect costs or any markup).

"Guaranteed Obligations" is defined in Section 10.13.

"Governmental Entity" means any: (i) nation, principality, republic, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (ii) federal, state, local, municipal, foreign or other government; (iii) governmental or quasi-governmental authority of any nature (including any governmental division, subdivision, department, agency, bureau, branch, office, commission, council, board, instrumentality, officer, official, representative, organization, unit, body or other entity and any court, arbitrator or other tribunal); (iv) multi-national organization or body; or (v) individual, body or other entity exercising, or entitled to exercise, any executive, legislative, judicial, administrative, regulatory, police, military or taxing authority or power of any nature.

"In-License" means an agreement with a Third Party pursuant to which such Third Party grants a license to the counterparty under such Third Party's intellectual property.

"Indemnified Party" is defined in Section 8.2.

"Indemnifying Party" is defined in Section 8.2.

"Initial Purchase Price" means $100,000,000.

"Judgment" means any judgment, order, writ, injunction, citation, award or decree of any nature.

"Karuna Product Patents" means any and all Patents, other than the Licensed Patents, owned or in-licensed by Licensee or its Affiliates that claim or cover the Licensed Product, including all Patents listed at any time after the date hereof in the Orange Book for a Licensed Product.

"KarXT" means the oral modulator of muscarinic receptors referred to by Licensee as of the date hereof as xanomeline-trospium, KarXT (xanomeline-trospium) or KarXT and being evaluated by Licensee as of the date hereof in Phase 3 clinical trials as both a monotherapy and adjunctive therapy for the treatment of schizophrenia and as a monotherapy for the treatment of psychosis in Alzheimer's disease.

"Knowledge of the Seller" means the actual knowledge of Daphne Zohar, Chief Executive Officer, Bharatt Chowrira, PhD, JD, President and Chief Business, Finance and Operating Officer, Eric Elenko, PhD, Chief Innovation and Strategy Officer, Anita Terpstra, PhD, JD, Senior Vice President and Head, Intellectual Property, and Charles Sherwood, Esq., Associate General Counsel, after reasonable due inquiry; provided that "reasonable due inquiry" shall not include any requirement to contact or correspond with any Person that is not an Affiliate or employee of the Seller.

"License Agreement" means (i) that certain Exclusive Patent License Agreement by and between the Seller (f/k/a PureTech Ventures, LLC) and Licensee dated March 4, 2011, as amended by Amendment No. 1 to Exclusive Patent License Agreement dated February 1, 2013, Amendment No. 2 to Exclusive Patent License Agreement dated February 25, 2015, and Amendment No. 3 to Exclusive Patent License Agreement dated July 31, 2015, as may be further amended and/or restated from time to time as permitted under this Agreement, and (ii) any New License Agreement, as may be further amended and/or restated from time to time.

"License Agreement Correspondence" means copies of all:

(a) reports provided to the Seller by Licensee as of the date hereof pursuant to Section 4.1 of the License Agreement;

(b) sublicenses granted by Licensee and received by the Seller pursuant to Section 2.2 of the License Agreement;

(c) agreements between the Seller and Licensee (or their Affiliates) relating to the License Agreement, including any development, manufacturing, services, or pharmacovigilance agreements;

(d) audit records or reports provided by Licensee to the Seller under Section 4.4 of the License Agreement;

(e) patent prosecution updates provided by Licensee to the Seller under Section 5.1 or 5.3 of the License Agreement;

(f) patent infringement notices provided by either Licensee or the Seller under Section 6.1 of the License Agreement;

(g) patent enforcement or defense updates provided by either Licensee or the Seller under Section 6.2 or 6.3 of the License Agreement;

(h) updates regarding Third Party infringement claims provided by either Licensee or the Seller; and

(i) other material communications between Licensee and the Seller since January 1, 2020 relating to the License Agreement, the Royalty, the Licensed Patents, or the Licensed Products.

"Licensed Patents" shall have the meaning ascribed to the term Patent Rights in Section 1.5 of the License Agreement.

"Licensed Product" shall (i) have the meaning ascribed to the term Licensed Product in Section 1.3 of the License Agreement, and (ii) in the case of a New Arrangement entered into by the Seller in accordance with the terms hereof, the analogous term for "licensed product" or any comparable concept as defined in the applicable New License Agreement, including, for clarity, in each case ((i) and (ii)), KarXT.

"Licensee" means (i) Karuna Therapeutics, Inc. (f/k/a Karuna Pharmaceuticals, Inc.), a Delaware corporation, and any successor entity thereto, and (ii) any licensee party to any New License Agreement.

"Licensee Instruction Letter" is defined in Section 3.3.

"Lien" means any mortgage, lien, pledge, charge, adverse claim, security interest, encumbrance or restriction of any kind, including any restriction on use, transfer or exercise of any other attribute of ownership of any kind.

"Loss" means any and all Judgments, damages, losses, claims, costs, liabilities and expenses, including reasonable fees and out-of-pocket expenses of counsel.

"Material Adverse Effect" means (i) a material adverse effect on the legality, validity or enforceability of any provision of this Agreement, (ii) a material adverse effect on the ability of the Seller to perform any of its obligations hereunder, (iii) a material adverse effect on the rights or remedies of the Buyer hereunder other than any such material adverse effect that results from compliance with any directions of the Buyer, (iv) a material adverse effect on the rights of the Seller under the License Agreement related to the Royalty, or (v) an adverse effect in any material respect on the timing, amount or duration of the payments to be made to the Buyer in respect of any portion of the Purchased Royalty or the right of the Buyer to receive such payments [***].

"NDA" means a New Drug Application as described in 21 C.F.R. § 314.50 submitted to the FDA in the United States with respect to a pharmaceutical product.

"Net Sales" shall have the meaning ascribed to the term Net Sales in Section 1.4 of the License Agreement.

"New Arrangement" is defined in Section 6.12(a)(ii).

"New License Agreement" is defined in Section 6.11.

"Orange Book" means the then-current edition of the FDA publication "Approved Drug Products with Therapeutic Equivalence Evaluations."

"Patents" means all patents and patent applications and all substitutions, divisions, continuations, continuations-in-part, any patent issued with respect to any such patent applications, any reissue, reexamination, renewal or extension (including any supplementary protection certificate) of any such patent, and any confirmation patent or registration patent or patent of addition based on any such patent, and all counterparts and equivalents of any of the foregoing in any country or jurisdiction.

"Payment Triggering Event" is defined in Section 2.1(b).

"Permitted Liens" means any (i) mechanic's, materialmen's, and similar liens for amounts not yet due and payable, (ii) statutory liens for Taxes not yet due and payable or for Taxes that the taxpayer is contesting in good faith, and (iii) any liens created, permitted or required by this Agreement in favor of the Buyer or its Affiliates.

"Permitted Reduction" means a Royalty Reduction pursuant to Section 3.2(b) of the License Agreement, excluding any such Royalty Reduction that is a withholding of Tax as a result of any action by the Seller, such as an assignment or re-domiciliation by the Seller, or any failure on the part of the Seller to comply with applicable law.

"Person" means any individual, firm, corporation, company, partnership, limited liability company, trust, joint venture, association, estate, trust, Governmental Entity or other entity, enterprise, association or organization.

"Prime Rate" means the prime rate published by The Wall Street Journal, from time to time, as the prime rate.

"Pro-Rata Portion" means, on a calendar year-by-calendar year basis, (i) with respect to the Buyer, 100%, until the portion of aggregate Purchased Royalties received by the Buyer with respect to Net Sales of Licensed Products occurring during such calendar year equals at least $60,000,000, and thereafter 33.33% with respect to Net Sales of Licensed Products occurring during such calendar year after the occurrence of the Net Sales which resulted in such $60,000,000 in Purchased Royalties received by the Buyer, and (ii) with respect to the Seller, 0%, until the portion of aggregate Purchased Royalties received by the Buyer with respect to Net Sales of Licensed Products occurring during such calendar year equals at least $60,000,000, and thereafter 66.67% with respect to Net Sales of Licensed Products occurring during such calendar year after the occurrence of the Net Sales which resulted in such $60,000,000 in Purchased Royalties received by the Buyer.

"Proceeds" means any amounts actually recovered by the Seller as a result of any settlement or resolution of any actions, suits, proceedings, claims or disputes related to (i) the License Agreement, (ii) the Licensed Patents, or (iii) any Licensed Product, in each case ((i), (ii) and (iii)), related to or involving the Royalty.

"Purchase Price" means, collectively, the Initial Purchase Price and any Additional Purchase Price Payments.

"Purchased Royalty" means, for each calendar quarter during the term of this Agreement, an amount payable to the Buyer equal to the amount of all Royalties with respect to Net Sales of Licensed Products occurring during such calendar quarter multiplied by the Applicable Percentage.

"PureTech In-Licenses" means any and all In-Licenses to which the Seller is a party pursuant to which the Seller has in-licensed any of the Licensed Patents from a Third Party.

"Receiving Party" is defined in Section 7.1.

"Representative" means, with respect to any Person, (i) any direct or indirect stockholder, member or partner of such Person and (ii) any manager, director, officer, employee, agent, advisor or other representative (including attorneys, accountants, consultants, bankers, financial advisors and actual and potential lenders and investors) of such Person.

"Retained Royalty" means that portion of the Royalty retained by the Seller that is not the Purchased Royalty.

"Royalty" means (i) any and all payments or amounts payable to the Seller under Section 3.1(a) of the License Agreement; (ii) any and all payments or amounts payable to the Seller under the License Agreement in lieu of such payments or amounts described in the foregoing clause (i); (iii) any and all payments or amounts payable to the Seller under Sections 4.4 (solely to the extent related to amounts due under Section 3.1(a) of the License Agreement), 6.4(ii) or 6.4(iii) (for any actions brought or defended by Licensee under Section 6.2 or 6.3 of the License Agreement), and 11.3(b) of the License Agreement; (iv) any and all payments or amounts payable to the Seller under Section 11.1 (solely to the extent related to any payments or amounts described under clauses (i) through (iii) and (v) through (vii) of this definition) of the License Agreement); (v) the share of any recovery payments or amounts payable to, or obtained and retained by, the Seller from an action brought by the Seller under Sections 6.2 or 6.3 of the License Agreement pursuant to the last sentence of Section 6.4 of the License Agreement (excluding reimbursement for any expenses incurred in such action); (vi) any and all amounts

payable to the Seller under Section 7.1 of the License Agreement to the extent such payments relate to the Royalty or Net Sales of the Licensed Products; and (vii) any and all interest payments to the Seller under Section 3.2(c) of the License Agreement assessed on any payments or amounts described in the foregoing clauses (i) through (vi).

Notwithstanding the immediately above definition, the term "Royalty" shall exclude: (w) any and all payments or amounts payable to the Seller under Section 3.1(b) or 3.1(c) of the License Agreement, (x) any payments or amounts of the types described in clauses (iii) through (vii) of this definition above which relate to or are in lieu of any payments or amounts payable to the Seller under Section 3.1(b) or 3.1(c) of the License Agreement, (y) any payments or amounts payable by Licensee to the Seller not related to the Royalty or the Licensed Product, and (z) any indemnity payments to the Seller and its Affiliates under Section 7.1 of the License Agreement that are not related to the Royalty or Net Sales of the Licensed Products.

"Royalty Reduction" is defined in Section 4.9(k).

"Royalty Reports" means the quarterly reports deliverable by Licensee pursuant to Sections 4.1(c) and 4.2 of the License Agreement.

"Seller" is defined in the preamble.

"Seller Indemnified Parties" is defined in Section 8.1(b).

"Seller Monetization Transaction" means, with respect to the Retained Royalty and/or any and all payments or amounts payable to the Seller under Section 3.1(b) or 3.1(c) of the License Agreement, (i) any sale, assignment or other transfer of all or a portion of the Seller's and/or its Affiliates' right, title and interest in, to and under such Retained Royalty and/or payments or amounts payable to the Seller under Section 3.1(b) or 3.1(c) of the License Agreement, (ii) any synthetic royalty or other monetization transaction, in each case secured by a Lien on, or providing for payments from and based on the cash flows generated by, the Seller's and/or its Affiliates' right, title and interest in such Retained Royalty and/or payments or amounts payable to the Seller under Section 3.1(b) or 3.1(c) of the License Agreement, or (iii) any debt financing where the collateral includes any portion of the Retained Royalty, the payments or amounts payable to the Seller under Section 3.1(b) or 3.1(c) of the License Agreement, the Licensed Patents, or any "proceeds" (as defined in the UCC) if any of the foregoing constitute a material portion of the collateral, including if such collateral is combined with similar collateral for other products, product candidates, intellectual property and proceeds; *provided* that the following shall not be a Seller Monetization Transaction: (x) any debt financing secured by a Lien on all or substantially all assets of the Seller and its material subsidiaries, on a consolidated basis and (y) a sale or transfer contemplated in clause (i) to an Affiliate in accordance with Section 10.3 so long as such Affiliate does not engage in a Seller Monetization Transaction.

"Seller Parent" is defined in the preamble.

"sNDA" means a Supplemental New Drug Application as described in 21 C.F.R. § 314.70 submitted to the FDA in the United States with respect to a pharmaceutical product.

"Tax" or "Taxes" means any U.S. federal, state, local or non-U.S. income, gross receipts, license, payroll, employment, excise, severance, occupation, premium, windfall profits, environmental, customs duties, capital stock, franchise, profits, withholding, social security, unemployment, disability, real property, personal property, value added, alternative or add-on minimum, estimated or other tax of any kind whatsoever, including any interest, penalty or addition thereto, whether disputed or not.

"Third Party" means any Person other than the Buyer, the Seller or any of their respective Affiliates.

"Trilateral Common Interest and Joint Privilege Agreement" means a common interest and joint privilege agreement among the Seller, Licensee, and the Buyer substantially in the form attached hereto as Exhibit D-2.

"UCC" means Article 9 of the New York Uniform Commercial Code, as in effect from time to time.

Section 1.2 Certain Interpretations. Except where expressly stated otherwise in this Agreement, the following rules of interpretation apply to this Agreement:

(a) "either" and "or" are not exclusive and "include," "includes" and "including" are not limiting and shall be deemed to be followed by the words "without limitation;"

(b) "extent" in the phrase "to the extent" means the degree to which a subject or other thing extends, and such phrase does not mean simply "if;"

(c) "hereof," "hereto," "herein" and "hereunder" and words of similar import when used in this Agreement refer to this Agreement as a whole and not to any particular provision of this Agreement;

(d) references to a Person are also to its permitted successors and assigns;

(e) definitions are applicable to the singular as well as the plural forms of such terms;

(f) unless otherwise indicated, references to an "Article", "Section" or "Exhibit" refer to an Article or Section of, or an Exhibit to, this Agreement, and references to a "Schedule" refer to the corresponding part of the Disclosure Schedule;

(g) references to "$" or otherwise to dollar amounts refer to the lawful currency of the United States;

(h) provisions referring to matters that would or could have, or would or could reasonably be expected to have, or similar phrases, shall be deemed to have such result or expectation with or without the giving of notice or the passage of time, or both;

(i) for covenants that are to be undertaken "reasonably," such actions (or inactions) shall take into account Buyer's and Seller's relative economic interests in the matter and the relative economic impact of the applicable action (or inaction) on such interests;

(j) references to this Agreement include the Bill of Sale, the Disclosure Schedule, the Bilateral Common Interest and Joint Privilege Agreement, the Escrow Agreement, and the Licensee Instruction Letter; and

(k) references to a law include any amendment or modification to such law and any rules and regulations issued thereunder, whether such amendment or modification is made, or issuance of such rules and regulations occurs, before or after the date of this Agreement.

Section 1.3 Headings. The table of contents and the descriptive headings of the several Articles and Sections of this Agreement and the Exhibits and Schedules are for convenience only, do not constitute a part of this Agreement and shall not control or affect, in any way, the meaning or interpretation of this Agreement.

Article 2

PURCHASE, SALE AND ASSIGNMENT OF THE PURCHASED ROYALTY

Section 1.1 Closing; Purchase Price.

(a) Upon the terms and subject to the conditions of this Agreement, at the Closing, the Seller shall sell, transfer, assign and convey to the Buyer, and the Buyer shall purchase, acquire and accept from the Seller, free and clear of all Liens (other than Permitted Liens), all of the Seller's right, title and interest in and to the Purchased Royalty. The purchase price to be paid at the Closing to the Seller for the sale, transfer, assignment and conveyance of the Seller's right, title and interest in and to the Purchased Royalty to the Buyer is the Initial Purchase Price. At the Closing, the Buyer shall pay the Seller the Initial Purchase Price by wire transfer of immediately available funds to one or more accounts specified by the Seller on Exhibit A.

(b) Following the Closing, upon the occurrence of each of the following events (each a "Payment Triggering Event"), the Buyer shall make a cash payment (each an "Additional Purchase Price Payment") to the Seller in the amount corresponding to such Payment Triggering Event:

#	PAYMENT TRIGGERING EVENT	ADDITIONAL PURCHASE PRICE PAYMENT AMOUNT
1	[***]	$[***]
2	[***]	$[***]
3	[***]	$[***]
4	[***]	[***]
5	[***]	$[***]
6	[***]	$[***]
7	[***]	$[***]
8	[***]	$[***]
9	[***]	$[***]
	TOTAL	**$400,000,000**

(c) The Seller hereby agrees and acknowledges that: (i) the Additional Purchase Price Payments are contingent payment obligations of the Buyer and there can be no assurance regarding the occurrence of any of the Payment Triggering Events; and (ii) the Buyer shall have no obligation or liability with respect to any Additional Purchase Price Payment unless and until the corresponding Payment Triggering Event has occurred. Any Additional Purchase Price Payment owed to the Seller by the Buyer in accordance with Section 2.1(b) shall be paid to the Seller by wire transfer of immediately available funds to the account(s) specified by the Seller on Exhibit A (or such other account(s) as specified by the Seller in a writing delivered to the Buyer in accordance with Section 10.1) within **[***]** (**[***]**) Business Days following the occurrence of a Payment Triggering Event; *provided* that with respect to Payment Triggering Event #4, such payment shall be made within **[***]** (**[***]**) Business Days after Buyer's receipt of the Purchased Royalties attributable to Net Sales that occur within the twelfth calendar quarter ending after the First Commercial Sale). For clarity, only one Additional Purchase Price Payment shall be due hereunder with respect to each Payment Triggering Event; no Additional Purchase Price Payment shall be payable for subsequent or repeated achievements of any Payment Triggering Events. Each party hereto further agrees and acknowledges that the other party hereto shall have the right to offset, reduce or withhold any amounts otherwise due and payable hereunder solely to the extent determined to be owed by such party to the other party hereunder pursuant to a final determination of a court of competent jurisdiction.

(d) The parties hereto further agree that: (i) the aggregate Additional Purchase Price Payments payable by the Buyer hereunder shall not exceed $400,000,000 and (ii) the total Purchase Price payable to the Seller by the Buyer hereunder (inclusive of the Initial Purchase Price and, if required to be paid under this Agreement, all of the Additional Purchase Price Payments) shall in no event exceed $500,000,000 in the aggregate.

Section 1.2 No Assumed Obligations; Excluded Assets. Notwithstanding any provision in this Agreement to the contrary, the Buyer is purchasing, acquiring and accepting only the Purchased Royalty, and is not assuming any liability or obligation of the Seller of whatever nature, whether presently in existence or arising or asserted hereafter, under the License Agreement or otherwise. Except as specifically set forth herein in respect of the Purchased Royalty purchased, acquired and accepted hereunder, the Buyer does not, by such purchase, acquisition and acceptance, acquire any other contract rights of the Seller under the License Agreement or otherwise or any other assets of the Seller. For the avoidance of doubt and notwithstanding anything herein to the contrary, nothing in this provision limits any other obligation of the Buyer under this Agreement, including without limitation any indemnity obligations of the Buyer.

Section 1.3 True Sale. It is the intention of the parties hereto that the sale, transfer, assignment and conveyance contemplated by this Agreement be, and is, a true, complete, absolute and irrevocable sale, transfer, assignment and conveyance by the Seller to the Buyer of all of the Seller's rights, title and interests in and to the Purchased Royalty and the Seller relinquishes all title and control over the Purchased Royalty upon such sale, transfer, assignment and conveyance. Neither the Seller nor the Buyer intends the transactions contemplated by this Agreement to be, or for any purpose characterized as, a loan from the Buyer to the Seller or to any of the Seller's Affiliates, or a pledge, a security interest, a financing transaction or a borrowing. It is the intention of the parties hereto that the beneficial interest in and title to the Purchased Royalty and any "proceeds" (as defined in the UCC) thereof shall not be part of the Seller's estates in the event of the filing of a petition by or against the Seller under any Bankruptcy Laws. Each of the Seller and the Buyer hereby waives, to the maximum extent permitted by applicable law, any right to contest or otherwise assert that the sale contemplated by this Agreement does not constitute a true, complete, absolute and irrevocable sale, transfer, assignment and conveyance by the Seller to the Buyer of all of the Seller's right, title and interest in and to the Purchased Royalty under applicable law, which waiver shall, to the maximum

extent permitted by applicable law, be enforceable against the Seller in any bankruptcy or insolvency proceeding relating to the Seller or its subsidiaries. Accordingly, the Seller shall treat the sale, transfer, assignment and conveyance of the Purchased Royalty as a sale of an "account" or a "payment intangible" (as appropriate) in accordance with the UCC, and the Seller hereby authorizes the Buyer to file financing statements (and continuation statements with respect to such financing statements when applicable) naming the Seller as the debtor and/or seller and the Buyer as the secured party and/or buyer in respect of the Purchased Royalty. Not in derogation of the foregoing statement of the intent of the parties hereto in this regard, and for the purposes of providing additional assurance to the Buyer in the event that, despite the intent of the parties hereto, the sale, transfer, assignment and conveyance contemplated hereby is hereafter held not to be a sale, the Seller does hereby grant to the Buyer a security interest in and to all right, title and interest of the Seller, in, to and under the Purchased Royalty and any "proceeds" (as defined in the UCC) thereof as security for all of the Seller's obligations hereunder, including the payment of the Purchased Royalty, and the Seller does hereby authorize the Buyer, from and after the Closing, to file such financing statements (and continuation statements with respect to such financing statements when applicable) in such manner and such jurisdictions as are necessary or appropriate to perfect such security interest.

Article 3

CLOSING

Section 1.1 Closing; Payment of Purchase Price.

The purchase and sale of the Purchased Royalty shall take place remotely via the exchange of documents and signatures on the date hereof or such other place, time and date as the parties hereto may mutually agree (the "Closing"). At the Closing, the Buyer shall deliver (or cause to be delivered) payment of the Initial Purchase Price to the Seller by wire transfer of immediately available funds to one or more accounts specified by the Seller on Exhibit A.

Section 1.2 Bill of Sale. At the Closing, upon confirmation of the receipt of the Initial Purchase Price, each of the Seller and the Buyer shall deliver to the other party hereto a duly executed bill of sale evidencing the sale, transfer, assignment and conveyance of the Purchased Royalty, substantially in the form attached hereto as Exhibit B (the "Bill of Sale").

Section 1.3 Licensee Instruction. At the Closing, the Seller shall deliver to the Buyer and Licensee an instruction letter, in the form attached hereto as Exhibit C (the "Licensee Instruction Letter"), duly executed by the Seller, instructing Licensee to pay the Royalty directly to the Escrow Account.

Section 1.4 Bilateral Common Interest and Joint Privilege Agreement. At the Closing, each of the Seller and the Buyer shall deliver to the other party hereto a duly executed counterpart of the Bilateral Common Interest and Joint Privilege Agreement.

Section 1.5 Escrow Agreement. At the Closing, each of the Seller and the Buyer shall deliver to the other party hereto a duly executed counterpart of the Escrow Agreement, and the Escrow Agent shall deliver to the parties hereto a duly executed counterpart of the Escrow Agreement.

Section 1.6 Form W-9. At the Closing, the Seller shall deliver to the Buyer a valid, properly executed IRS Form W-9 certifying that the Seller is a corporation for U.S. federal income tax purposes and is exempt from U.S. federal withholding tax and "backup" withholding tax with respect to the Purchase Price.

Section 1.7 Form W-8BEN-E. At the Closing, the Buyer shall deliver to the Seller a valid, properly executed IRS Form W-8BEN-E certifying that the Buyer is exempt from U.S. federal withholding tax with respect to any and all royalty payments in respect of the Purchased Royalty pursuant to an income tax treaty to which the United States is a party.

Section 1.8 Additional Documents. At the Closing, the Seller shall deliver to the Buyer the document attached as Appendix 1 to Exhibit H, duly and properly executed by the Seller.

Article 4

SELLER'S AND SELLER PARENT'S REPRESENTATIONS AND WARRANTIES

Except as set forth in the Disclosure Schedule, each of the Seller and the Seller Parent represents and warrants to the Buyer that as of the Closing Date:

Section 1.1 Existence; Good Standing. The Seller is a limited liability company, duly formed, validly existing and in good standing under the laws of the State of Delaware. The Seller Parent is a public limited company duly incorporated, validly existing and in good standing under the laws of England and Wales. Each of the Seller and the Seller Parent is duly licensed or qualified to do business and is in limited liability company or corporate, as applicable, good standing in each jurisdiction in which the nature of the business conducted by it or the character or location of the properties and assets owned, leased or operated by it makes such licensing or qualification necessary, except where the failure to be so licensed or qualified and in limited liability company or corporate, as applicable, good standing has not and would not reasonably be expected to have, either individually or in the aggregate, a Material Adverse Effect.

Section 1.2 Authorization. Each of the Seller and the Seller Parent has all requisite corporate or limited liability company power and authority to execute, deliver and perform its obligations under this Agreement. The execution, delivery and performance of this Agreement, and the consummation of the transactions contemplated hereby, have been duly authorized by all necessary corporate or limited liability company action on the part of the Seller and the Seller Parent.

Section 1.3 Enforceability. The Agreement has been duly executed and delivered and constitutes a valid and binding obligation of the Seller and the Seller Parent enforceable against each in accordance with its terms, except as such enforceability may be limited by applicable Bankruptcy Laws or general principles of equity (whether considered in a proceeding in equity or at law).

Section 1.4 No Conflicts. The execution, delivery and performance by the Seller and the Seller Parent of this Agreement and the consummation of the transactions contemplated hereby do not and shall not (i) contravene or conflict with the organizational documents of the Seller or the Seller Parent, (ii) contravene or conflict with or constitute a material default under any law or Judgment binding upon or applicable to the Seller or the Seller Parent, (iii) contravene or conflict with or constitute a default under the License Agreement or (iv) contravene or conflict with or constitute a material default under any other material contract or material agreement binding upon or applicable to the Seller or the Seller Parent.

Section 1.5 Consents. Except for the consents that have been obtained on or prior to the Closing or filings required by the federal securities laws or stock exchange rules, no consent, approval, license, order, authorization, registration, declaration or filing with or of any

Governmental Entity or other Person is required to be done or obtained by the Seller in connection with (i) the execution and delivery by the Seller of this Agreement, (ii) the performance by the Seller of its obligations under this Agreement or (iii) the consummation by the Seller of any of the transactions contemplated by this Agreement.

Section 1.6 No Litigation. There is no action, suit, claim, investigation or proceeding pending or, to the Knowledge of the Seller, threatened, including before any Governmental Entity, against or involving the Seller or any of its Affiliates, or any of their respective properties or assets that, individually or in the aggregate, would be reasonably be expected to result in a Material Adverse Effect or which questions the validity of this Agreement or the transactions contemplated hereby or any action taken or to be taken pursuant hereto.

Section 1.7 Compliance with Laws. Neither the Seller nor any of its Affiliates is in violation of, and to the Knowledge of the Seller, neither the Seller nor any of its Affiliates is under investigation with respect to nor has the Seller or any of its Affiliates been threatened to be charged with or given notice of any violation of, any law or Judgment applicable to the Seller or any of its Affiliates, which violation would reasonably be expected to have, either individually or in the aggregate, a Material Adverse Effect.

Section 1.8 No Undisclosed Events or Circumstances. No event or circumstance has occurred or exists with respect to the Seller, its Affiliates, or their respective businesses, properties, operations or financial condition, which, under applicable law, rule or regulation, requires public disclosure or announcement by the Seller but which has not been so publicly announced or disclosed and which, individually or in the aggregate, would constitute a Material Adverse Effect.

Section 1.9 License Agreement. Attached hereto as Exhibit F is a true, correct and complete copy of the License Agreement. The Seller has delivered to the Buyer true, correct and complete copies of all License Agreement Correspondence.

(a) No Other Agreements. Except as set forth on Schedule 4.9(a)(i) of the Disclosure Schedule, the License Agreement is the only agreement, instrument, arrangement, modification, waiver or understanding (collectively, "Contracts") between the Seller (or any predecessor or Affiliate thereof), on the one hand, and Licensee (or any predecessor or Affiliate thereof), on the other hand, relating to the subject matter thereof. Except as set forth on Schedule 4.9(a)(ii) of the Disclosure Schedule, there are no other Contracts between the Seller (or any predecessor or any Affiliate thereof), on the one hand, and any other Person, including Licensee (or any predecessor or Affiliate thereof), on the other hand, that relate to the License Agreement, any Licensed Patent, a Licensed Product (including the development or commercialization thereof), or the Royalty. Except as set forth on Schedule 4.9(a)(iii) of the Disclosure Schedule, to the Knowledge of the Seller, the License Agreement and the Eli Lilly Agreement are the only material Contracts between Licensee (or any predecessor or Affiliate thereof), on the one hand, and any other Person, on the other hand, relating to KarXT (including the development or commercialization thereof). Except as set forth on Schedule 4.9(a)(iv) of the Disclosure Schedule, there is no proposal to amend or waive any provision of the License Agreement in any manner that (i) would result in a breach of this Agreement or (ii) would otherwise reasonably be expected to have a Material Adverse Effect. No executed, draft or proposed Contract between the Seller (or any predecessor or any Affiliate thereof), on the one hand, and any other Person, including Licensee (or any predecessor or Affiliate thereof), on the other hand, contains any provision, term or condition that would reasonably be expected to result in a Material Adverse Effect.

(b) Licenses/Sublicenses. Except as set forth on Schedule 4.9(b) of the Disclosure Schedule, to the Knowledge of the Seller, there are no licenses or sublicenses entered into by Licensee (or any predecessor or Affiliate thereof) or any other Person in respect of Licensee's rights and obligations under the License Agreement (including any Licensed Patents). Except as set forth on Schedule 4.9(b) of the Disclosure Schedule, the Seller has not received any notice from Licensee pursuant to Section 2.2 or 6.6 of the License Agreement.

(c) Validity and Enforceability of License Agreement; No Breaches or Defaults; No Repudiation. The License Agreement is legal, valid, binding, enforceable, and in full force and effect, except as such enforceability may be limited by applicable Bankruptcy Laws or general principles of equity (whether considered in a proceeding in equity or at law). The License Agreement will continue to be legal, valid, binding, enforceable, and in full force and effect on identical terms, immediately following the consummation of the transactions contemplated by this Agreement, except as such enforceability may be limited by applicable Bankruptcy Laws or general principles of equity (whether considered in a proceeding in equity or at law). Neither the Seller nor, to the Knowledge of the Seller, Licensee is, or has at any time been, in material breach under the License Agreement or material default thereunder, and, to the Knowledge of the Seller, no event has occurred that would constitute such a breach, or permit termination, modification, or acceleration, under the License Agreement. No party to the License Agreement has repudiated any provision of the License Agreement and the Seller has not received any notice in connection with the License Agreement challenging the validity, enforceability or interpretation of any provision of such agreement, including the obligation to pay any portion of the Royalty without set-off of any kind.

(d) Licensed Product. KarXT is a Licensed Product under the License Agreement, and to the Knowledge of the Seller, there are no other Licensed Products being researched, developed or commercialized by or on behalf of Licensee under the License Agreement. Licensee and its Affiliates are required to pay the royalties under Section 3.1(a) of the License Agreement on all Net Sales of any Licensed Products by or on behalf of them and any of their (sub)licensees. The Seller has the right to receive the Royalty for so long as Licensee, one of its Affiliates or any of its or their (sub)licensees is selling any Licensed Product during the Term (as defined in Section 1.9 of the License Agreement).

(e) No Liens or Assignments by the Seller. The Seller has not, except for Permitted Liens and as contemplated hereby, conveyed, assigned or in any other way transferred or granted any Liens upon or with respect to all or any portion of its right, title and interest in and to the Royalty, any Licensed Patent or the License Agreement.

(f) No Waivers or Releases. Except as set forth on Schedule 4.9(f) of the Disclosure Schedule, the Seller has not granted any material waiver under the License Agreement and has not released Licensee, in whole or in part, from any of its material obligations under the License Agreement.

(g) No Termination. The Seller has not (i) given Licensee any notice of termination of the License Agreement (whether in whole or in part) or any notice expressing any intention to terminate the License Agreement or (ii) received any notice of termination of the License Agreement (whether in whole or in part) or any notice expressing any intention to terminate the License Agreement. To the Knowledge of the Seller, no event has occurred that would give rise to the expiration or termination of, or either the Seller or Licensee having the right to terminate, the

License Agreement, including a breach of any of the obligations set forth in Section 2.4 of the License Agreement.

(h) Payments Made. The Seller has timely received from Licensee the full amount of the payments due and payable under the License Agreement, to the extent such amounts have come due.

(i) No Assignments by Licensee. The Seller has not consented to any assignment, delegation or other transfer by Licensee or any of its predecessors of any of their rights or obligations under the License Agreement, and, to the Knowledge of the Seller, Licensee has not assigned or otherwise transferred or granted any Lien upon or with respect to any of its rights or obligations under the License Agreement.

(j) No Indemnification Claims. The Seller has not notified Licensee or any other Person of any claims for indemnification under the License Agreement nor has the Seller received any claims for indemnification under the License Agreement.

(k) No Royalty Reductions. To the Knowledge of the Seller, the amount of the Royalty due and payable under Section 3.1(a) of the License Agreement is not subject to any claim by Licensee alleging a right of set-off, counterclaim, credit, reduction or deduction by contract or otherwise, including as permitted by Section 3.2(b) of the License Agreement, or otherwise against the Royalty (each, a "Royalty Reduction"). To the Knowledge of the Seller, no event or condition exists that would reasonably be expected to permit Licensee to claim, or have the right to claim, a Royalty Reduction.

(l) No Notice of Infringement, Enforcement or Defense. The Seller has not received any written notice from, or given any written notice to, Licensee pursuant to Section 6.1, 6.2 or 6.3 of the License Agreement.

(m)Audits. The Seller has not initiated, pursuant to Section 4.4 of the License Agreement or otherwise, any inspection or audit of books of accounts or other records pertaining to Net Sales, the calculation of royalties or other amounts payable to the Seller under the License Agreement.

(n) In-Licenses. There are no PureTech In-Licenses.

Section 1.10 Title to Purchased Royalty. The Seller has good and marketable title to the Purchased Royalty, free and clear of all Liens (other than Permitted Liens). Upon payment of the Initial Purchase Price by the Buyer, the Buyer will acquire, subject to the terms and conditions set forth in this Agreement and the License Agreement, good and marketable title to the Purchased Royalty, free and clear of all Liens (other than Permitted Liens).

Section 1.11 Intellectual Property.

(a) Schedule 4.11(a) of the Disclosure Schedule lists all Licensed Patents. The Seller is the sole owner of, and has sole interest in, all of the Licensed Patents. Schedule 4.11(a) of the Disclosure Schedule specifies as to each of the Licensed Patents: the jurisdiction in which such patent has issued or such patent application has been filed, its patent number and/or application number, and its issue and filing dates.

(b) Except as set forth in Schedule 4.11(b) of the Disclosure Schedule, there are no pending or, to the Knowledge of the Seller, threatened, litigations, interferences, reexamination, oppositions or like procedures involving any Licensed Patents or, to the Knowledge of the Seller, Karuna Product Patents.

(c) All of the issued Licensed Patents are in full force and effect and have not lapsed, expired or otherwise terminated, and, to the Knowledge of the Seller, all Licensed Patents and Karuna Product Patents are valid and enforceable. The Seller has not received any written notice relating to the lapse, expiration or other termination of any of the Licensed Patents, or any written legal opinion that alleges that any of the issued Licensed Patents are invalid or unenforceable.

(d) To the Knowledge of the Seller, there is no Person who is or claims to be an inventor under any of the Licensed Patents who is not a named inventor thereof.

(e) The Seller has not, and, to the Knowledge of the Seller, Licensee has not, received any written notice of any claim by any Person (i) challenging the inventorship or ownership of, the rights of the Seller or Licensee, as applicable, in and to, or the patentability, validity or enforceability of, any Licensed Patent, or (ii) asserting that the development, manufacture, importation, sale, offer for sale or use of any Licensed Product infringes any patent rights or other intellectual property rights of such Person.

(f) To the Knowledge of the Seller, the discovery and development of the Licensed Products did not and does not infringe, misappropriate or otherwise violate any patent rights or other intellectual property rights owned by any other Person, other than the Karuna Product Patents. Neither the Seller nor, to the Knowledge of the Seller, Licensee, has in-licensed any Patents or other intellectual property rights covering the manufacture, use, sale, offer for sale or import of the Licensed Products.

(g) To the Knowledge of the Seller, the manufacture, use, marketing, sale, offer for sale, importation or distribution of the Licensed Products has not and will not, infringe, misappropriate or otherwise violate any patent rights or other intellectual property rights owned by any other Person, other than the Karuna Product Patents.

(h) To the Knowledge of the Seller, no Person has infringed, misappropriated or otherwise violated, or is infringing, misappropriating or otherwise violating, any of the Licensed Patents.

(i) All required maintenance fees, annuities and like payments with respect to the Licensed Patents for which the Seller controls the prosecution and maintenance in accordance with Article 5 of the License Agreement, and to the Knowledge of the Seller, with respect to all other Licensed Patents, have been paid timely.

(j) No Third Party has a binding contractual right to prosecute any Licensed Patents on behalf of Licensee. Licensee has not elected not to prosecute any of the Licensed Patents pursuant to Section 5.3 of the License Agreement. The Seller does not own, in-license or otherwise control or have rights to any Patents that are necessary or useful for the research, development, manufacture, use, marketing, sale, offer for sale, importation or distribution of the Licensed Products and are not licensed to Licensee under the License Agreement, including by reversion pursuant to Section 5.3 of the License Agreement.

Section 1.12 UCC Representation and Warranties. The Seller's exact legal name is, and for the immediately preceding seven (7) years has been, "PureTech Health LLC". The Seller is, and for the prior seven (7) years has been, formed in the State of Delaware.

Section 1.13 Brokers' Fees. There is no investment banker, broker, finder, financial advisor or other intermediary who has been retained by or is authorized to act on behalf of the Seller who might be entitled to any fee or commission in connection with the transactions contemplated by this Agreement.

Section 1.14 Taxes. The Seller has not received any notice from Licensee of any intention to withhold or deduct any material tax from future payments to the Seller. There are no existing Liens for taxes on the Royalty (or any portion thereof), other than Permitted Liens. There are no material Tax audits or investigations (and the Seller has not been informed or notified of any pending material Tax audits or investigations) with respect to any payment made to the Seller under the License Agreement. To the knowledge of the Seller, the arrangement under the License Agreement is not treated as a partnership for U.S. tax purposes and the Seller has never taken the position for U.S. federal income or other tax purposes that the arrangement under the License Agreement is treated as such. The Seller has never received an IRS Schedule K-1 or other U.S. tax form reporting that the Seller is a partner in a partnership as a result of being a party to the License Agreement.

Section 1.15 No Implied Representations and Warranties. EXCEPT AS EXPRESSLY SET FORTH IN THIS ARTICLE 4, THE SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, AT LAW OR IN EQUITY, INCLUDING WITH RESPECT TO MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, AND ANY SUCH REPRESENTATIONS OR WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED. THE BUYER ACKNOWLEDGES THAT, EXCEPT AS SPECIFICALLY PROVIDED IN THIS ARTICLE 4 AND THE DISCLOSURE SCHEDULES, THE SELLER HAS ASSUMED NO RESPONSIBILITIES OF ANY KIND WITH RESPECT TO ANY ACT OR OMISSION OF LICENSEE WITH RESPECT TO THE DESIGN, DEVELOPMENT, MANUFACTURE, USE, SALE, DISTRIBUTION, MARKETING OR OTHER ACTIVITIES OF LICENSEE WITH RESPECT TO ANY OF THE LICENSED PRODUCTS.

Article 5

BUYER'S REPRESENTATIONS AND WARRANTIES

The Buyer represents and warrants to the Seller that as of the Closing Date:

Section 1.1 Existence; Good Standing. The Buyer is an Irish collective asset-management vehicle that is duly organized, validly existing and in good standing under the laws of the Republic of Ireland.

Section 1.2 Authorization. The Buyer has the requisite right, power and authority to execute, deliver and perform its obligations under this Agreement. The execution, delivery and performance of this Agreement, and the consummation of the transactions contemplated hereby, have been duly authorized by all necessary action on the part of the Buyer.

Section 1.3 Enforceability. This Agreement has been duly executed and delivered by an authorized person of the owner trustee of the Buyer and constitutes the valid and binding obligation of the Buyer, enforceable against the Buyer in accordance with its terms, except as may be limited by applicable Bankruptcy Laws or by general principles of equity (whether considered in a proceeding in equity or at law).

Section 1.4 No Conflicts. The execution, delivery and performance by the Buyer of this Agreement and the consummation of the transactions contemplated hereby do not

and shall not (i) contravene or conflict with the organizational documents of the Buyer, (ii) contravene or conflict with or constitute a material default under any law or Judgment binding upon or applicable to the Buyer or (iii) contravene or conflict with or constitute a default under any material contract or other material agreement binding upon or applicable to the Buyer.

Section 1.5 Consents. Other than the filing of financing statement(s) in accordance with Section 2.3 or filings required by federal securities laws or stock exchange rules, no consent, approval, license, order, authorization, registration, declaration or filing with or of any Governmental Entity or other Person is required to be done or obtained by the Buyer in connection with (i) the execution and delivery by the Buyer of this Agreement, (ii) the performance by the Buyer of its obligations under this Agreement, or (iii) the consummation by the Buyer of any of the transactions contemplated by this Agreement.

Section 1.6 No Litigation. There is no action, suit, investigation or proceeding pending or, to the knowledge of the Buyer, threatened, including before any Governmental Entity, to which the Buyer is a party that would, if determined adversely, reasonably be expected to prevent or materially and adversely affect the ability of the Buyer to perform its obligations under this Agreement.

Section 1.7 Financing. The Buyer has sufficient cash on hand to pay the Purchase Price. The Buyer acknowledges that its obligations under this Agreement are not contingent on obtaining financing.

Section 1.8 Brokers' Fees. There is no investment banker, broker, finder, financial advisor or other intermediary who has been retained by or is authorized to act on behalf of the Buyer who might be entitled to any fee or commission in connection with the transactions contemplated by this Agreement.

Article 6

COVENANTS

Section 1.1 Disclosures. Except for a press release previously approved in form and substance by the Seller and the Buyer or any other public announcement using substantially the same text as such press release or any other public disclosure permitted under this Agreement following the Closing, neither the Buyer nor the Seller shall, and each party hereto shall cause its respective Representatives, Affiliates and Affiliates' Representatives not to, issue a press release or other public announcement or otherwise make any public disclosure with respect to this Agreement or the subject matter hereof without the prior written consent of the other party hereto (which consent shall not be unreasonably withheld, conditioned or delayed), except as may be required by applicable law or stock exchange rule (in which case the party hereto required to make the press release or other public announcement or disclosure shall allow the other party hereto reasonable time to comment on such press release or other public announcement or disclosure in advance of such issuance to the extent permitted to do so or reasonably practicable under the circumstances).

Section 1.2 Payments Received In Error.

(a) Commencing on the Closing Date and at all times thereafter, if any payment of any portion of the Purchased Royalty is made to the Seller, the Seller shall pay such amount to the Buyer, promptly (and in any event within **[***]** (**[***]**) Business Days) after the receipt thereof, by wire transfer of immediately available funds to an account designated in writing by the Buyer. The Seller shall notify the Buyer of such wire transfer and provide

reasonable details regarding the Purchased Royalty payment so received by the Seller. The Seller agrees that, in the event any payment of the Purchased Royalty is paid to the Seller, the Seller shall (i) until paid to the Buyer, hold such payment received in trust for the benefit of the Buyer and (ii) have no right, title or interest in such payment and that it shall not pledge or otherwise grant any security interest therein.

(b) Commencing on the Closing Date and at all times thereafter, if any payment due under the License Agreement that does not constitute any payment of any portion of the Purchased Royalty is made to the Buyer, the Buyer shall pay such amount to the Seller, promptly (and in any event within **[***]** (**[***]**) Business Days) after the receipt thereof, by wire transfer of immediately available funds to an account designated in writing by the Seller. The Buyer shall notify the Seller of such wire transfer and provide reasonable details regarding the erroneous payment so received by the Buyer. The Buyer agrees that, in the event any payment due under the License Agreement that does not constitute the Purchased Royalty is paid to the Buyer, the Buyer shall (i) until paid to the Seller, hold such payment received in trust for the benefit of the Seller and (ii) have no right, title or interest in such payment and that it shall not pledge or otherwise grant any security interest therein.

Section 1.3 Royalty Reduction. If Licensee exercises any Royalty Reduction against any payment of the Purchased Royalty other than for a Permitted Reduction, then the Seller shall promptly (and in any event within **[***]** (**[***]**) Business Days) following the payment of the Purchased Royalty affected by such Royalty Reduction) make a true-up payment to the Buyer such that the Buyer receives the full amount of such Purchased Royalty payments that would have been payable to the Buyer had such Royalty Reduction not occurred.

Section 1.4 Interest on Overdue Payments. If either party hereto fails to pay on or before the due date any amount which is payable to the other party hereto under this Agreement, such other party may, after giving at least **[***]** (**[***]**) days' prior written notice of such failure to pay to the party that failed to pay, charge interest on that amount from the due date until payment is made in full at a rate per annum equal to four percent (4%) over the Prime Rate (or, if less, the maximum amount permitted by applicable law).

Section 1.5 Royalty Reports; Communications with Licensee.

(a) Promptly (and in any event within **[***]** (**[***]**) Business Days) following the receipt by the Seller of (i) any Royalty Report or other reports under Section 4.1 of the License Agreement, (ii) any notices under Section 13.1 of the License Agreement or other material communications between Licensee and the Seller relating to the Royalty, the Licensed Patents, or the Licensed Products, or (iii) any other material notice or communications related to the License Agreement that would reasonably be expected (individually or in the aggregate) to have a Material Adverse Effect, the Seller shall furnish a true, correct and complete copy of any such written notice or communication or a reasonably detailed written summary of any such oral notice or communication to the Buyer.

(b) The Seller shall not, without the Buyer's prior written consent (not to be unreasonably withheld, conditioned or delayed) or as expressly permitted under Section 6.14(c)(i)(B) of this Agreement, send any written notice or written correspondence to Licensee under or in connection with the License Agreement (i) that is (A) related to the Royalty, (B) related to the Licensed Patents (other than immaterial written correspondence, the subject matter of which is not related to the filing, prosecution, maintenance, defense or enforcement of such Licensed Patents), or (C) material and related to the Licensed Products; or (ii) that would reasonably be expected (individually or in the aggregate) to have a Material Adverse Effect. The Seller shall send any written notice or written correspondence reasonably requested by the Buyer to Licensee related to the Licensed Patents, the Licensed Products or the Royalty.

(c) Not in derogation of the foregoing clauses (a) and (b), promptly (and in any event within **[***]** (**[***]**) Business Days) following the receipt by the Seller of copies of all (i) sublicenses granted by Licensee and received by Seller pursuant to Section 2.2 of the License Agreement, or (ii) agreements between the Seller and Licensee (or their Affiliates) relating to the License Agreement, including any development, manufacturing, services, or pharmacovigilance agreements, the Seller shall furnish a true, correct and complete copy of the same to the Buyer.

(d) After the Closing, the Seller shall (i) execute the Trilateral Common Interest and Joint Privilege Agreement and (ii) use commercially reasonably efforts to obtain from Licensee (x) an agreement to send Royalty Reports directly to both the Seller and the Buyer, and (y) Licensee's signature to the Trilateral Common Interest and Joint Privilege Agreement.

Section 1.6 Inspections and Audits of Licensee. If either party hereto desires to cause an audit or inspection by an independent public accounting firm under Section 4.4 of the License Agreement to be made for the purpose of determining the correctness of the Royalty paid under the License Agreement, then the Seller and the Buyer agree to consult in good faith with each other in connection therewith. Following such consultation the Seller may, and if requested by the Buyer, shall, to the extent permitted under Section 4.4 of the License Agreement, cause such an inspection or audit to be made. The Seller shall, for purposes of Section 4.4 of the License Agreement, select such independent public accounting firm as reasonably designated by the Buyer for such purpose. The party hereto requesting hereunder that such an inspection or audit be made shall pay the expenses associated therewith (including the fees and expenses of such independent public accounting firm designated for such purpose); provided, however, that, if, following the completion of such an inspection or audit requested by the Buyer hereunder, the Licensee reimburses the Seller for the expenses of such inspection or audit pursuant to Section 4.4 of the License Agreement, the Seller shall promptly (and in any event within **[***]** (**[***]**) Business Days) following receipt by the Seller of such reimbursement remit the amount of such reimbursement to the Buyer to the extent that the Buyer paid such expenses. The Seller shall deliver to the Buyer a copy of the results of any inspection or audit conducted pursuant to Section 4.4 of the License Agreement within **[***]** (**[***]**) Business Days following the Seller's receipt thereof, with, if applicable, information redacted that the Seller reasonably determines is not relevant for determining the correctness of the Royalty made under the License Agreement.

Section 1.7 Amendment of License Agreement.

(a) The Seller shall not, without the Buyer's prior written consent (not to be unreasonably withheld, conditioned or delayed), (i) amend, modify, supplement or restate (or consent to any amendment, modification, supplement or restatement of) any provision of the License Agreement, or (ii) enter into any Contract having the effect of the foregoing.

(b) With respect to any provision of the License Agreement related to the Licensed Patents, the Licensed Products or the Royalty, the Seller shall (if reasonably instructed by the Buyer) (a) use commercially reasonable efforts to amend, modify, supplement or restate such provision and (b) agree to any amendment, modification, supplement or restatement of such provision proposed or requested by the Licensee; provided, however, that (in the case of both (a) and (b)) such amendment, modification, supplement or restatement does not (i) relate to a reduction of any milestone payments or sublicense income payments under Section 3.1(b) or 3.1(c) of the License Agreement or the Seller's rights and remedies to collect such amounts, or (ii) impose on the Seller any additional obligations or liabilities other than those existing in the License Agreement as of the date hereof or created pursuant to a subsequent amendment, modification, supplement or restatement entered into by the Seller in accordance with this Section 6.7(b).

(c) Promptly, and in any event within **[***]** (**[***]**) Business Days, following receipt by the Seller of any final amendment, modification, supplement or restatement of the License Agreement, any consent to any amendment, modification, supplement or restatement of any provision of the License Agreement, or any Contract having the effect of the foregoing, the Seller shall furnish a copy of the same to the Buyer.

Section 1.8 Assignment of License Agreement and Licensed Patents.

(a) The Seller shall not, without the Buyer's prior written consent (such consent to be granted or withheld in the sole discretion of the Buyer), sell, assign or otherwise transfer all or any portion of its interest under the License Agreement (including any of its rights or obligations thereunder) to any Person, including by contract, operation of law, merger, change of control, or otherwise, except in connection with (i) an assignment of this Agreement in its entirety in accordance with Section 10.3 to an assignee permitted thereunder or (ii) a Seller Monetization Transaction that (x) is permitted by and undertaken in accordance with this Agreement and (y) would not otherwise adversely affect the ability of the Seller to perform any of its obligations hereunder.

(b) The Seller shall not, without the Buyer's prior written consent (such consent to be granted or withheld in the sole discretion of the Buyer), sell, assign or otherwise transfer all or any portion of its interest in the Licensed Patents to any Person, including by contract, operation of law, merger, change of control, or otherwise, except in connection with an assignment of this Agreement in its entirety in accordance with Section 10.3 to an assignee permitted thereunder.

Section 1.9 Maintenance of License Agreement. The Seller shall comply in all material respects with its obligations under the License Agreement and shall not take any action or forego any action that would reasonably be expected to constitute a material breach thereof or default thereunder. Promptly, and in any event within **[***]** (**[***]**) Business Days, after receipt of any (written or oral) notice from Licensee of an alleged breach or default under the License Agreement, the Seller shall give notice thereof to the Buyer, including delivering the Buyer a copy of any such written notice or a detailed written summary of any such oral notice. The Seller shall consult with the Buyer regarding such alleged breach or default and shall act as reasonably instructed by the Buyer to cure any breaches or defaults and shall give written notice within **[***]** (**[***]**) Business Days to the Buyer upon curing any such breach or default. The Seller shall not without the Buyer's prior written consent (not to be unreasonably withheld, conditioned or delayed) and shall (if reasonably instructed by the Buyer) (i) forgive, release or compromise any amount owed to or becoming owed to the Seller under the License Agreement in respect of the Royalty or (ii) waive any obligation of, or grant any consent to, Licensee under, in respect of or related to the Royalty. The Seller shall not, without the Buyer's written consent (to be granted or withheld in the Buyer's sole discretion), enter into any new agreement or legally binding arrangement in respect of the Licensed Products or the Licensed Patents, except in connection with (i) an assignment of this Agreement in its entirety in accordance with Section 10.3 to an assignee permitted thereunder or (ii) a Seller Monetization Transaction that (x) is permitted by and undertaken in accordance with this Agreement and (y) would not otherwise adversely affect the ability of the Seller to perform any of its obligations hereunder.

Section 1.10 Enforcement of License Agreement.

(a) Notice of Breaches by Licensee. Promptly (and in any event within **[***]** (**[***]**) Business Days) after the Seller becomes aware of a material breach of the License Agreement by Licensee, the Seller shall provide notice of such breach to the Buyer.

(b) Enforcement of License Agreement. The Seller shall consult with the Buyer regarding the timing, manner and conduct of any enforcement of Licensee's obligations under the License Agreement or regarding any breach, default or other dispute under the License Agreement or otherwise relating to the Royalty or any purported Royalty Reduction. Following such consultation, the Seller shall, as reasonably instructed by the Buyer, exercise such rights and remedies, whether under the License Agreement or otherwise, relating to any such breach, default or other dispute that would reasonably be expected (individually or in the aggregate) to have a Material Adverse Effect, or that is otherwise related to the Royalty or any Royalty Reduction. The Seller shall employ such counsel, reasonably acceptable to the Seller, as the Buyer may select, and shall provide the Buyer with access to such counsel, in connection with any such dispute regarding any such alleged breach, default or other dispute under the License Agreement. [***] The Seller agrees to keep the Buyer reasonably informed of any actual or alleged breach, default or other dispute related to the License Agreement or the Royalty or any Royalty Reduction and to provide copies as soon as practicable, but in any event within **[***]** (**[***]**) Business Days following the Seller's receipt or delivery of (i) any written notice of any breach or alleged breach of the License Agreement or dispute in connection with the Royalty or any Royalty Reduction and (ii) any and all filings, notices and written communications relating thereto.

(c) Allocation of Proceeds and Costs of Enforcement. Except as otherwise provided herein, each of the Buyer and the Seller shall bear its own fees and expenses incurred in enforcing Licensee's obligations under the License Agreement pursuant to this Section 6.10. The Proceeds resulting from any enforcement of Licensee's obligations under the License Agreement shall be applied first to reimburse the Seller and the Buyer for any reasonable and documented expenses incurred by them in connection with such enforcement, with the remainder of the Proceeds distributed (i) between the Buyer and the Seller, according to their respective Pro-Rata Portions, to the extent the breach by Licensee is related to any payment of, or adversely impacted, the Royalty and (ii) otherwise to the Seller for all other breaches by Licensee. The Seller hereby assigns and, if not presently assignable, agrees to assign to the Buyer, the amount of Proceeds due to the Buyer in accordance with this Section 6.10(c).

Section 1.11 Termination of License Agreement. Without the prior written consent of the Buyer (such consent to be granted or withheld in the sole discretion of the Buyer), the Seller shall not (i) exercise any right to terminate the License Agreement, in whole or in part, (ii) agree with Licensee to terminate the License Agreement, in whole or in part, (iii) take, or permit any Affiliate or sublicensee to take, any action that would reasonably be expected to give Licensee the right to terminate the License Agreement, in whole or in part, or (iv) take any action, fail to take an action or permit an action to be taken, that would give Licensee the right to terminate the License Agreement under Section 11.2(b) thereof.

Section 1.12 New Arrangements.

(a) Without limiting the provisions of this Article 6 or any other rights or remedies the Buyer may have under this Agreement, if the License Agreement is terminated prior to the date on which all Patents within the Licensed Patents have expired or been abandoned:

(i) as reasonably instructed by the Buyer, the Seller will use commercially reasonable efforts to negotiate and enter into a license, assignment or transfer agreement with Licensee for the regulatory filings and approvals, data, know-how, and Patents owned or controlled by Licensee, including a license to the Karuna Product Patents, in each case, that are necessary or useful to research, develop, manufacture, use, market, sell, offer for sale, import or distribute the Licensed Products; and

(ii) the Buyer shall have the exclusive right to negotiate, or cause the Seller to use commercially reasonable efforts to negotiate and enter into, a license under the Licensed Patents with a Third Party, pursuant to which such Third Party will be granted rights to research, develop, manufacture, use, market, sell, offer for sale, import or distribute the Licensed Products for any purpose that Licensee would have been permitted to research, develop, manufacture, use, market, sell, offer for sale, import or distribute the Licensed Products under the License Agreement, subject to any rights retained by Licensee following such termination pursuant to Section 11.3 of the License Agreement (such license, a "New Arrangement"). The Seller shall provide reasonable assistance to and cooperate with the Buyer, at the Buyer's cost and expense (including the Buyer's payment of the Seller's reasonable and documented attorneys' fees, if any, in connection therewith), in such efforts as the Buyer shall undertake in connection with the negotiation of, and entry into, such New Arrangement. Any New Arrangement shall (x) not become effective earlier than the effective date of such termination of the License Agreement and (y) not include terms, conditions and limitations that impose any additional obligation or expense on the Seller or that are, in the aggregate, materially less favorable to the Seller and (as a result of the Buyer's purchase hereunder) the Buyer than those contained in the License Agreement, including with respect to obligations and costs imposed on the Seller, disclaimers of the Seller's liability, intellectual property ownership and control, indemnification of the Seller, milestone payments, royalty rates and sharing of sublicense income.

(b) Without limiting Section 6.12(a), should the Buyer identify any New Arrangement(s), the Seller agrees to execute and deliver a new license agreement to the applicable Third Party (each, a "New License Agreement") effectuating such New Arrangement that satisfies the foregoing requirements and contains such other reasonable terms as may be required or customarily included by the Seller and agreed to by the Buyer. Thereafter, each New License Agreement shall be included for all purposes in the definition of "License Agreement" under this Agreement, any payments that are equivalent to the Royalty under such New License Agreement and any rights similar shall be included for all purposes under this Agreement, and the Seller's and the Buyer's rights and obligations under this Agreement in respect of the License Agreement shall apply in respect of their rights and obligations under the New License Agreement *mutatis mutandis*, in each case without any further action by the parties hereto to amend this Agreement or the Bill of Sale.

Section 1.13 No Impairment of the Purchased Royalty. Notwithstanding anything herein to the contrary, the Seller shall not (i) enter into or propose or deliver any Contract (or make or propose any amendments, modifications waivers or notices in connection with any Contract) that imposes a Lien upon, or otherwise sells, transfers, hypothecates, assigns, conveys title (in whole or in part), grants any right to, or otherwise disposes of any portion of the Purchased Royalty, or (ii) knowingly take any action or knowingly fail to act in a manner, in each case that would, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

Section 1.14 Enforcement; Defense; Prosecution and Maintenance.

(a) The Buyer and the Seller shall promptly inform each other of any suspected infringement by a Third Party they become aware of with respect to any of the Licensed Patents or any other Patent claiming the composition of matter of, or the method of making or using, any Licensed Product. The Seller shall provide to the Buyer such documentation and information as the Buyer reasonably requests in connection with any such infringement and any action arising therefrom, including communications between Licensee and

the Seller under Section 6.1 or 6.2 of the License Agreement, in each case as soon as practicable and in any event not less than **[***]** (**[***]**) Business Days.

(b) The Seller shall not join or initiate without the prior written consent of the Buyer (not to be unreasonably withheld, conditioned or delayed), and shall (as reasonably instructed by the Buyer) join or initiate, an enforcement action of the Licensed Patents in accordance with, respectively, Sections 6.2(a), 6.2(b) and 6.5 of the License Agreement. The Seller shall not act without the prior written consent of the Buyer (not to be unreasonably withheld, conditioned or delayed), and shall act (as reasonably instructed by the Buyer), as to the timing, manner and conduct of any such enforcement action whether joined or initiated by the Seller. Without limiting Section 6.4 of the License Agreement, to the extent Licensee enforces any of the Licensed Patents in accordance with Section 6.2(a) of the License Agreement together with any other Patents owned or controlled by Licensee, the Seller agrees to, only as reasonably instructed by the Buyer, negotiate in good faith with Licensee and agree to a reasonable allocation of Proceeds as between the Licensed Patents and any other Patents that were subject to such suit. In each such case, the Seller shall obtain and deliver to the Buyer an accounting detailing the Proceeds allocated to the Licensed Patents.

(c) The Seller shall (as reasonably instructed by the Buyer), with respect to any Licensed Patents for which the Seller controls the prosecution and maintenance, (i) (A) take any and all actions, and prepare, execute, deliver and file any and all agreements, documents and instruments, that are reasonably necessary or desirable (x) to diligently prosecute, preserve and maintain any such Licensed Patents, including payment of maintenance fees or annuities on any such Licensed Patents, and (y) to extend the term of any such Licensed Patent or exclusivity period for a Licensed Product (including any patent term extension(s) or supplementary protection certificate(s) with respect to any such Licensed Patent, regulatory exclusivity periods with respect to a Licensed Product, or the like), in each case ((x) and (y)), including to the extent permitted in accordance with Article 5 of the License Agreement, and (B) without limiting the generality of clause (A), undertake the activities set forth on Exhibit H; (ii) prosecute any corrections, substitutions, reissues, reviews, reexaminations and any other forms of patent term restoration of any such Licensed Patents, including to the extent permitted in accordance with Article 5 of the License Agreement; (iii) diligently enforce and defend any such Licensed Patents, including by bringing any legal action for infringement in accordance with Section 6.14(b) and defending any counterclaim of invalidity or unenforceability or action of a Third Party for declaratory judgment of non-infringement or non-interference, including to the extent permitted in accordance with Sections 6.3 and 6.5 of the License Agreement; and (iv) not disclaim or abandon, or fail to take any action necessary or desirable to prevent the disclaimer or abandonment (including through lack of enforcement against Third Party infringers) of, any such Licensed Patents, including to the extent permitted in accordance with Article 5 of the License Agreement. [***]

(d) Promptly (and in any event within **[***]** (**[***]**) Business Days) following the receipt by the Seller of any (i) patent prosecution updates provided by Licensee to the Seller under Section 5.1 or 5.3 of the License Agreement, or (ii) patent defense updates provided by Licensee to the Seller under Section 6.2 or 6.3 of the License Agreement, the Seller shall furnish a true, correct and complete copy of the same to the Buyer. The Seller agrees to use its commercially reasonable efforts to obtain from Licensee, and deliver to the Buyer, on an annual basis, a complete and accurate docket report for all Licensed Patents; *provided* that if the Seller is unable to obtain such a docket report from Licensee in any given year, the Seller shall deliver a complete and accurate, to the best of the Seller's knowledge, docket report for all Licensed Patents.

(e) The Buyer shall have the right to participate in any action, suit or other proceeding or any material meeting or material discussion relating to the infringement, legality,

validity or enforceability of the Licensed Patents, including any counterclaim, settlement discussions or meetings. The parties hereto shall enter into the Bilateral Common Interest and Joint Privilege Agreement at the Closing in accordance with Section 3.4, and the Seller acknowledges and agrees that it will not object to the Buyer participating in such action, suit or other proceeding or such meeting or discussion and will not assert that such participation could adversely affect the maintenance by the Seller of any applicable attorney-client privilege.

Section 1.15 Further Assurances. After the Closing, the Seller and the Buyer agree to execute and deliver such other documents, certificates, agreements and other writings and to take such other actions as may be reasonably necessary in order to give effect to the transactions contemplated by this Agreement.

Section 1.16 Tax Matters.

(a) Notwithstanding anything to the contrary in this Agreement, the Seller and the Buyer shall treat the transactions contemplated by this Agreement as a sale of the Purchased Royalty for United States federal, state, local and non-U.S. Tax purposes. Accordingly, (i) any and all Purchased Royalty payments made pursuant to the License Agreement after the Closing Date shall be treated as income of the Buyer and (ii) any and all amounts remitted by the Seller to the Buyer after the Closing Date pursuant to Section 6.2(a) shall be treated as received by the Seller as agent for the Buyer, in each case for United States federal, state, local and non-U.S. Tax purposes. The parties hereto shall cooperate to effect the foregoing treatment for United States federal, state, local and non-U.S. Tax purposes in the event that, notwithstanding the Licensee Instruction Letter, Licensee, any Sublicensee (as defined in the License Agreement) or any other Person makes any future remittance of Purchased Royalty payments to the Seller which the Seller must remit to the Buyer pursuant to Section 6.2(a). The parties hereto agree to cooperate with one another and use reasonable efforts (including in the case of the Seller, to use commercially reasonable efforts to cause Licensee) to reduce, mitigate and eliminate tax withholding or similar obligations in respect of any Royalty payments, including assisting one another to claim the benefits of any applicable tax treaty or other available reduction or exemption from any such Taxes imposed, and by making claims for refunds of withholding tax; provided, however, that the Seller shall be entitled to deduct or withhold any amounts if it is required to do so by law; provided, further, that Seller shall use reasonable efforts to notify Buyer in advance of any such deduction or withholding.

(b) The parties hereto agree not to take any position that is inconsistent with the provisions of this Section 6.16 on any Tax return or in any audit or other Tax-related administrative or judicial proceeding unless (i) the other party hereto has consented in writing to such actions, (ii)) the party hereto that contemplates taking such an inconsistent position is required to do otherwise pursuant to a "determination," within the meaning of Section 1313(a) of the U.S. Internal Revenue Code of 1986, as amended, or (iii) the party hereto that contemplates taking such an inconsistent position has been advised by nationally recognized tax counsel in writing that there is no "reasonable basis" (within the meaning of Treasury Regulation Section 1.6662-3(b)(3)) for the position specified in this Section 6.16. If there is an inquiry by any Governmental Entity of the Seller or the Buyer related to this Section 6.16, the parties hereto shall cooperate with each other in responding to such inquiry in a reasonable manner consistent with this Section 6.16.

(c) From time to time during the term of this Agreement, upon the reasonable request of the Seller, the Buyer shall deliver to the Seller a valid, properly executed IRS Form W-8BEN-E certifying that royalty payments to the Buyer under this Agreement are exempt from U.S. federal withholding tax pursuant to an income tax treaty to which the United States is a party, or other documentation establishing an exemption from or reduction in U.S. withholding taxes. Seller shall deliver a copy of any such IRS Form W-8BEN-E or other documentation

provided by Buyer to Licensee. The Buyer shall, whenever a lapse in time or change in circumstances renders such documentation expired, obsolete or inaccurate in any respect, deliver to the Seller (to the extent it is legally eligible to do so) an updated IRS Form W-8BEN-E or any successor form or other documentation establishing an exemption from or reduction in U.S. federal withholding tax with respect to royalty payments made under this Agreement.

Section 1.17 Seller Monetization Transaction. The Seller shall provide reasonable (and at least **[***]** (**[***]**) Business Days') prior written notice to the Buyer before entering into any contract or arrangement with respect to a Seller Monetization Transaction which relates, in whole or in part, to the Retained Royalty.

Article 7

CONFIDENTIALITY

Section 1.1 Confidentiality. Except as provided in this Article 7 or otherwise agreed in writing by the parties, the parties hereto agree that, during the term of this Agreement and for five (5) years thereafter, each party (the "Receiving Party") shall keep confidential and shall not publish or otherwise disclose and shall not use for any purpose other than as provided for in this Agreement (which includes the exercise of any rights or the performance of any obligations hereunder) any information furnished to it by or on behalf of the other party (the "Disclosing Party") pursuant to the Existing Confidentiality Agreement (as defined below) or this Agreement (such information, "Confidential Information" of the Disclosing Party), except for that portion of such information that:

(a) was already known to the Receiving Party, other than under an obligation of confidentiality, at the time of disclosure by the Disclosing Party;

(b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the Receiving Party;

(c) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the Receiving Party in breach of this Agreement;

(d) is independently developed by the Receiving Party or any of its Affiliates, as evidenced by written records, without the use of or reference of the Confidential Information; or

(e) is subsequently disclosed to the Receiving Party on a non-confidential basis by a Third Party without obligations of confidentiality with respect thereto.

Section 1.2 Authorized Disclosure.

(a) Either party may disclose Confidential Information with the prior written consent of the Disclosing Party or to the extent such disclosure is reasonably necessary in the following situations:

(i) prosecuting or defending litigation;

(ii) complying with applicable laws and regulations, including regulations promulgated by securities exchanges;

(iii) complying with a valid order of a court of competent jurisdiction or other Governmental Entity;

(iv) for regulatory, tax or customs purposes;

(v) for audit purposes, provided that each recipient of Confidential Information must be bound by customary obligations of confidentiality and non-use prior to any such disclosure;

(vi) disclosure to its Affiliates and Representatives on a need-to-know basis, provided that each recipient of Confidential Information must be bound by customary obligations of confidentiality and non-use prior to any such disclosure; or

(vii) disclosure to its actual or potential investors and co-investors, and other sources of funding, including debt financing, or potential partners, collaborators or acquirers, and their respective accountants, financial advisors and other professional representatives, provided, that such disclosure shall be made only to the extent customarily required to consummate such investment, financing transaction partnership, collaboration or acquisition and that each recipient of Confidential Information must be bound by customary obligations of confidentiality and non-use prior to any such disclosure.

(b) Notwithstanding the foregoing, in the event the Receiving Party is required to make a disclosure of the Disclosing Party's Confidential Information pursuant to Section 7.2(a)(i), (ii), (iii) or (iv), it will, except where impracticable, give reasonable advance notice to the Disclosing Party of such disclosure and use reasonable efforts to secure confidential treatment of such information. In any event, the Buyer shall not file any patent application based upon or using the Confidential Information of Seller provided hereunder.

Section 1.3 Termination of Confidentiality Agreement. Effective upon the date hereof, that certain Confidential Disclosure Agreement, dated September 20, 2022, between RP Management LLC and the Seller (the "Existing Confidentiality Agreement") shall terminate and be of no further force or effect, and shall be superseded by the provisions of this Article 7.

Article 8

INDEMNIFICATION

Section 1.1 General Indemnity. Subject to Section 8.3, from and after the Closing:

(a) the Seller hereby agrees to indemnify, defend and hold harmless the Buyer and its Affiliates and its and their directors, managers, trustees, officers, agents and employees (the "Buyer Indemnified Parties") from, against and in respect of all Losses suffered or incurred by the Buyer Indemnified Parties to the extent arising out of or resulting from (i) (x) any breach of any of the representations or warranties (in each case, when made) of the Seller in this Agreement, or (y) any breach of any of the covenants or agreements of the Seller in this Agreement; provided, however, that the foregoing clause (i) shall exclude any indemnification to any Buyer Indemnified Party solely to the extent (1) that it has the effect of imposing on the Seller any liability to make payments of or in lieu of the Royalty because of any Credit Event, (2) that it results from the failure of Licensee to perform any of its obligations under the License

Agreement, unless directly resulting from the breach or default by the Seller of or under the License Agreement or this Agreement, (3) resulting from the gross negligence, willful misconduct, or fraud of any Buyer Indemnified Party, or (4) resulting from acts or omissions of the Seller or any of its Affiliates solely based upon, and in conformity with, the Buyer's express written instructions; or (ii) the matter set forth on Schedule 4.9(a)(ii) of the Disclosure Schedule and any Losses related to such matter.

(b) the Buyer hereby agrees to indemnify, defend and hold harmless the Seller and its Affiliates and its and their directors, officers, agents and employees (the "Seller Indemnified Parties") from, against and in respect of all Losses suffered or incurred by the Seller Indemnified Parties to the extent arising out of or resulting from (i) any breach of any of the representations or warranties (in each case, when made) of the Buyer in this Agreement or (ii) any breach of any of the covenants or agreements of the Buyer in this Agreement; provided, however, that the foregoing shall exclude any indemnification to any Seller Indemnified Party solely to the extent (y) resulting from the gross negligence, willful misconduct, or fraud of any Seller Indemnified Party, or (z) resulting from acts or omissions of the Buyer or any of its Affiliates solely based upon, and in conformity with, the Seller's express written instructions.

Section 1.2 Notice of Claims. If either a Buyer Indemnified Party, on the one hand, or a Seller Indemnified Party, on the other hand (such Buyer Indemnified Party on the one hand and such Seller Indemnified Party on the other hand being hereinafter referred to as an "Indemnified Party"), has suffered or incurred any Losses for which indemnification may be sought under this Article 8, the Indemnified Party shall so notify the other party from whom indemnification is sought under this Article 8 (the "Indemnifying Party") promptly in writing describing such Loss, the amount or estimated amount thereof, if known or reasonably capable of estimation, and the method of computation of such Loss, all with reasonable particularity and containing a reference to the provisions of this Agreement in respect of which such Loss shall have occurred. If any claim, action, suit or proceeding is asserted or instituted by a Third Party with respect to which an Indemnified Party intends to claim any Loss under this Article 8, such Indemnified Party shall promptly notify the Indemnifying Party of such claim, action, suit or proceeding and tender to the Indemnifying Party the defense of such claim, action, suit or proceeding. A failure by an Indemnified Party to give notice and to tender the defense of such claim, action, suit or proceeding in a timely manner pursuant to this Section 8.2 shall not limit the obligation of the Indemnifying Party under this Article 8, except to the extent such Indemnifying Party is actually prejudiced thereby.

Section 1.3 Limitations on Liability. No party hereto shall be liable for any indirect, consequential, punitive, special or incidental damages as a result of any breach or violation of any covenant or agreement of such party (including under this Article 8) in or pursuant to this Agreement. Notwithstanding the foregoing, the Buyer shall be entitled to make indemnification claims, in accordance with the procedures set forth in this Article 8, for Losses that include any portion of the Purchased Royalty that the Buyer was entitled to receive but did not receive timely or at all due to any indemnifiable events under this Agreement, and such portion of the Purchased Royalty shall not be deemed indirect, consequential, punitive, special or incidental damages for any purpose of this Agreement. For the avoidance of doubt, the Seller shall have no liability to the Buyer for any Permitted Reduction or Credit Event.

Section 1.4 Third Party Claims. Following the receipt of notice provided by an Indemnified Party pursuant to Section 8.2 of the commencement of any action, suit or proceeding against such Indemnified Party by a Third Party with respect to which such Indemnified Party intends to claim any Loss under this Article 8, an Indemnifying Party shall have the right to defend such claim, at such Indemnifying Party's expense and with counsel of its choice reasonably satisfactory to the Indemnified Party. If the Indemnifying Party assumes the defense of such claim, the Indemnified Party shall, at the request of the Indemnifying Party, use

commercially reasonable efforts to cooperate in such defense; *provided* that the Indemnifying Party shall bear the Indemnified Party's reasonable out-of-pocket costs and expenses incurred in connection with such cooperation. So long as the Indemnifying Party is conducting the defense of such claim as provided in this Section 8.4, the Indemnified Party may retain separate co-counsel at its expense and may participate in the defense of such claim. The Indemnifying Party shall not consent to the entry of any Judgment or enter into any settlement with respect to such claim without the prior written consent of the Indemnified Party unless such Judgment or settlement (i) provides for the payment by the Indemnifying Party of money as sole relief (if any) for the claimant (other than customary and reasonable confidentiality obligations relating to such claim, Judgment or settlement), (ii) results in the full and general release of the Indemnified Party from all liabilities arising out of, relating to or in connection with such claim and (iii) does not involve a finding or admission of any violation of any law, rule, regulation or Judgment, or the rights of any Person, and has no effect on any other claims that may be made against the Indemnified Party. In the event the Indemnifying Party does not or ceases to conduct the defense of such claim as so provided, (x) the Indemnified Party may defend against, and consent to the entry of any Judgment or enter into any settlement with respect to, such claim in any manner it may reasonably deem to be appropriate, (y) subject to the limitations set forth in Section 8.3, the Indemnifying Party shall reimburse the Indemnified Party promptly and periodically for the reasonable out-of-pocket costs of defending against such claim, including reasonable attorneys' fees and expenses against reasonably detailed invoices, and (z) the Indemnifying Party shall remain responsible for any Losses the Indemnified Party may suffer as a result of such claim to the full extent provided in this Article 8.

Section 1.5 Exclusive Remedy. Except as set forth in Section 10.10, from and after Closing, the rights of the parties hereto pursuant to (and subject to the conditions of) this Article 8 shall be the sole and exclusive remedy of the parties hereto and their respective Affiliates with respect to any claims (whether based in contract, tort or otherwise) resulting from or relating to any breach of the representations, warranties, covenants and agreements made under this Agreement or any certificate, document or instrument delivered hereunder, and each party hereto hereby waives, to the fullest extent permitted under applicable law, and agrees not to assert after Closing, any other claim or action in respect of any such breach. Notwithstanding the foregoing, claims for common law fraud shall not be waived or limited in any way by this Article 8.

Section 1.6 Tax Treatment of Indemnification Payments. For all purposes hereunder, any indemnification payments made pursuant to this Article 8 will be treated as an adjustment to the Purchase Price for U.S. federal income tax purposes to the fullest extent permitted by applicable law, except to the extent otherwise required pursuant to a "determination," within the meaning of Section 1313(a) of the U.S. Internal Revenue Code of 1986, as amended.

Article 9

TERMINATION

Section 1.1 Grounds for Termination. This Agreement may be terminated at any time by mutual written agreement of the Buyer and the Seller.

Section 1.2 Automatic Termination. Unless earlier terminated as provided in Section 9.1, this Agreement shall continue in full force and effect until sixty (60) days after the full satisfaction of any amounts due under the License Agreement to the Seller and any payments in respect of the Purchased Royalty due under this Agreement to the Buyer, at which point this

Agreement shall automatically terminate, except with respect to any rights and obligations that shall have accrued prior to such termination.

Section 1.3 Survival. Notwithstanding anything to the contrary in this Article 9, the following provisions shall survive termination of this Agreement: Section 2.3 (True Sale), Section 6.1 (Disclosures), Section 6.2 (Payments Received in Error), Section 6.4 (Interest on Overdue Payments), Section 6.6 (Inspections and Audits of Licensee) (for the period set forth in Section 4.4 of the License Agreement), Article 7 (Confidentiality) (for the period set forth in Section 7.1), Article 8 (Indemnification), this Section 9.3 (Survival) and Article 10 (Miscellaneous). Termination of this Agreement shall not relieve any party hereto of liability in respect of breaches under this Agreement by such party on or prior to termination. In addition, in the event the License Agreement is terminated prior to the date on which all Patents within the Licensed Patents have expired or been abandoned, Section 6.12 (New Arrangements) shall survive the termination of this Agreement.

Article 10

MISCELLANEOUS

Section 1.1 Notices. All notices and other communications under this Agreement shall be in writing and shall be by email with PDF attachment, courier service or personal delivery to the following addresses, or to such other addresses as shall be designated from time to time by a party hereto in accordance with this Section 10.1:

If to the Seller or the Seller Parent:

PureTech Health LLC
6 Tide Street, 4th Floor
Boston, MA 02210
Attention: President
Email: [***]

With a copy to Legal Department at the above address

And with a copy to:

Sills Cummis & Gross P.C.
One Riverfront Plaza
Newark, NJ 07102
Attention: [***]
Email: [***]

If to the Buyer:

RP Management, LLC
110 E. 59th Street, Suite 3300
New York, New York 10022
Attention: General Counsel
Email: [***]

With a copy to:
Gibson, Dunn & Crutcher LLP
555 Mission Street
San Francisco, CA 94105

Attention: [***]
Email: [***]

All notices and communications under this Agreement shall be deemed to have been duly given (i) when delivered by hand, if personally delivered, (ii) when received by a recipient, if sent by email, with such receipt to be effective the date acknowledged by such recipient, or (iii) one Business Day following sending within the United States by overnight delivery via commercial one-day overnight courier service.

Section 1.2 Expenses. Except as otherwise provided herein, all fees, costs and expenses (including any legal, accounting and banking fees) incurred in connection with the preparation, negotiation, execution and delivery of this Agreement and to consummate the transactions contemplated hereby shall be paid by the party hereto incurring such fees, costs and expenses.

Section 1.3 Assignment. The Seller shall not sell, assign or otherwise transfer all or any portion of its interest (including its rights or obligations) under this Agreement to any Person, including by contract, operation of law, merger, change of control, or otherwise, unless in connection therewith (i) such Person acquires all of the Seller's interest in all of the Licensed Products, Licensed Patents, the License Agreement and this Agreement and (ii) prior to closing any such transaction, the Seller causes such Person to first enter into an assumption agreement with the Buyer in substantially the form attached hereto as Exhibit G in which (x) if such Person is not Licensee, such Person assumes all of the obligations of the Seller to the Buyer under this Agreement, and (y) if such Person is Licensee, Licensee assumes all of the obligations of the Seller to the Buyer hereunder and agrees to pay the Purchased Royalty to the Buyer notwithstanding any subsequent termination of the License Agreement by Licensee. Notwithstanding the foregoing, the Seller may sell, assign or otherwise transfer its right to receive any or all of the Additional Purchase Price Payments under this Agreement to any Person without the written consent of the Buyer; provided that the Seller gives prompt written notice of such sale, assignment or transfer to the Buyer. Following the Closing, the Buyer may assign this Agreement, provided that (1) the Buyer promptly notifies the Seller of such assignment, (2) the Buyer shall not assign this Agreement to any biopharmaceutical company competitor of the Seller without the Seller's prior written consent, and (3) no such assignment shall relieve the Buyer of its obligations under this Agreement to pay any Additional Purchase Price Payments when due. This Agreement shall be binding upon, inure to the benefit of and be enforceable by, the parties hereto and their respective permitted successors and assigns. Any purported assignment in violation of this Section 10.3 shall be null and void.

Section 1.4 Amendment and Waiver.

(a) This Agreement may be amended, modified or supplemented only in a writing signed by each of the parties hereto. Any provision of this Agreement may be waived only in a writing signed by the parties hereto granting such waiver.

(b) No failure or delay on the part of any party hereto in exercising any right, power or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy. No course of dealing between the parties hereto shall be effective to amend, modify, supplement or waive any provision of this Agreement.

Section 1.5 Entire Agreement. This Agreement, the Exhibits annexed hereto and the Disclosure Schedule constitute the entire understanding between the parties hereto with respect to the subject matter hereof and supersede all other understandings and negotiations with respect thereto.

Section 1.6 No Third Party Beneficiaries. This Agreement is for the sole benefit of the Seller and the Buyer and their permitted successors and assigns and nothing herein expressed or implied shall give or be construed to give to any Person, other than the parties hereto and such successors and assigns, any legal or equitable rights hereunder; except that the Indemnified Parties shall be third party beneficiaries of the benefits provided for in Article 8.

Section 1.7 Governing Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of New York without giving effect to any choice or conflict of law provision or rule that would cause the application of the laws of any other jurisdiction.

Section 1.8 JURISDICTION; VENUE.

(a) EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY AND UNCONDITIONALLY SUBMITS, FOR ITSELF AND ITS RESPECTIVE PROPERTY AND ASSETS, TO THE EXCLUSIVE JURISDICTION OF ANY NEW YORK STATE COURT OR FEDERAL COURT OF THE UNITED STATES OF AMERICA SITTING IN NEW YORK COUNTY, NEW YORK, AND ANY APPELLATE COURT THEREOF, IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT, OR FOR RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT IN RESPECT THEREOF, AND THE BUYER AND THE SELLER HEREBY IRREVOCABLY AND UNCONDITIONALLY AGREE THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION OR PROCEEDING MAY BE HEARD AND DETERMINED IN ANY SUCH NEW YORK STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. THE BUYER AND THE SELLER HEREBY AGREE THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY APPLICABLE LAW. EACH OF THE BUYER AND THE SELLER HEREBY SUBMITS TO THE EXCLUSIVE PERSONAL JURISDICTION AND VENUE OF SUCH NEW YORK STATE AND FEDERAL COURTS. THE BUYER AND THE SELLER AGREE, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THAT PROCESS MAY BE SERVED ON THE BUYER OR THE SELLER IN THE SAME MANNER THAT NOTICES MAY BE GIVEN PURSUANT TO SECTION 10.1 HEREOF.

(b) EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT IT MAY LEGALLY AND EFFECTIVELY DO SO, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT IN ANY NEW YORK STATE OR FEDERAL COURT SITTING IN NEW YORK COUNTY, NEW YORK, AND ANY APPELLATE COURT THEREOF. EACH OF THE BUYER AND THE SELLER HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

(c) EACH PARTY HERETO HEREBY JOINTLY AND SEVERALLY WAIVES ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY OTHER DOCUMENT DELIVERED HEREUNDER OR IN CONNECTION HEREWITH, OR ANY TRANSACTION ARISING FROM OR CONNECTED TO ANY OF THE FOREGOING. EACH OF THE PARTIES HERETO REPRESENTS THAT THIS WAIVER IS KNOWINGLY, WILLINGLY, AND VOLUNTARILY GIVEN.

Section 1.9 Severability. If any term or provision of this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any situation in any jurisdiction, then, to the extent that the economic and legal substance of the transactions contemplated hereby is not affected in a manner that is materially adverse to either party hereto, all other terms and provisions of this Agreement shall nevertheless remain in full force and effect and the enforceability and validity of the offending term or provision shall not be affected in any other situation or jurisdiction.

Section 1.10 Specific Performance. Each of the parties hereto acknowledges and agrees that the other parties hereto may be damaged irreparably in the event any of the provisions of this Agreement are not performed in accordance with their specific terms or otherwise are breached or violated. Accordingly, notwithstanding Section 8.5, each of the parties hereto agrees that, without posting bond or other undertaking, the other parties hereto shall be entitled to seek an injunction or injunctions to prevent breaches or violations of the provisions of this Agreement and to seek to enforce specifically this Agreement and the terms and provisions hereof in any action, suit or other proceeding instituted in any court of the United States or any state thereof having jurisdiction over the parties hereto and the matter in addition to any other remedy to which it may be entitled, at law or in equity. Each party hereto further agrees that, in the event of any action for specific performance in respect of such breach or violation, it shall not assert the defense that a remedy at law would be adequate.

Section 1.11 Counterparts. This Agreement may be executed in any number of counterparts and by the parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Copies of executed counterparts transmitted by email or other similar means of electronic transmission, including "PDF," shall be considered original executed counterparts, provided receipt of such counterparts is confirmed.

Section 1.12 Relationships of the Parties. The relationship between the Buyer and the Seller is solely that of purchaser and seller, and neither the Buyer nor the Seller has any fiduciary or other special relationship with the other party hereto or any of its Affiliates. This Agreement is not a partnership or similar agreement, and nothing contained herein shall be deemed to constitute the Buyer and the Seller as a partnership, an association, a joint venture or any other kind of entity or legal form for any purposes, including any Tax purposes. The Buyer and the Seller agree that they shall not take any inconsistent position with respect to such treatment in a filing with any Governmental Entity.

Section 1.13 Seller Parent Guarantee. The Seller Parent hereby guarantees to the Buyer the full and timely performance of all of the obligations of the Seller under this Agreement (the "Guaranteed Obligations"). This is a guarantee of performance, and not merely of collection, and the Seller Parent acknowledges and agrees that this guarantee is full and unconditional, and no amendment, modification, release or extinguishment of the Seller's obligations or liabilities, whether by decree in any bankruptcy proceeding or otherwise, shall affect the continuing validity and enforceability of this guarantee. The Seller Parent hereby waives, for the benefit of the Buyer, (i) any right to require the Buyer, as a condition of performance by the Seller Parent, to proceed in any legal action against the Seller or pursue any other remedies whatsoever and (ii) to the fullest extent permitted by applicable law, any defenses or benefits that may be derived from or afforded by any law that limits the liability of or exonerates guarantors or sureties, other than defense of performance in full of the Guaranteed Obligations. The Seller Parent will reimburse the Buyer for all reasonable and documented out-of-pocket costs and expenses (including court costs and reasonable attorneys' fees) incurred by the Buyer in connection with the enforcement of its rights under this Section 10.13. If all or any part of any payment to or for the benefit of the Buyer in respect of a Guaranteed Obligation is invalidated, declared to be fraudulent or preferential or set aside and, in each such case, required for any reason to be repaid or paid to a

trustee, receiver or other Person that is not the Buyer, the Guaranteed Obligations that otherwise would have been satisfied by that payment or partial payment will be revived and will continue in full force and effect as if that payment had not been made. The Seller Parent understands and acknowledges that the Buyer is relying on this guarantee and the representations and warranties of the Seller Parent in Article 4 in entering into this Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have caused this Royalty Purchase Agreement to be executed and delivered by their respective representatives thereunto duly authorized as of the date first above written.

PURETECH HEALTH LLC

By: /s/ Bharatt Chowrira
Name: Bharatt Chowrira
Title: President, PureTech Health

Solely for purposes of Article 4 and Section 10.13, PURETECH HEALTH PLC

By: /s/_Bharatt Chowrira _____
Name: Bharatt Chowrira
Title: President, PureTech Health

ROYALTY PHARMA INVESTMENTS 2019 ICAV

By: RP Management, LLC, its Manager and lawfully appointed attorney

By: /s/ Arthur McGivern
Name: Arthur McGivern
Title: Executive Vice President, Investments & General Counsel

THE SECURITIES REPRESENTED BY THIS NOTE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISTRIBUTION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

THIS NOTE IS SUBJECT TO THE TERMS OF A SUBORDINATION AGREEMENT DATED [●], 2023 BY AND AMONG THE COMPANY, THE HOLDERS OF THE NOTES (AS DEFINED BELOW), K2 HEALTHVENTURES LLC, AND ANKURA TRUST COMPANY, LLC.

SECURED SUBORDINATED CONVERTIBLE PROMISSORY NOTE

$[●] [●], 2023

Cambridge, MA

For value received, Vedanta Biosciences, Inc., a Delaware corporation (the "**Company**"), promises to pay to [●] (the "**Holder**"), or its permitted assigns, in lawful money of the United States of America the principal sum of [●]. Interest shall accrue from the date of this Secured Convertible Promissory Note (this "**Note**") on the unpaid principal amount at a rate equal to nine percent (9.0%) based on a 365-day year, which interest shall accrue daily and compound annually. Any capitalized terms not defined herein shall have the meaning as set forth in the Purchase Agreement (as defined below). This Note is subject to the following terms and conditions:

1. **Issuance of Notes.** This Note is one of a series of Secured Subordinated Convertible Promissory Notes (collectively, the "**Notes**" and the holders of such Notes, the "**Holders**") being issued pursuant to that certain Secured Convertible Promissory Note Purchase Agreement, dated as of [●], 2023, by and among the Company, the Holder and certain other investors listed on Exhibit A thereto (as may be amended from time to time, the "**Purchase Agreement**"), and is subject to, and the Holder and Company shall be bound by, all the terms, conditions and provisions of the Purchase Agreement. This Note is subordinated to certain other indebtedness of the Company on the terms set forth in that certain Subordination Agreement dated [_____], 2023, by and among the Holder, K2 HealthVentures LLC ("**K2**") as administrative agent, Ankura Trust Company, LLC as collateral trustee, and certain other parties (as amended from time to time, the "**Subordination Agreement**"), if in effect and outstanding at the relevant time.

2. **Repayment**. If this Note is not earlier converted or repaid, the entire then-outstanding and unpaid principal amount of this Note, together with any accrued but unpaid interest under this Note (the "**Outstanding Amount**"), shall be due and payable upon the earliest to occur of (i) the later of (x) November 1, 2025 and (y) the date which is sixty (60) days after all amounts owed under or in connection with the K2 Loan Agreement (if then in effect and outstanding) have been paid in full (the "**Maturity Date**"), (ii) the consummation of a Deemed Liquidation Event (as defined in the Company's Amended and Restated Certificate of Incorporation in effect at the Initial Closing (the "**Current Certificate**")) to the extent the Outstanding Amount is not converted pursuant to Section 4(c) below and after all amounts owed under or in connection with the K2 Loan Agreement (if then in effect and outstanding) have been paid in full, or (iii) the occurrence of an Event of Default (as defined below), when such amounts are declared due and payable by the Holder in accordance with the terms hereof and in accordance with the terms of (and strictly to the extent permitted under) the Subordination Agreement (if then in effect and outstanding). The Notes shall rank *pari passu* in right of payment with respect to each other Note, and all payments to each of the Holders under the Notes shall be made *pro rata* among the Holders based upon the aggregate unpaid principal amount of the Notes outstanding immediately prior to any such payment. All payments shall be made in lawful money of the United States of America at such place as the Holder hereof may from time to time designate in writing to the Company. Subject to Section 4 below, interest shall accrue on this Note but shall not be due and payable until the Maturity Date. The Company shall have the right to prepay all or any portion of this Note only with the prior written consent of the Majority Holders, which must include the Lead Investor Majority.

3. **Security**. The payment obligations of the Company arising under this Note are secured pursuant to the terms of (i) that certain Security Agreement dated as of [●], 2023 by and among the

Company, the Collateral Agent (as defined therein) and the Purchasers (as defined therein) (as amended from time to time, the "**Security Agreement**") and (ii) that certain Intellectual Property Security Agreement dated as of [●], 2023 by and among the Company, the Collateral Agent (as defined therein) and the Purchasers (as defined therein) (as amended from time to time, the "**IP Security Agreement**"). Reference hereby is made to the Security Agreement and the IP Security Agreement for a description of the nature and extent of the collateral serving as security for this Note and the rights of the Holder with respect to such security.

4. **Conversion.**

(a) **Certain Definitions**.

(i) "**K2 Loan Agreement**" means that certain Loan and Security Agreement, dated on or about [_____], 2023, by and between, among others, K2 HealthVentures LLC as administrative agent, the Lenders party from time to time party thereto and the Company (as amended, restated, amended and restated, extended, supplemented or otherwise modified from time to time).

(ii) "**Outstanding Shares**" means the number of shares of the capital stock of the Company deemed to be outstanding as of immediately prior to the applicable Transaction Closing on a fully-diluted, as-converted basis (specifically including all shares of issued and outstanding capital stock, all outstanding options and promised options, any shares reserved for issuance under the Company's equity incentive plans, as well as any increase to such reserve to be effected in connection with such Transaction Closing and any subsequent closing thereof (whether such increases are effective prior to, in connection with or following the closing thereof) and all securities exercisable or exchangeable for or convertible into shares of the Company's capital stock, including, but not limited to warrants, convertible notes and other convertible debt instruments, SAFEs and other convertible securities that have the right to convert into shares of the Company's capital stock, but excluding the Notes.

(iii) "**Qualified Equity Financing**" means the first bona fide equity financing consummated after the Initial Closing in which the Company sells and issues shares of Preferred Stock resulting in aggregate gross proceeds actually received by the Company of at least $75,000,000 (excluding the Debt, other outstanding indebtedness for borrowed money and other convertible instruments (e.g. SAFEs or other similar instruments)) (the "**QEF Threshold Amount**") in a single transaction or series of related transactions.

(iv) "**Transaction Closing**" means, as applicable, (v) the closing of a Qualified Equity Financing upon which the Company has actually received, in the aggregate at such closing and at all earlier closings of such financing, aggregate gross proceeds of such financing at least equal to the QEF Threshold Amount, (w) the initial closing of an Optional Equity Financing, (x) immediately prior to the effectiveness of a Maturity Conversion (as defined below), (y) the closing of a transaction constituting a Sale Transaction, or (z) the closing of a Qualified Public Offering (as defined in the Current Certificate).

(v) "**Valuation Cap Amount**" means US $160,000,000.00.

(b) **Automatic Conversion Upon a Qualified Financing.** Immediately upon the initial closing of a Qualified Equity Financing, the Outstanding Amount shall automatically convert into shares of the Company's Preferred Stock sold and issued in the Qualified Equity Financing to cash investors (the "**Equity Securities**") at a per share conversion equal to the lesser of (i) 80% of the lowest per share price paid for the Equity Securities by the other investors participating in the Qualified Equity Financing and (ii) an amount equal to (y) the Valuation Cap Amount divided by (z) the number of Outstanding Shares. The issuance of the Equity Securities upon conversion of this Note pursuant to this Section 4(b) shall otherwise be on the same terms and conditions provided to the cash investors purchasing Equity Securities in the Qualified Equity Financing.

(c) **Optional Conversion Upon Non-Qualified Equity Financing**. In the event that, prior to the repayment in full or conversion of this Note, the Company consummates an equity financing, which is not a Qualified Equity Financing (an "**Optional Equity Financing**"), the entire outstanding Debt with respect to such Notes may, upon the written election of the Lead Investor Majority in connection therewith or anytime thereafter, be converted into shares of the Company's capital stock sold and issued to cash investors in the Optional Equity Financing at a per share conversion price equal to the lesser of (i) 80% of the lowest per share price paid for the capital stock by the other investors

participating in the Optional Equity Financing and (ii) an amount equal to (y) the Valuation Cap Amount divided by (z) the number of Outstanding Shares. The issuance of the capital stock upon conversion of this Note pursuant to this Section 4(c) shall otherwise be on the same terms and conditions provided to the cash investors purchasing Equity Securities in the Qualified Equity Financing.

(d) **Optional Conversion upon Deemed Liquidation Event**. If the Company consummates a Deemed Liquidation Event (as defined in the Current Certificate) or a similar change of control transaction (including a transaction or series of related transactions in which a Person, or a group of related Persons, acquires from stockholders of the Company shares representing more than fifty percent (50%) of the outstanding voting power of the Company) (collectively, a "**Sale Transaction**") at any time prior to the repayment or conversion of the entire Outstanding Amount, the Holder shall be entitled, in satisfaction of all amounts owed under the Note, to receive the greater of (i) payment equal to 1.5 times the Outstanding Amount as of immediately prior to the closing of such Sale Transaction, or (ii) such amount per share as would have been payable had the Outstanding Amount as of immediately prior to the closing of such Sale Transaction been converted into shares of Common Stock at a per share conversion price equal to (y) the Valuation Cap Amount divided by (z) the number of Outstanding Shares.

(e) **Maturity Conversion**. Upon the occurrence of an Event of Default or if the Note has not been converted or repaid prior to the Maturity Date, the Holder shall be entitled, upon Holder's election, to convert the Outstanding Amount of this Note into shares of a newly created series of Preferred Stock at a per share conversion price equal to (i) the Valuation Cap Amount divided by (ii) the number of Outstanding Shares (a "**Maturity Conversion**"). The shares of such newly created series of Preferred Stock issued pursuant to this Section 4(e) shall have terms which are substantially the same as the Company's Series D Preferred Stock (or, if (x) the Company issues, in an Option Equity Financing, shares of a newly created series of Preferred Stock for aggregate gross cash proceeds of such Option Equity Financing actually received by the Company (excluding, for the avoidance of doubt, any proceeds from conversion of indebtedness) of not less than $25,000,000, (y) any of the Notes remain outstanding after such Option Equity Financing, and (z) such newly created series of Preferred Stock issued in connection with the Option Equity Financing ranks either senior to or *pari passu* with the rights, preferences and privileges of the Company's Series D Preferred Stock, then the shares of the newly created series of Preferred Stock issued pursuant to this Section 4(e) shall have terms which are substantially the same as the newly created series of Preferred Stock issued in connection with the Option Equity Financing (the series of Preferred Stock issued pursuant to this Section 4(e) being referred to herein as the "**New Preferred Stock**")), except that (i) such shares shall be senior in all respects to the Series D Preferred Stock and all other Preferred Stock, (ii) such shares shall provide for customary terms and conditions with respect thereto (including reasonable provisions to protect its seniority), (iii) the holders of record of shares of the New Preferred Stock, exclusively and as a separate class, shall be entitled to elect seven (7) directors of the Company, (iv) the provisions of Section 3.3.5 of Article IV, Part B of the Current Certificate as amended and/or restated to reflect the authorization and issuance of the New Preferred Stock shall be modified to delete therefrom the words "or unless such debt security or other indebtedness for borrowed money has received the prior approval of the Board of Directors" and (v) in connection with the issuance of shares of New Preferred Stock upon a Maturity Conversion, the Investors' Rights Agreement shall be amended by adding thereto a provision substantially similar to Section 5.5 of the National Venture Capital Association's model form of Investors' Rights Agreement (as then available at https://nvca.org/model-legal-documents/; the "**Model Form**") requiring approval of matters enumerated in such Section 5.5 of the Model Form by a "Requisite Preferred Director Vote", with the term "Preferred Director" defined for that purpose as meaning any director of the Company elected by the holders of New Preferred Stock as set forth in clause (iii) of this Section 4(e) or designated to serve on the Board of Directors pursuant to clause 3.2(g), (h) or (i) of the Investors' Rights Agreement, and with the term "Requisite Preferred Director Vote" defined for that purpose as meaning approval of the Board of Directors including the vote of a majority of the Preferred Directors then seated.

(f) **Conversion Upon Initial Public Offering**. If the Company consummates a Qualified Public Offering at any time prior to the repayment or conversion of the Outstanding Amount, the Outstanding Amount shall automatically convert into shares of Common Stock at a per share conversion price equal to the lesser of (i) 80% of the per share price at which shares of Common Stock are sold to the public in such Qualified Public Offering and (ii) (y) the Valuation Cap Amount divided by (z) the number of Outstanding Shares.

(g) **Mechanics and Effect of Conversion.** No fractional shares of the Company's capital stock will be issued upon conversion of this Note. Upon conversion of this Note pursuant to this Section 4, the Holder shall surrender this Note, duly endorsed, at the principal offices of the Company or any transfer agent of the Company. At its expense, the Company will, as soon as practicable thereafter, issue and deliver to the Holder, at such principal office, a certificate or certificates for the number of shares to which the Holder is entitled upon such conversion, together with any other securities and property to which the Holder is entitled upon such conversion under the terms of this Note. Upon conversion of this Note, the Company will be forever released from all of its obligations and liabilities under this Note with regard to that portion of the Outstanding Amount being converted including, without limitation, the obligation to pay such portion of the Outstanding Amount.

(h) **No Rights as Stockholder**. Without derogation from any of the provisions of the Investors' Rights Agreement, this Note does not by itself entitle the Holder to any voting rights or other rights as a stockholder of the Company, and in the absence of conversion of this Note, no provisions of this Note, and no enumeration herein of the rights or privileges of the Holder shall cause the Holder to be a stockholder of the Company for any purpose.

5. **Events of Default**. Promptly following the Company becoming aware of an occurrence of any Event of Default, the Company shall furnish to the Holder written notice of the occurrence thereof. The occurrence of any of the following shall constitute an "**Event of Default**" under this Note:

(a) the Company shall fail to pay Holder in full the Outstanding Amount when due;

(b) the Company, or any of its subsidiaries, fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in the Purchase Agreement, and as to any default under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within ten (10) days after the occurrence thereof; provided, however, that if the default cannot by its nature be cured within the ten (10) day period or cannot after diligent attempts by the Company be cured within such ten (10) day period, and such default is likely to be cured within a reasonable time, then the Company shall have an additional period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to cure the default shall not be deemed an Event of Default.

(c) a Material Adverse Change occurs;

(d) (i) the service of process seeking to attach, by trustee or similar process, any funds of the Company or any of its subsidiaries or of any entity under control of the Company or its subsidiaries on deposit with any bank or other institution at which the Company or any of its subsidiaries maintains Collateral, or (ii) a notice of lien, levy, or assessment is filed against the Company or any of its subsidiaries or their respective assets by any government agency, and the same under subclauses (i) and (ii) hereof are not, within ten (10) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise);

(e) (i) any material portion of the Company's or any of its subsidiaries' assets is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents the Company or any of its subsidiaries from conducting any part of its business;

(f) (i) the Company or any of its subsidiaries is or becomes Insolvent; (ii) the Company or any of its subsidiaries begins an Insolvency Proceeding; or (iii) an Insolvency Proceeding is begun against the Company or any of its subsidiaries and not dismissed or stayed within forty-five (45) days;

(g) there is a default in any agreement to which the Company or any of its subsidiaries is a party with a third party or parties resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any indebtedness in an amount in excess of Five Hundred Thousand Dollars ($500,000.00) or that could reasonably be expected to have a Material Adverse Change;

(h) one or more judgments, orders, or decrees for the payment of money in an amount, individually or in the aggregate, of at least Five Hundred Thousand Dollars ($500,000.00) (not covered by independent third-party insurance as to which liability has been accepted by such insurance

carrier) shall be rendered against the Company or any of its subsidiaries and shall remain unsatisfied, unvacated, or unstayed for a period of ten (10) days after the entry thereof;

(i) the Company's representations or warranties contained in the Purchase Agreement shall prove to have been incorrect in any material respect when made;

(j) a default or breach occurs under any agreement between the Company or any of its subsidiaries and any creditor of the Company or any of its subsidiaries that signed a subordination, intercreditor, or other similar agreement with Collateral Agent or the Holders, or any creditor that has signed such an agreement with Collateral Agent or the Holders breaches any terms of such agreement;

(k) any Governmental Approval shall have been revoked, rescinded, suspended, modified in an adverse manner, or not renewed in the ordinary course for a full term and such revocation, rescission, suspension, modification or non-renewal has resulted in or could reasonably be expected to result in a Material Adverse Change;

(l) any Lien (as defined in the Security Agreement) created hereunder or by the Transaction Agreements shall at any time fail to constitute a valid and perfected Lien on any of the Collateral purported to be secured thereby, subject to no prior or equal Lien, other than Permitted Liens (as defined in the Security Agreement) which are permitted to have priority in accordance with the terms of this Agreement; provided that such circumstance is not due to Collateral Agent's failure to file an appropriate continuation financing statement, amendment financing statement or initial financing statement; or

(m) after the initial public offering of any class of equity securities of the Company, the shares of such class of equity securities of the Company are delisted from the primary stock exchange on which they are traded because of failure to comply with continued listing standards thereof or due to a voluntary delisting, or for any other reason, which results in such shares not promptly being listed on any other nationally recognized stock exchange in the United States having listing standards at least as restrictive as the aforementioned primary stock exchange.

6. **More Favorable Terms**. So long as any portion of the Outstanding Amount is unpaid and outstanding, if after the date hereof the Company issues a convertible promissory note(s) (each, a "**Future Note**") to any lender having terms and conditions regarding (a) the conversion of such Future Note or (b) the repayment of such Future Note in connection with a Deemed Liquidation Event or a Sale Transaction, that are, individually or in the aggregate, more favorable than the terms and conditions granted to the Holder hereunder, then this Note shall be deemed to immediately be amended as of the date of the first issuance of such Future Note to reflect substantially equivalent terms and conditions to the Holder hereunder. For purposes of this Section 6, the determination regarding whether any such terms and conditions are more favorable than those granted hereunder shall be made by the Lead Investor Majority in their good faith judgment. Notwithstanding the foregoing, the rights to convert a portion of the outstanding principal amount pursuant to the K2 Loan Agreement shall not be deemed a Future Note for the purposes of this provision.

7. **Transfer; Successors and Assigns.** This Note and any rights hereunder may not be assigned, conveyed or transferred, in whole or in part, without the prior written consent of the Company; provided, however, that an assignment, conveyance or transfer to an Affiliate (as defined in the Investors' Rights Agreement) of the Holder shall not be subject to such requirement for prior written consent. The terms and conditions of this Note shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the parties. Subject to the preceding sentences, this Note may be transferred only upon surrender of the original Note for registration of transfer, duly endorsed, or accompanied by a duly executed written instrument of transfer in form satisfactory to the Company. Thereupon, a new note for the same principal amount and interest will be issued to, and registered in the name of, the transferee. Interest and principal are payable only to the registered holder of this Note.

8. **Governing Law.** This Note and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law.

9. **Notices.** All notices and other communications given or made pursuant to this Note shall be in writing and shall be deemed effectively given upon the earlier of actual receipt, or (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next

business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to (i) to the Company at its corporate headquarters, to the Holder at the address as set forth Exhibit A to the Purchase Agreement, or to such e-mail address, facsimile number or address as subsequently modified by written notice given in accordance with this subsection.

10. **Amendments and Waivers.** Any term of this Note may be amended or waived only with the written consent of the Company and the Lead Investor Majority, provided that (a) such amendment of this Note does not impose any additional financial liability or funding obligations on the Holder, and (b) in the event that an amendment or waiver (i) adversely affects the obligations or rights of the Holder in a different manner than other Holders by its terms, without reference to the principal amount of this Note, or (ii) would reduce the amount of principal or accrued interest due on the Note (regardless of whether such amendment also applies to other Notes), then such amendment or waiver shall also require the written consent of the Holder. Any amendment or waiver effected in accordance with this Section 10 shall be binding upon the Company, the Holder and each transferee of this Note.

11. **Stockholders, Officers and Directors Not Liable.** In no event shall any stockholder, officer or director of the Company be liable for any amounts due or payable pursuant to this Note.

12. **Usury**. If any interest is paid on this Note which is deemed to be in excess of the then legal maximum rate, then that portion of the interest payment representing an amount in excess of the then legal maximum rate shall be deemed a payment of principal and applied against the principal of this Note.

13. **Tax Matters**. All payments made by the Company shall be made free and clear of, and without any deduction or withholding of, any taxes, except as otherwise required by applicable law. Upon request, the Holder shall provide the Company with a properly executed IRS Form W-9 or IRS Form W-8 and supporting documentation (if any). In addition, the Company shall pay upon demand any stamp or other taxes, levies or charges of any jurisdiction with respect to the execution, delivery, registration, performance and enforcement of the Note. Upon request by the Collateral Agent, the Company shall furnish evidence reasonably satisfactory to the Collateral Agent that all requisite authorizations and approvals by, and notices to and filings with, governmental authorities and regulatory bodies have been obtained and made and that all requisite taxes, levies and charges have been paid.

14. **Register**. The Company shall maintain at one of its offices a copy of each assignment and a register for the recordation of the name and address of, and the principal amounts (and stated interest) of the obligations owing to, each Holder from time to time (the "**Register**"). The entries in the Register shall be conclusive absent manifest error, and the parties hereto shall treat each Person whose name is recorded in the Register as a Holder hereunder for all purposes of this Note. The Register shall be available for inspection by any Holder at any reasonable time and from time to time upon reasonable prior notice. The Register is intended to cause the Note to be in "registered form" within the meaning of Section 5f.103-1(c) of the United States Treasury Regulations and within the meaning of Sections 163(f), 871(h)(2) and 881(c)(2) of the Internal Revenue Code of 1986, as amended.

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The Company has caused this Secured Convertible Promissory Note to be issued as of the date first written above.

COMPANY

VEDANTA BIOSCIENCES, INC.

By:__
Name: Bernat Olle
Title: Chief Executive Officer

AGREED AND ACCEPTED:

HOLDER:

[●]

By:__
Name:__
Its:__

Exhibit 12.1

Certification by the Principal Executive Officer pursuant to
Securities Exchange Act Rules 13a-14(a) and 15d-14(a)
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Daphne Zohar, certify that:

1. I have reviewed this annual report on Form 20-F of PureTech Health plc;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

April 27, 2023

/s/ Daphne Zohar

Daphne Zohar
Chief Executive Officer
(Principal Executive Officer)

Exhibit 12.2

Certification by the Principal Financial Officer pursuant to
Securities Exchange Act Rules 13a-14(a) and 15d-14(a)
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Bharatt Chowrira, certify that:

1. I have reviewed this annual report on Form 20-F of PureTech Health plc;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

April 27, 2023

/s/ Bharatt Chowrira

Bharatt Chowrira

President and Chief Business, Finance and Operating Officer

(Principal Financial Officer)

Exhibit 13.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT
TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 20-F of PureTech Health plc (the "Company") for the fiscal year ended December 31, 2022 (the "Report"), I, Daphne Zohar, Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

April 27, 2023

/s/ Daphne Zohar
Daphne Zohar
Chief Executive Officer
(Principal Executive Officer)

Exhibit 13.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT
TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 20-F of PureTech Health plc (the "Company") for the fiscal year ended December 31, 2022 (the "Report"), I, Bharatt Chowrira, President and Chief Business, Finance and Operating Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

April 27, 2023

/s/ Bharatt Chowrira
Bharatt Chowrira

President and Chief Business, Finance and Operating Officer
(Principal Financial Officer)

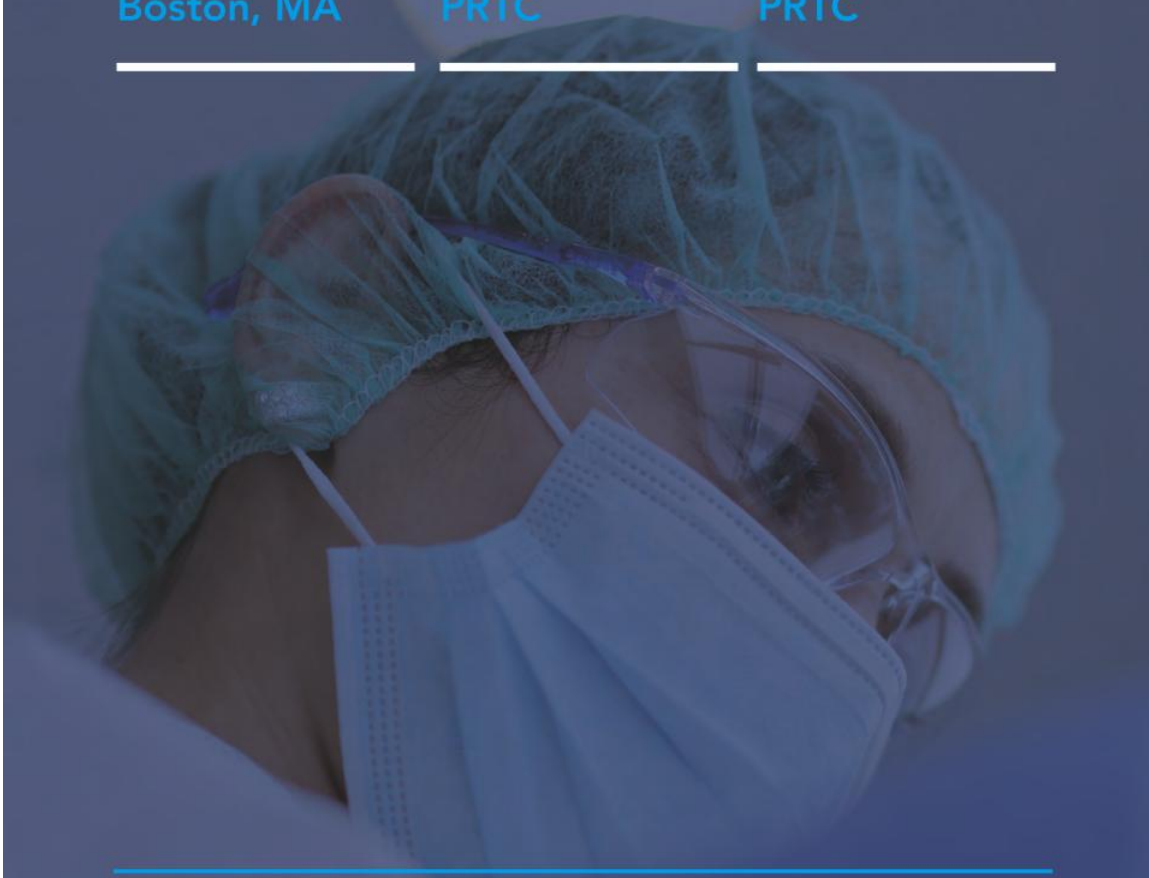
Exhibit 15.1

PURETECH

GIVING LIFE TO SCIENCE®

PureTech Health

Headquarters	Nasdaq	LSE
Boston, MA	PRTC	PRTC



Giving Life to Science

PureTech Health plc ("PureTech Health", "PureTech" or "the Company") is a clinical-stage biotherapeutics company dedicated to giving life to new classes of medicine to change the lives of patients with devastating diseases. We have created a broad and deep pipeline through our experienced research and development team and our extensive network of scientists, clinicians and industry leaders that is being advanced both internally and through our Founded Entities.[1] Our R&D engine has resulted in the development of 27 therapeutics and therapeutic candidates, including two (Plenity® and EndeavorRx®) that have received both US FDA clearance and European marketing authorization and a third (KarXT) that is expected to be filed soon for FDA approval. A number of these programs are being advanced by PureTech or our Founded Entities in various indications and stages of clinical development, including registration enabling studies. All of the underlying programs and platforms that resulted in this pipeline of therapeutic candidates were initially identified or discovered and then advanced by the PureTech team through key validation points.

The common theme underlying all of our programs has been to start with a serious patient need. In many cases, these programs are identified based on previous signals of human efficacy, which has enabled us to advance therapeutic candidates with substantially de-risked profiles and robust development rationales. Within our Wholly Owned Programs,[2] the majority of our candidates are centered on enhancing on-target efficacy, enabling oral administration or improving tolerability to unlock new classes of medicine that have been held back by one of these issues. We do this by applying our unique insights or technology.

Our track record of success is six times[3] the industry average, which is due to our unique approach to R&D and our seasoned management team. We are led by a team of proven industry leaders who have significant experience in discovering and developing important new medicines, delivering them to patients and maximizing shareholder value.

Highlights of the Year – 2022

PureTech Level Cash, Cash Equivalents and Short-term Investments as of Year End

$339.5m[4]

2021: $418.9m
2020: $349.4m
2019: $120.6m
2018: $177.7m
2017: $126.7m

Consolidated Cash, Cash Equivalents and Short-term Investments as of Year End

$350.1m[4]

Includes cash held at the PureTech level and at Controlled Founded Entities (Follica, Entrega, and Vedanta)

2021: $465.7m
2020: $403.9m
2019: $162.4m
2018: $250.9m
2017: $188.7m

Amount of Funding Secured for Founded Entities

$1.28b[5,6]

$1.25b (98%) came from third parties

2021: $731.9m
2020: $247.8m
2019: $666.8m
2018: $274.0m
2017: $102.9m

1 Our Founded Entities are comprised of our Controlled Founded Entities and our Non-Controlled Founded Entities, all of which are incorporated in the United States. References in this report to our "Controlled Founded Entities" refer to Follica, Incorporated, and Entrega, Inc., for all periods prior to March 1, 2023, Vedanta Biosciences, Inc., for all periods prior to May 25, 2022, Sonde Health Inc., and for all periods prior to June 10, 2021, Alivio Therapeutics, Inc. References to our "Non-Controlled Founded Entities" refer to Akili Interactive Labs, Inc., Karuna Therapeutics, Inc., Vor Bio, Inc., Gelesis, Inc., for all periods following May 25, 2022, Sonde Health, Inc., for all periods following March 1, 2023, Vedanta Biosciences, Inc., and, for all periods prior to December 18, 2019, resTORbio, Inc. We formed each of our Founded Entities and have been involved in development efforts in varying degrees. In the case of our Controlled Founded Entities Follica, Incorporated and Entrega, Inc., we continue to maintain majority voting control. With respect to our Non-Controlled Founded Entities, we may benefit from appreciation in our minority equity investment as a shareholder of such companies.

2 References in this report to "Wholly Owned Programs" refer to the Company's five therapeutic candidates (LYT-100, LYT-200, LYT-300, LYT-310, and LYT-503/IMB-150), Glyph platform and potential future therapeutic candidates and platforms that the Company may develop or obtain. References to "Wholly Owned Pipeline" refer to LYT-100, LYT-200, LYT-300, LYT-310, and LYT-503/IMB-150. On July 23, 2021, Imbrium Therapeutics exercised its option to license LYT-503/IMB-150 pursuant to which it is responsible for all future development activities and funding for LYT-503/IMB-150.

3 Industry average data measures the probability of clinical trial success of therapeutics by calculating the number of programs progressing to the next phase vs. the number progressing and suspended (Phase 1=52%, Phase 2=29%, Phase 3=58%). BIO, PharmaIntelligence, QLS (2021) Clinical Development Success Rates 2011 – 2020. This study did not include therapeutics regulated as devices. PureTech's aggregate percentages include all therapeutic candidates advanced through at least Phase 1 by PureTech or its Founded Entities from 2009 onward, calculated by multiplying the individual phase percentages of the following, Phase 1 (n = 6/8; 75%), Phase 2 (n = 10/12; 83%), Phase 3 (n = 3/4; 75%), last updated on August 8, 2022; Phase 2 and Phase 3 percentages include some therapeutic candidates where Phase 1 trials were not conducted by PureTech or its Founded Entities (i) due to the requirements of the medical device regulatory pathway or (ii) because a prior Phase 1 trial was conducted by a third party, which Phase 1 trials were not included in this analysis.

4 PureTech level cash, cash equivalents and short-term investments is a non-IFRS measure. For more information in relation to the PureTech level cash, cash equivalents and short-term investments and Consolidated cash, cash equivalents and short-term investments measures used in this Annual Report, please see pages 51 to 52 of the Financial Review. For comparative periods from 2016 to 2019, balances included cash, cash equivalents and short-term investments and for 2020 and 2021 balances included cash and cash equivalents.

5 Funding figure includes private equity financings, loans and promissory notes, public offerings or grant awards. Funding figure excludes future milestone considerations received in conjunction with partnerships and collaborations. Funding figure does not include proceeds from Vedanta's 2023 post-period financing.

6 Number represents figure for the relevant fiscal year only and is not cumulative.

Letter from the Chair

"As a member of PureTech's Board of Directors for nearly a decade, I have seen the Company grow as a biopharmaceutical pioneer, and 2022 was the most noteworthy year yet. We achieved multiple firsts as we advanced our goal of delivering new classes of medicines for patients with unmet need."

Christopher Viehbacher,
Chair of the Board of Directors

As a member of PureTech's Board of Directors for nearly a decade, I have seen the Company grow as a biopharmaceutical pioneer, and 2022 was the most noteworthy year yet. We achieved multiple firsts as we advanced our goal of delivering new classes of medicines for patients with unmet need.

I have been reflecting on how PureTech has grown and evolved. Its track record of clinical success is six times the industry average, and the Company has pioneered new classes of medicine that are positioned to impact the lives of millions of patients.

What stands out to me is how our disciplined approach to development and financial management has created a focused, well-capitalized organization with a clear mission and differentiated value. I have consistently been impressed by how much PureTech achieves with very little resources, especially relative to many of its peers.

The team takes swift action when they see a potential hurdle, and – while it is never easy to deprioritize a program – being decisive and following the data is what ultimately creates true value for patients and for shareholders. This team is a force, and I believe the discipline and focus demonstrated by its strong management team will continue to inspire employees to achieve great things.

PureTech's "do more with less" ethos is something our industry at large would do well to embrace. To me, it is this approach that makes PureTech an exemplar of impact investing and what can be accomplished in a capital-efficient manner. Given the current macro-economic conditions, this will only become more imperative for companies and the patients and shareholders they serve.

PureTech's model is unique in the industry and keeps the Company well-positioned to weather the current economic downturn. For example, the Company's Founded Entities are a significant source of non-dilutive cash, and to date, over $780 million has been generated from the sales of Founded Entity equity and royalties to fund PureTech's operations. PureTech also derives value from its Founded Entities in the form of royalties, milestone payments and sublicense revenues, which will similarly be invested back into the Wholly Owned Programs. This innovative strategy means the Company has not needed to dilute shareholders by tapping the equity market in over five years.

Another remarkable aspect about PureTech is the team's ability to be ahead of the times. One example is its potential impact on mental health through its Founded Entities Karuna (Nasdaq: KRTX), Akili (Nasdaq: AKLI) and Sonde, as well as a number of PureTech's wholly-owned CNS programs enabled by its Glyph™ platform. As the greater industry has started to produce disease modifying therapies for chronic neurologic disorders, the importance of remote screening – and even remote early diagnosis – could provide a much less expensive and invasive way to identify and stratify those who may benefit from the treatments.

PureTech also took a leading position in the role of the microbiome in medicine. Our Founded Entity Vedanta was formed on the idea of harnessing the power of the body's ecosystem by using bacteria to make medicines to the same standards as traditional drugs.

In a similar way, PureTech's Wholly Owned Pipeline is rich with programs that could have a substantial impact on patients' needs. LYT-100 (deupirfenidone) for idiopathic pulmonary fibrosis (IPF) and LYT-300 (oral allopregnanolone) for anxiety and postpartum depression are just two examples of unique innovations generated by PureTech that could address the significant drawbacks of standard of care treatments.

I am proud to have worked so closely with such a talented and passionate team as I conclude my tenure as Board Chair. As PureTech embarks on a new phase of clinical expansion, I look forward to the multiple exciting milestones ahead in important areas of medical need. The groundbreaking business model and seasoned management team of PureTech remain standouts in the industry, and I believe this will steer the enterprise through continued success in 2023 and beyond. On behalf of the Board, I thank our shareholders for your continued support of our work to change the treatment paradigm for patients.

Sincerely,

Christopher Viehbacher
Chair

April 27, 2023

GIVING LIFE TO SCIENCE®

"2022 was an exceptionally productive year that shaped the next phase of PureTech's development and furthered our mission of giving life to new medicines for patients with devastating diseases."

Daphne Zohar,
Founder and Chief Executive Officer

2022 was an exceptionally productive year that shaped the next phase of PureTech's development and furthered our mission of giving life to new medicines for patients with devastating diseases.

We continue to have one of the most productive track records in biopharma with a clinical trial success rate that is approximately six times better than the industry average.[1] Across our Wholly Owned Pipeline and Founded Entities, we've developed the platforms and programs resulting in 27 therapeutics and therapeutic candidates. Two (Akili's EndeavorRx® and Gelesis' Plenity®) have gone from inception at PureTech through FDA and EU regulatory clearances, and a third (Karuna's KarXT) is expected to be filed soon for FDA approval. Within our Wholly Owned Pipeline alone, we completed five clinical trials this year, and we expect at least five more important milestones/catalysts over the next 12 months.

The key to our strong track record of advancing promising therapeutics lies in our proven innovation and drug development strategy. Our approach is underpinned by three key pillars. The first pillar is our network of collaborators which enables us to learn about advances before the rest of the world. Nearly 30 papers related to our programs have been published in major journals such as *Science*, *Cell* and *Nature*, and – thanks to the deep insights of our advisors – almost all were published after we in-licensed the technology or filed key patents. This brings us to the second pillar: our innovative technologies and approaches. We are experts in applying proprietary insights to medicines that have demonstrated efficacy but that have been held back from reaching their full potential by issues for which we now have innovative solutions, and I'll detail this further in the next section. Our third pillar is centered on what we call "killer experiments" early in the development process. We believe in disciplined and rigorous R&D, and we are quite decisive in rapidly shutting down programs that don't reach our prespecified stringent thresholds for advancement. This allows us to pivot resources towards the programs with the highest probability of success. Consistent with this strategy, we have decided to discontinue the Orasome technology platform and Meningeal lymphatics platform, as these research programs have not yielded promising candidates the way our Glyph™ technology platform has.

Our Strategy: Unlocking new classes of medicine with proven efficacy

A majority of our Wholly Owned Pipeline candidates are based on a strategy of leveraging validated efficacy to rapidly advance therapeutics with proven profiles. For decades, biopharma has devoted time and resources to discovering new modalities and drug candidates and proving they work in patients, but important new medicines have been abandoned after running into issues that seemed insurmountable at the time. At PureTech, we are applying new technologies and proprietary insights to bring these medicines – that weren't otherwise able to reach their potential – to life by enhancing on-target efficacy, improving tolerability or enabling oral administration.

We have a proven track record of success pursuing this approach as highlighted by the extraordinary clinical success of our Founded Entity, Karuna. In August 2022, Karuna announced that it expects to submit an NDA for KarXT in schizophrenia with the FDA in mid-2023. If approved by the FDA, Karuna's KarXT will become the first truly novel therapy for schizophrenia in more than 50 years. KarXT was built from our recognition of both the promise and the limitations of a neuroactive compound, xanomeline. Xanomeline had demonstrated robust clinical efficacy, but it could not be advanced into later stage development due to its tolerability issues. At PureTech, we found an elegant way to overcome these limitations and enable its potential to meet the needs of the millions of people with schizophrenia. Additional details surrounding Karuna and the KarXT program can be found on page 12.

1 Industry average data measures the probability of clinical trial success of therapeutics by calculating the number of programs progressing to the next phase vs. the number progressing and suspended (Phase 1=52%, Phase 2=29%, Phase 3=58%). BIO, PharmaIntelligence, QLS (2021) Clinical Development Success Rates 2011 – 2020. This study did not include therapeutics regulated as devices. PureTech's aggregate percentages include all therapeutic candidates advanced through at least Phase 1 by PureTech or its Founded Entities from 2009 onward, calculated by multiplying the individual phase percentages of the following, Phase 1 (n = 6/8; 75%), Phase 2 (n = 10/12; 83%), Phase 3 (n = 3/4; 75%), last updated on August 8, 2022; Phase 2 and Phase 3 percentages include some therapeutic candidates where Phase 1 trials were not conducted by PureTech or its Founded Entities (i) due to the requirements of the medical device regulatory pathway or (ii) because a prior Phase 1 trial was conducted by a third party, which Phase 1 trials were not included in this analysis.

Our approach with KarXT extends to several of our other Founded Entities and our Wholly Owned Pipeline: we identify key unmet medical needs and relevant existing approaches with clearly defined opportunities and challenges, and we pursue the innovations that will unlock the greatest potential for the drug. We pursue rapid proof-of-concept through experiments that rigorously assess our hypotheses and then make the decisions that will maximize the value of our pipeline. Our Wholly Owned Pipeline candidates such as LYT-100, LYT-300 and LYT-310 exemplify this strategy.

Wholly Owned Pipeline: Late-stage development in IPF and key proofs-of-principle

In our busiest year in the clinic yet, we achieved several notable milestones. We completed five clinical studies including demonstrating compelling safety and tolerability data for LYT-100 (deupirfenidone) and proof-of-principle, oral bioavailability and tolerability for LYT-300 (oral allopregnanolone). We also achieved robust dose escalation with a strong safety profile from the monotherapy portion of our Phase 1 study LYT-200 (anti-galectin 9 mAb) in metastatic solid tumors. LYT-200 has now advanced into combination cohorts for urothelial and head and neck cancers, as well as a second trial as a monotherapy in patients with acute myeloid leukemia (AML).

All of these results were important proof points for each candidate. Notably, the results of our LYT-300 study were a significant first clinical validation for our Glyph™ technology platform, which has yielded two candidates to date (LYT-300 and LYT-310) and has great potential utility for a range of other compounds with proven efficacy but previously challenging oral bioavailability, safety and tolerability profiles.

LYT-300 is another example of how we take an existing, efficacious therapy, held back by factors that limit its commercial use, and apply novel approaches to address those limitations. With this candidate, we designed an oral treatment that preserves the natural structure of allopregnanolone. . Allopregnanolone is FDA-approved as a 60-hour intravenous infusion to treat postpartum depression but faces challenges due to the method of administration. We applied our Glyph technology to create an oral prodrug of allopregnanolone (LYT-300), and we have achieved oral bioavailability in humans that is ninefold greater than what third parties have published with orally administered allopregnanolone.[2] LYT-300 has also demonstrated engagement of $GABA_A$ receptors, which are known to regulate mood and other neurological conditions. We believe offering the proven mechanism of natural allopregnanolone via the innovative orally-administered approach of LYT-300 represents an advancement that could have a truly meaningful impact for patients. LYT-300 may also unlock the class of medicines targeting $GABA_A$ receptors, which has the potential to offer advantages over current standards of care, such as rapid onset of action, for a range of conditions including depression, anxiety and others.

Another exemplar of our strategy, deuterated pirfenidone or LYT-100, has progressed into a global registration-enabling Phase 2b study for IPF, a rare, progressive and fatal lung disease where the median survival is two to five years.[3] There are two FDA-approved treatments for IPF, but each of them causes significant side effects and is poorly tolerated, which means patients cannot fully benefit from the drugs because they are unable to stay on treatment long enough or at the right dose. One of these treatments, pirfenidone, has been shown to extend life by three years,[3] but poor tolerability forces approximately 50% of patients to discontinue, dose adjust or switch treatment.[4] Because of this, nearly three out of four patients in the US living with IPF forego treatment with these otherwise efficacious medicines.[5]

We hope to change this staggering statistic with LYT-100, and we have demonstrated an approximately 50% reduction in GI-related adverse events with LYT-100 in a head-to-head study compared to pirfenidone. We believe this profile may offer improved patient outcomes by both allowing patients to stay on treatment longer and potentially enabling LYT-100 to be dosed at higher exposure levels than the FDA-approved dose of pirfenidone. We look forward to sharing the results of our Phase 2b trial in 2024.

Across our Wholly Owned Pipeline, we have generated compelling clinical data this year that supported the progression of our pipeline into more advanced studies. Over the next 12 months, we anticipate multiple important catalysts that will further guide how we prioritize our pipeline. These catalysts will help to inform our decisions regarding which programs we will drive to commercial launches ourselves and which programs could be most successfully advanced through other avenues such as a partnership (for example, LYT-503/IMB-150, which is being advanced by a partner), sale or spinout into another entity. We have also advanced several additional molecules into candidate selection, and we expect to announce progress towards the clinic with these new candidates in due course.

Founded Entities Highlights: KarXT headed for FDA submission, commercial progress for EndeavorRx and Plenity, first AML data from Vor

We often describe our Founded Entities as akin to partnered programs. Having launched the foundational technologies and programs on which these companies were formed and driven them through key points of validation, we have gained tremendous know-how across R&D, regulatory and business development, and we now gain continual value through equity, royalties, sublicense revenue and/or milestone payments as the Founded Entities mature. It is due to the success of our unique model that we have been able to generate non-dilutive funding to support our innovation engine and have not needed to raise money from the capital markets in over five years.

2 Brexanolone NDA 211371 Multi-disciplinary Review and Evaluation, FDA CDER, 2018.
3 Fisher, M., Nathan, S. D., Hill, C., Marshall, J., Dejonckheere, F., Thuresson, P., & Maher, T. M. (2017). Predicting Life Expectancy for Pirfenidone in Idiopathic Pulmonary Fibrosis. *Journal of Managed Care & Specialty Pharmacy*, 23(3-b Suppl), S17 -S24. https://doi.org/10.18553/jmcp.2017.23.3-b.s17.
4 Cottin, V., Koschel, D., Günther, A., Albera, C., Azuma, A., Sköld, C. M., Tomassetti, S., Hormel, P., Stauffer, J., Kirchgaessler, K., & Maher, T. M. (2018). Long-term safety of pirfenidone: results of the prospective, observational PASSPORT study. ERJ Open Research, 4(4), 00084–02018. https://doi.org/10.1183/23120541.00084-2018
5 Dempsey, T., Payne, S. C., Sangaralingham, L. R., Yao, X., Shah, N., & Limper, A. H. (2021). Adoption of the Antifibrotic Medications Pirfenidone and Nintedanib for Patients with Idiopathic Pulmonary Fibrosis. Annals of the American Thoracic Society, 18(7), 1121–1128. https://doi.org/10.1513/annalsats.202007-901oc

One recent example was the approximately $115.4 million generated from the sale of Karuna stock in August 2022. Another example was realized in the March 2023 post-period. We announced that Royalty Pharma acquired an interest in our royalty in Karuna's KarXT for up to $500 million, with $100 million in upfront cash and up to $400 million in additional payments contingent on the achievement of certain regulatory and commercial milestones. As part of this transaction, we sold our right to receive a 3% royalty from Karuna to Royalty Pharma on sales up to $2 billion annually, after which threshold we will retain 67% of the royalty payments and Royalty Pharma will receive 33%. We retain our 2.8% equity ownership in Karuna as of March 27, 2023, as well as our right to receive milestone payments from Karuna upon the achievement of certain regulatory approvals and 20% of sublicense income. This deal provides us with upfront non-dilutive capital and significant upside based on Karuna's future regulatory and commercial successes. We're tremendously proud of the way our model allows us to continue to fund our Wholly Owned Pipeline and operations, and we continue to manage our strong financial position proactively while retaining financial upside.

I want to highlight just a few additional key milestones from our Founded Entities in 2022. First, Karuna delivered strong Phase 3 clinical data for KarXT in August of 2022, and in the March 2023 post-period Karuna announced positive results from a second Phase 3 trial, reinforcing the safety and efficacy of KarXT. The consistency in the data to date with KarXT give us confidence in the drug's potential to change the treatment paradigm for people with schizophrenia, and we look forward to Karuna's continued work to validate the potential of KarXT in a range of dementias. The company's value increased by more than 60% over the course of 2022.

Gelesis and Akili also continued to advance the commercial development of their first-in-class FDA-cleared products, Plenity and EndeavorRx. Gelesis demonstrated the market potential for Plenity as a highly differentiated weight management aid for people with obesity or who are overweight. The company has generated $39.5 million in sales since launch, $25.5 million of which was in 2022, representing a 129% increase year-over-year. Gelesis also applied with the FDA to make Plenity available without a prescription, which Gelesis has announced could be achieved as soon as the third quarter of 2023 and should significantly expand access to millions of patients not served by other treatment options due to label, affordability or tolerability. Akili has also formed a foundational partnership with global gaming giant Roblox to further expand its growth opportunities for EndeavorRx.

Finally, Vor Bio delivered initial data in patients with AML for trem-cell (formerly VOR33), supporting both the candidate's potential and providing support for the company's unique approach of combining targeted therapies and antigen-depleted hematopoietic stem cell transplants.

Full details for each of our Founded Entities can be found on pages 12 to 14.

Thanks to our global network for helping us give life to science

First and foremost, I would like to extend my deepest gratitude to the patients, families and staff participating in and supporting our clinical trials. The PureTech team is inspired by you.

To the PureTech Team: thank you for your unwavering dedication and commitment to making a transformational impact for patients. I am so proud of what we have accomplished together, and I am energized by your passion.

Finally, on behalf of the board and management team, I would like to thank our ever-widening network of shareholders, advisors and other stakeholders for your continued support and input. We are grateful for your confidence in our team, our model and our vision, and that you are with us on this journey to change the lives of patients with devastating diseases.

PureTech is poised for another dynamic year, building on our momentum from 2022. We are entering the next phase of our growth with a promising Wholly Owned Pipeline, and we are in a position to move these new medicines forward quickly and efficiently. Importantly, we have many important catalysts on the horizon, and we expect to achieve a number of development and regulatory milestones over the course of 2023 and beyond.

Daphne Zohar
Founder, Chief Executive Officer and Director

April 27, 2023

Components of Our Value

The table to the right depicts the four components of our value: (1) our Wholly Owned Programs, (2) Founded Entities, (3) our available cash, cash equivalents and short-term investments at the PureTech level and (4) our return of capital to shareholders.

We hold majority voting control of or otherwise retain significant influence over our Controlled Founded Entities and continue to play a role in the development of their therapeutic candidates through representation on the board of directors. As of December 31, 2022, our board designees represented a majority of the members of the board of directors of Follica and Vedanta and a minority of the members of the board of directors of Entrega. With respect to our Non-Controlled Founded Entities, we do not hold majority equity ownership and are not responsible for the development or commercialization of their therapeutic candidates and therapeutics. Our Non-Controlled Founded Entities have independent management teams, and we do not control the day-to-day development of their respective therapeutic candidates.

1. Our Wholly Owned Programs: We are focused on the advancement of our Wholly Owned Programs and delivering value to our shareholders by driving these programs to key clinical and commercial milestones. We are prioritizing preclinical and clinical advancement, while continuing to generate new wholly-owned candidates through our technology platforms and our unique model for R&D.

2. Our Founded Entities: We established these entities' underlying programs and platforms and advanced them through key validation points. In certain cases, our value from these entities is solely derived from the potential appreciation of our equity interest. In other cases, we also have the right to royalty payments on product sales and/or sublicense revenues.

3. Cash, cash equivalents and short-term investments: We had PureTech Level cash, cash equivalents and short-term investments of $339.5[1] million as of December 31, 2022.

4. Our Return of Capital to Shareholders: In light of the strong foundation we have built for PureTech's future growth, the board and senior leadership team are committed to various approaches to drive additional value to our shareholders. As part of this capital allocation strategy, in 2022 we implemented a share buyback program of up to a maximum consideration of $50 million. We maintain a capital allocation strategy that will see us prioritize funding the continued development and expansion of our Wholly Owned Pipeline and strategic investment in our Founded Entities in accordance with our strategic plan while we will also look to return certain proceeds we may receive in the future to shareholders through various distribution mechanisms, including continued share buybacks or special dividends.

1 PureTech level cash, cash equivalents and short-term investments is a non-IFRS measure. For more information in relation to the PureTech level cash, cash equivalents and short-term investments and Consolidated cash, cash equivalents and short-term investments measures used in this Annual Report, including a reconciliation between the two measures, please see pages 51 to 52 of the Financial Review.

1 Wholly Owned Programs

Our Programs[2]	Discovery	Preclinical	Phase 1	Phase 2	Phase 3
LYT-100* Deupirfenidone	Idiopathic pulmonary fibrosis (IPF)				
LYT-200 Anti-Galectin-9 mAb	Solid tumors & hematological malignancies				
LYT-300 Oral Allopregnanolone	Depression, anxiety & related indications				
LYT-310 Oral Cannabidiol	Epilepsies & other neurological indications				
Research and Partnered Programs	Various indications				

Phase in progress Phase completed

*Also being advanced under the Animal Rule for radiation induced fibrosis; plans underway to study LYT-100 in progressive fibrosing interstitial lung disease (PF-ILDs) and exploring LYT-100 in myocardial and other organ system fibrosis

2 Founded Entities[3]

NASDAQ: KRTX

2.8% Equity

+ Milestone Payments/20% Sublicense Revenue/Royalties & up to $500M from agreement w/ Royalty Pharma[4]

Phase 3

NASDAQ: VOR

4.0% Equity

Phase 1/2a

NASDAQ: AKLI

14.6% Equity

Commercial

23.2% Equity

+ Royalties

Commercial

40.8% Equity

Phase 3 Ready

36.5% Equity

Commercial Release

73.8% Equity

Preclinical

3 PureTech Level Cash, Cash Equivalents and Short-Term Investments as of December 31, 2022: $339.5m[1]

4 Our Return of Capital to Shareholders

2 On July 23, 2021, Imbrium Therapeutics exercised its option to license LYT-503/IMB-150 pursuant to which it is responsible for all future development activities and funding for LYT-503/IMB-150; The FDA and corresponding regulatory authorities will ultimately review our clinical results and determine whether our wholly-owned therapeutic candidates are safe and effective. No regulatory agency has made any such determination that our wholly-owned therapeutic candidates are safe or effective for use by the general public for any indication

3 This figure represents the stage of development for each Founded Entity's most advanced therapeutic candidate. Founded Entities represent companies founded by PureTech in which PureTech maintains ownership of an equity interest and, in certain cases, is eligible to receive sublicense income and royalties on product sales. Relevant ownership interests for Vedanta, Sonde and Entrega were calculated on a partially diluted basis (as opposed to a voting basis) as of December 31, 2022, including outstanding shares, options and warrants, but excluding unallocated shares authorized to be issued pursuant to equity incentive plans. Gelesis, Vor Bio, Akili and Karuna ownerships were calculated on a beneficial ownership basis in accordance with SEC rules as of March 24, 2023, March 17, 2023, March 3, 2023, and March 27, 2023, respectively. With an increased focus on resource allocation towards our Wholly Owned Programs, we decided to hibernate the Follica Founded Entity in the 2023 post-period. We may choose to advance this program at a later date or with partners.

4 As of March 22, 2023, PureTech has sold its right to receive a 3% royalty from Karuna to Royalty Pharma on net sales up to $2 billion annually, after which threshold PureTech will receive 67% of the royalty payments and Royalty Pharma will receive 33%. PureTech retains its equity ownership in Karuna. Additionally, under its license agreement with Karuna, PureTech retains the right to receive milestone payments upon the achievement of certain regulatory approvals and 20% of sublicense income.

LYT-100

Therapeutic Candidate	PureTech Ownership	Indication	Stage of Development
LYT-100	Wholly-owned	Idiopathic pulmonary fibrosis (IPF)	Phase 2b (first of two registration enabling studies)

Our lead wholly-owned candidate, LYT-100 (deupirfenidone), is being advanced for the potential treatment of conditions involving inflammation and fibrosis, including idiopathic pulmonary fibrosis (IPF) and radiation induced fibrosis.[1] We also plan to study LYT-100 in progressive fibrosing interstitial lung diseases (PF-ILDs) and we are exploring its application in other inflammatory and fibrotic conditions, including myocardial and other organ system fibrosis, based on the strength of the existing clinical data around the use of pirfenidone in these indications. LYT-100 is a selectively deuterated form of pirfenidone. It is designed to retain the potent and clinically validated anti-fibrotic and anti-inflammatory activity of pirfenidone, but it has a highly differentiated pharmacokinetic (PK) profile that has the potential to transform the standard of care for IPF. To date, LYT-100 has been studied in more than 400 subjects as part of our ongoing development work and indication prioritization.

Key Points of Innovation & Differentiation

- LYT-100 has shown a 50% reduction in gastro-intestinal (GI)-related adverse events (AEs) in a head-to-head study versus pirfenidone. We believe the differentiated tolerability profile of LYT-100 will address one of the key reasons that patients on the current standard of care treatments must dose reduce, discontinue or switch from otherwise efficacious treatments.[2,3] We have also been able to dose LYT-100 at a higher exposure level, but with a lower Cmax, than the FDA-approved dosage of pirfenidone, potentially enabling improved efficacy. Given this, we believe LYT-100 has the potential to become standard of care and to become a backbone therapy in the treatment for IPF.
- Pirfenidone (Esbriet®) is approved for the treatment of IPF in the US and other countries. Pirfenidone has been shown to slow the decline of lung function and research suggests it extends life by approximately 3 years in patients with IPF.[4] It is one of two standard of care treatments for IPF, with nintedanib (OFEV®) being the other.

Program Discovery Process by the PureTech Team

- We acquired LYT-100 in July 2019 based on insights gained internally and via unpublished findings through our network of collaborators. LYT-100 was originally developed by Auspex Pharmaceuticals, Inc. (Auspex), where our President and Chief Business, Finance and Operating Officer, Bharatt Chowrira, Ph.D., J.D., served as Chief Operating Officer. Auspex (now a wholly owned subsidiary of Teva Pharmaceuticals), pioneered the deuteration technology and successfully developed deutetrabenazine (Austedo®), the first deuterated drug that received FDA approval.

Patient Need & Market Potential

- There are approximately 120,000 people in the US and 110,000 people in the EU[5] living with IPF.[6] IPF is a progressive condition characterized by irreversible scarring of the lungs that makes it difficult to breathe. The prognosis of IPF is poor, with the median survival after diagnosis generally estimated at two to five years.[4]
- Only about 25% of IPF patients are currently being treated with either standard of care drug,[3] yet combined sales of Esbriet and Ofev in 2022 were more than $4 billion, representing a significant market opportunity in IPF and other fibrotic lung diseases.[7]
- In 2022, we engaged an independent third-party market research firm to survey pulmonologists who actively treat IPF patients to assess the commercial opportunity for LYT-100 in IPF. The surveyed pulmonologists noted an unmet need for treatments with improved tolerability profiles, and 80-90% highlighted GI AEs as the primary reason their patients discontinue or dose reduce on current treatments. Pulmonologists said they would prescribe a new product with an improved tolerability profile and comparable efficacy to nearly 44% of their new IPF patients, and nearly 80% indicated they would prescribe it more than pirfenidone. Based on this survey, if approved by the FDA, LYT-100 would be expected to have a significant impact on the IPF market if the improved tolerability profile seen in the Phase 1 crossover study is reproduced in later stage trials and demonstrates the same or enhanced efficacy compared to standard of care.
- Pirfenidone has also shown activity in patients with non-IPF PF-ILDs, myocardial fibrosis and other organ system fibrosis.

Milestones Achieved & Development Status

- IPF
  - In June 2022, we announced the initiation of ELEVATE IPF, a Phase 2b clinical trial of LYT-100 for the potential treatment of IPF. The global, randomized, placebo-controlled registration-enabling trial is designed to evaluate the efficacy, tolerability, safety and dosing regimen of LYT-100. The primary objective of the trial is to demonstrate a clinically meaningful difference versus placebo in a measure of lung function, Forced Vital Capacity (FVC), over 6 months. The trial will also assess the relative efficacy of two doses of LYT-100, one with comparable exposure to the approved dose of pirfenidone and one with a higher level of exposure that has the potential for improved efficacy. Both doses will be compared to pirfenidone.
  - In January 2022, we announced results from a randomized, double-blind crossover trial in healthy older adults demonstrating that approximately 50% fewer subjects treated with LYT-100 (deupirfenidone) experienced gastrointestinal (GI)-related adverse events (AE) compared to subjects treated with pirfenidone (17.4% vs. 34.0%). In an additional clinical trial, LYT-100 also demonstrated that it can be safely dosed with a higher total drug exposure than the currently approved dose of pirfenidone, which could translate into improved efficacy over pirfenidone.
  - In May 2022, we presented additional data from the healthy older adults study at the American Thoracic Society 2022 International Conference. Notably, LYT-100 at 550 mg TID (fed state) met the criteria for bioequivalence for exposure compared to the FDA-approved dosage of pirfenidone – 801 mg TID – but with a lower Cmax. Higher dosages of LYT-100 may provide enhanced antifibrotic and anti-inflammatory activity.
- Radiation Induced Fibrosis
  - In 2022, we initiated a preclinical program of LYT-100 for the prevention and treatment of the delayed effects of acute radiation exposure, including radiation induced fibrosis. This program is being developed under the Animal Rule,[1] which allows for the approval of drugs based on well-controlled animal models when human efficacy studies are not ethical or feasible. PureTech may be eligible to receive a priority review voucher from the FDA for a medical countermeasure application upon approval.

Expected Milestones

- Topline results from the Phase 2 dose-ranging trial of LYT-100 in patients with IPF are expected in 2024. We also plan to pursue a streamlined development program for LYT-100 in IPF, capitalizing on efficiencies of the 505(b)(2) pathway. Pending positive clinical and regulatory feedback, the program will advance into a Phase 3 study. We believe the results of the Phase 2 study, together with a Phase 3 study, could serve as the basis for registration in the US and other geographies.

Intellectual Property

- As of December 31, 2022, the LYT-100 patent portfolio includes 32 active patents acquired from Auspex which provide broad coverage of compositions of matter, formulations and methods of use for deuterated pirfenidone, including the LYT-100 deupirfenidone compound. This IP estate comprises six issued US patents and 26 patents issued in 23 foreign jurisdictions, which are expected to expire in 2028 and may be extended by up to five years. In addition, we have in-licensed one US patent and one US patent application from Auspex directed to formulations of deuterated pirfenidone which expires in 2035, and also filed additional patent applications on deupirfenidone, including 19 pending US patent applications, 17 foreign applications and one international PCT application directed to the use of deuterated pirfenidone, including LYT-100, for the treatment of a range of conditions. Any issued patents claiming priority to these applications are expected to expire in 2039 through 2043, exclusive of possible patent term adjustments or extensions or other exclusivities.

1 Our program in radiation induced fibrosis is preclinical-stage and is subject to the Animal Rule, which allows for the approval of drugs based on validated animal models when human efficacy studies are not feasible. The use of the Animal Rule is intended for drugs and biological products developed to reduce or prevent serious or life-threatening conditions caused by exposure to lethal or permanently disabling toxic chemical, biological, radiological or nuclear substances.

2 Cottin, V., Koschel, D., Günther, A., Albera, C., Azuma, A., Sköld, C. M., Tomassetti, S., Hormel, P., Stauffer, J., Kirchgaessler, K., & Maher, T. M. (2018). Long-term safety of pirfenidone: results of the prospective, observational PASSPORT study. *ERJ Open Research*, 4(4), 00084–02018. https://doi.org/10.1183/23120541.00084-2018

3 Dempsey, T., Payne, S. C., Sangaralingham, L. R., Yao, X., Shah, N., & Limper, A. H. (2021). Adoption of the Antifibrotic Medications Pirfenidone and Nintedanib for Patients with Idiopathic Pulmonary Fibrosis. *Annals of the American Thoracic Society*, 18(7), 1121–1128. https://doi.org/10.1513/annalsats.202007-901oc

4 Fisher, M., Nathan, S. D., Hill, C., Marshall, J., Dejonckheere, F., Thuresson, P., & Maher, T. M. (2017). Predicting Life Expectancy for Pirfenidone in Idiopathic Pulmonary Fibrosis. *Journal of Managed Care & Specialty Pharmacy*, 23(3-b Suppl), S17 -S24. https://doi.org/10.18553/jmcp.2017.23.3-b.s17

5 United Kingdom, France, Germany, Italy and Spain.

6 GlobalData Epidemiology and Market Size Search.

7 Roche 2022 Annual Report and Boehringer Ingelheim 2022 Financial Results.

LYT-300

Therapeutic Candidate	PureTech Ownership	Indication	Stage of Development
LYT-300	Wholly-owned	Anxiety disorders Postpartum depression	Phase 2a ready Phase 2a ready

LYT-300, an oral prodrug of allopregnanolone, is being advanced for the potential treatment of anxiety disorders and postpartum depression. We developed LYT-300 using our Glyph™ platform, which harnesses the body's natural lipid absorption and transport process to enable the oral administration of certain therapeutics that otherwise cannot be administered orally.

Key Points of Innovation & Differentiation

- We are developing LYT-300 to advance what we believe could be a best-in-class new medicine for treating anxiety and depression. LYT-300 is designed to overcome the poor oral bioavailability of allopregnanolone. LYT-300 has demonstrated oral bioavailability in healthy adults, achieving blood levels of allopregnanolone at or above those associated with therapeutic effect and nine times greater than orally administered allopregnanolone, based on third-party published data.[1] LYT-300 has also demonstrated favorable tolerability in addition to target engagement with γ-aminobutyric-acid type A ($GABA_A$)receptors, which are known to regulate mood and other neurological conditions.
- Allopregnanolone is a positive allosteric modulator of $GABA_A$ receptors that has therapeutic potential across a wide range of neurological conditions, including depression and anxiety disorders, though its therapeutic application has been limited due to high first pass metabolism. To overcome this, the industry has developed synthetic oral analogs of allopregnanolone, though these may not capture the full therapeutic potential of natural allopregnanolone.
- Our Glyph platform reversibly links a drug to a dietary fat molecule, creating a novel prodrug. The linked fat molecule re-routes the drug's normal path to the systemic circulation, bypassing the liver and instead moving from the gut into the lymphatic vessels that normally process dietary fats. We believe this technology has the potential to provide a broadly applicable means of enhancing the bioavailability of certain orally administered drugs that would otherwise be limited by first-pass liver metabolism.

Program Discovery Process by the PureTech Team

- We sought out different approaches that could selectively transport therapeutic molecules through the lymphatic system to target cells in the lymph nodes. Based on insights gained internally and via unpublished findings through our network of collaborators, we became aware of a technology being developed at Monash University that had the potential to selectively target the lymphatic system. We obtained an exclusive license to this technology and the related intellectual property. We have since further developed the platform and have generated our own intellectual property associated with the Glyph platform.
- We conducted a systematic analysis of compounds and indications that could benefit from the application of our Glyph platform. We prioritized areas of high unmet patient need where the broad application of treatment options with validated efficacy was untapped due to poor oral bioavailability. We believe LYT-300 may unlock the full therapeutic potential of allopregnanolone across a range of neurological and psychiatric conditions.

Patient Need & Market Potential

- Anxiety disorders are the most common mental disorder, affecting nearly 30% of adults.[2] There are several types of anxiety disorders, including generalized anxiety disorder, panic disorder and social anxiety disorder. They are characterized by feelings of excessive fear and may impact a person's ability to function normally.
- Postpartum depression (PPD) is a debilitating condition that affects over 400,000 women who have given birth in the United States.[3] It is characterized by feelings of extreme sadness, changes in energy, sleep and appetite, and it can impact a mother's ability to care for her child.
- Allopregnanolone and related endogenous neurosteroids have been recognized for their potential to treat depression and other neurological indications with a rapid onset of action. The major hurdles associated with the translation of these compounds have been the inability to create oral formulations of these neurosteroids and chronically administer compounds to patients.
  - An intravenous formulation of allopregnanolone is approved by the FDA as a 60-hour infusion for the treatment of postpartum depression, though the method of administration has significant challenges and limits the scope of clinical translation with this class of compounds.
  - Medicinal chemistry approaches have been applied to synthesize orally bioavailable analogs of allopregnanolone. The variable clinical activity of these compounds may be due to the possibility that chemical modifications are interfering with optimal $GABA_A$ receptor engagement and consequently their on-target mode of action. Hence, these chemically distinct analogs of allopregnanolone may not have the same pharmacologic effects as the natural unmodified allopregnanolone.

Milestones Achieved & Development Status

- In February 2023, we announced plans to advance LYT-300 (oral allopregnanolone) for the potential treatment of anxiety disorders and PPD.
- In December 2022, we announced topline results from the completed, multi-part Phase 1 trial of LYT-300. The results showed that oral administration of LYT-300 achieved blood levels of allopregnanolone at or above those associated with therapeutic benefit and resulted in exposure-dependent target engagement with $GABA_A$ receptors.
- In June 2022, we achieved proof-of-principle for the Glyph platform in a healthy adult study of LYT-300. This was the first mechanistic proof-of-principle in the clinic for the Glyph platform. Data from this Phase 1 program of LYT-300 showed bioavailability of allopregnanolone that was approximately ninefold greater than that of orally administered allopregnanolone, based on previously published data.
- In December 2021, we presented preclinical proof-of-concept data at the 60th American College of Neuropsychopharmacology (ACNP) Annual Meeting that supported the clinical advancement of LYT-300 for the potential treatment of neurological and neuropsychological conditions. The data presented at ACNP showed that systemic exposure of natural allopregnanolone was achieved after oral administration of LYT-300 in multiple preclinical models of increasing complexity. In contrast, systemic levels of allopregnanolone were not observed following oral administration of natural unmodified allopregnanolone. These results demonstrated the potential of the Glyph technology platform to enhance the systemic absorption of natural bioactive molecules and other small molecules with poor oral bioavailability.

Expected Milestones

- A placebo-controlled, Phase 2a, proof-of-concept, trial using a validated clinical model of anxiety in healthy volunteers is expected to begin in the first half of 2023, with results anticipated by the end of 2023.
- An open-label, Phase 2a, proof-of-concept clinical trial in women with PPD is expected to begin in the second half of 2023.

Intellectual Property

- Within the extensive Glyph intellectual property portfolio, which covers a wide range of novel linker chemistries, LYT-300 is specifically covered by four patent families comprising six US patent applications and 16 foreign patent applications as of December 31, 2022, which are co-owned with Monash University or PureTech owned. Any patents to issue from these patent applications are expected to expire in 2039 through 2043, exclusive of possible patent term adjustments or extensions or other forms of exclusivity.

1 Brexanolone NDA 211371 Multi-disciplinary Review and Evaluation, FDA CDER, 2018.
2 Any Anxiety Disorder. (n.d.). National Institute of Mental Health (NIMH). https://www.nimh.nih.gov/health/statistics/any-anxiety-disorder
3 Bauman, B. L. (2020, May 15). Vital Signs: Postpartum Depressive Symptoms and Provider . . . Centers for Disease Control and Prevention. https://www.cdc.gov/mmwr/volumes/69/wr/mm6919a2.htm?s_cid=mm6919a2_w

LYT-310

Therapeutic Candidate	PureTech Ownership	Indication	Stage of Development
LYT-310	Wholly-owned	Epilepsies and other neurological indications	Preclinical

LYT-310, an oral form of cannabidiol (CBD), is being advanced for the potential treatment of epilepsies and other neurological indications. Like LYT-300, we developed LYT-310 using our Glyph™ platform, which harnesses the body's natural lipid absorption and transport process to enable the oral administration of certain therapeutics that otherwise have poor oral bioavailability.

Key Points of Innovation & Differentiation

- We are developing LYT-310 to offer improved oral dosing and tolerability of CBD. A CBD-based product has received regulatory approval in the United States and Europe to treat seizures resulting from certain rare conditions, but it requires a large volume of a sesame oil-based formulation, which limits its use in broader indications and age groups. LYT-310 could expand the therapeutic application of CBD across a wider range of age groups and indications, including both rare and more common forms of epilepsy and other central nervous system disorders. LYT-310 is designed to:
  - enable oral administration in a capsule or other patient-friendly method of administration;
  - expand the use of CBD into a broad range of therapeutic areas and patient populations (such as adolescents and adults) where higher doses are required to achieve a therapeutic effect;
  - potentially improve safety and reduce gastrointestinal (GI) tract side effects that are associated with the currently approved CBD-based treatment by reduce GI and liver exposure; and
  - allow for a readily scalable, consistent product in a cost-effective manner.
- Our Glyph platform reversibly links a drug to a dietary fat molecule, creating a novel prodrug. The linked fat molecule re-routes the drug's normal path to the systemic circulation, bypassing the liver and instead moving from the gut into the lymphatic vessels that normally process dietary fats. We believe this technology has the potential to provide a broadly applicable means of enhancing the bioavailability of certain orally administered drugs that would otherwise be limited by first-pass liver metabolism.

Program Discovery Process by the PureTech Team

- We sought out different approaches that could selectively transport therapeutic molecules through the lymphatic system to target cells in the lymph nodes. Based on insights gained internally and via unpublished findings through our network of collaborators, we became aware of a technology being developed at Monash University that had the potential to selectively target the lymphatic system. We obtained an exclusive license to this technology and the related intellectual property. We have since further developed the platform and have generated our own intellectual property associated with the Glyph technology platform.
- We conducted a systematic analysis of compounds and indications that could benefit from the application of our Glyph platform. We prioritized areas of high unmet patient need where the broad application of treatment options with validated efficacy was untapped due to poor oral bioavailability and tolerability. We believe LYT-310 may expand the therapeutic application and potential of CBD across a range of epilepsies and other neurological indications.

Patient Need & Market Potential

- A CBD-based product has received regulatory approval in the United States and Europe to treat seizures resulting from certain rare conditions, but it requires a large volume of a sesame oil-based formulation to achieve therapeutic levels of exposure, which limits its use in broader indications and age groups.

Milestones Achieved & Development Status

- In November 2022, we announced LYT-310 as a new therapeutic candidate leveraging our Glyph platform.
- In multiple preclinical models, including large animal and non-human primate, LYT-310 has demonstrated a three to fourfold increase in oral exposure vs. unmodified CBD in a fasted state. This has the potential to translate into improved safety and reduced side effects. Lymphatic transport has also been confirmed in preclinical models, with up to 30% of LYT-310 entering the lymphatics, compared to 5% for unmodified CBD – which further supports the novel Glyph mechanism of enhancing bioavailability.

Expected Milestones

- We are advancing LYT-310 toward a Phase 1 clinical trial, which is expected to begin in Q4 of 2023.

Intellectual Property

- Within the extensive Glyph intellectual property portfolio, which covers a wide range of novel linker chemistries, LYT-310 is specifically covered by one patent family comprising one US patent application and four foreign patent applications as of December 31, 2022, which is co-owned with Monash University. Any patents to issue from these patent applications are expected to expire in 2038, exclusive of possible patent term adjustments or extensions or other forms of exclusivity.

LYT-200

Therapeutic Candidate	PureTech Ownership	Indication	Stage of Development
LYT-200	Wholly-owned	Metastatic/locally advanced solid tumors Hematological malignancies	Phase 1b/2a Phase 1b

LYT-200 is a fully human IgG4 monoclonal antibody, or mAb, designed to inhibit the activity of galectin-9, an immunomodulatory molecule expressed by tumors and immune cells and shown to suppress the immune system from recognizing and destroying cancer cells. We are developing LYT-200 for the treatment of metastatic/locally advanced solid tumors that have poor survival rates, including urothelial and head and neck cancers. We are also developing LYT-200 for the treatment of hematological malignancies, such as acute myeloid leukemia (AML), where more than 50% of patients either don't respond to initial treatment or experience relapse after responding to initial treatment[1] and have an approximately 12.6% five-year survival rate.[2]

Key Points of Innovation & Differentiation

- Galectin-9 promotes and facilitates multiple immunosuppressive pathways by expanding regulatory T cells, shifting macrophages from the M1 to M2 phenotype, and inducing apoptosis of activated CD4+ and CD8+ T cells. High expression of galectin-9 is evident in solid tumors and in hematological malignancies, both in patients' tumors and blood, and correlates with poor survival outcomes and aggressive disease. Our preclinical work demonstrates single agent mechanistic and anti-tumor efficacy of LYT-200 in multiple animal and patient-derived tumor cell models. For example, LYT-200 outperforms anti-PD-1 in a standard B16F10 melanoma model as a single agent. LYT-200 also synergizes with anti-PD-1 in activating CD4 and CD8 T cells in melanoma and pancreatic *in vivo* models. We are advancing LYT-200 to inhibit the multiple effects of galectin-9 and thereby potentially removing a key immunosuppressive barrier that would enable the immune system to attack and destroy the tumor.
- A 2021 study published in *Nature Communications* proposed that the molecular mechanism by which PD-1 and galectin-9 interact to shield tumors from the immune system demonstrates for the first time that galectin-9 is a ligand for PD-1 and emphasizes its importance as a promising target for immunotherapy[3]. This provided further evidence that galectin-9 acts as a key regulator of the immune response to tumors and supports its importance as a potential target for cancer treatment.
- We believe that LYT-200 is the most advanced clinical program against this target. It has the potential to be used as a single agent and safely in combination with checkpoint inhibitors and other anti-cancer therapies, depending on the cancer type, treatment setting and line of treatment. Additionally, targeting galectin-9 gives LYT-200 the potential to address a high unmet need for more effective therapies with improved tolerability for AML, a devastating disease in which prognosis is poor.

Program Discovery Process by the PureTech Team

- In order to identify approaches with the potential to provide significant therapeutic benefit to cancer patients, we opportunistically identified a foundational immunosuppressive mechanism involving galectin-9, which was the basis of certain intellectual property that we licensed from New York University prior to its publication in *Nature Medicine*.

Patient Need & Market Potential

- Metastatic/locally advanced solid tumors
  - In the US, there are approximately 82,000 new cases of bladder cancer each year[5] of which ~90% are urothelial carcinoma.[4] While metastatic disease only accounts for ~5% of bladder cancer diagnoses, prognosis for these patients is extremely poor with a 5-year survival rate of ~5%.[4]
  - In the US, there are approximately 66,000 people diagnosed with head and neck cancers each year.[5] At diagnosis, ~10% of patients have metastatic disease though an additional 20-30% will develop metastases during the course of their disease. The prognosis for metastatic disease is unfavorable with a median survival of about 10 months.[6]
- AML
  - The National Cancer Institute estimates that about 60,000 new cases of leukemia are diagnosed each year,[7] including about 20,000 in AML.[8] More than 50% of AML patients either don't respond to initial treatment or experience relapse or death after responding to initial treatment[1] and have an approximately 12.6% five-year survival rate.[2] The poor overall survival highlights the need for more effective therapies for patients with relapsed and refractory AML.

Milestones Achieved & Development Status

- AML
  - In December 2022, a poster describing new preclinical data supporting the clinical potential of LYT-200 for the treatment of leukemia was presented at the American Society of Hematology (ASH) 64th Annual Meeting. In all models used, LYT-200 demonstrated significant anti-tumor activity and in addition to its established effects on the immune system in solid tumor models, it also notably induced direct apoptosis or cell death across all leukemia cell types. Based on this and other compelling preclinical data generated with LYT-200 in blood cancers, we initiated a clinical trial to evaluate LYT-200 as a single agent for the treatment of AML.
- Metastatic/locally advanced solid tumors
  - In December 2022, we announced results from the monotherapy dose escalation portion of the Phase 1 program of LYT-200 as a potential treatment for metastatic solid tumors. No dose-limiting toxicities were reported, and the full results are planned for presentation in a scientific forum in 2023.
  - In the first quarter of 2023, we initiated a trial of LYT-200 in combination with tislelizumab in urothelial and head and neck cancers.

Expected Milestones

- Initial results from a subset of patients from the Phase 1b clinical trial to evaluate LYT-200 as a single agent for the treatment of AML are expected by the end of 2023.
- Topline results from the Phase 1b trial of LYT-200 in combination with tislelizumab in urothelial or head and neck cancers are expected in 2024.

Intellectual Property

- We have broad intellectual property coverage for these antibody-based immunotherapy technologies, including exclusive rights to seven families of patent filings that are exclusively licensed from or co-owned with New York University which cover antibodies that target galectin-9, including LYT-200, methods of using these antibodies, and related immuno-oncology technologies. In addition, the intellectual property portfolio includes ten families of PureTech-owned patent applications covering the use of anti-galectin-9 antibodies in the diagnosis and treatment of solid tumors.
- As of December 31, 2022, there are 17 families of intellectual property within this patent portfolio covering compositions of matter for antibodies targeting galectin-9, including LYT-200, and methods of use for the treatment of solid tumors and various other cancers, and methods of use for the treatment of hematological cancers. This intellectual property comprises three issued US patents which are expected to expire in 2038, 15 pending US patent applications, which if issued, are expected to expire 2037 through 2043, six international PCT applications, 34 pending foreign applications and eight issued patents in foreign jurisdictions.

1 Walter, R. B., Othus, M., Burnett, A. K., Löwenberg, B., Kantarjian, H. M., Ossenkoppele, G. J., Hills, R. K., Ravandi, F., Pabst, T., Evans, A., Pierce, S., Vekemans, M., Appelbaum, F. R., & Estey, E. H. (2015). Resistance prediction in AML: analysis of 4601 patients from MRC/NCRI, HOVON/SAKK, SWOG and MD Anderson Cancer Center. *Leukemia*, 29(2), 312–320. https://doi.org/10.1038/leu.2014.242

2 Brandwein, J., Saini, L. M., Geddes, M., Yusuf, D., Liu, F., Schwann, K., Billawala, A., Westcott, C., Kurniawan, J. A., & Cheung, W. Y. (2020). Outcomes of patients with relapsed or refractory acute myeloid leukemia: a population-based real-world study. *American Journal of Blood Research*, 10(4), 124–133.

3 Cancer of the Urinary Bladder – Cancer Stat Facts. (n.d.). National Cancer Institute. https://seer.cancer.gov/statfacts/html/urinb.html

4 Saginala, K., Barsouk, A., Aluru, J. S., Rawla, P., Padala, S. A., & Barsouk, A. (2020). Epidemiology of Bladder Cancer. *Medical Sciences*, 8(1), 15. https://doi.org/10.3390/medsci8010015

5 Head and Neck Cancer – Statistics. (2022, December 16). Cancer.Net. https://www.cancer.net/cancer-types/head-and-neck-cancer/statistics

6 Pisani, P., Airoldi, M., Allais, A., Valletti, P. A., Battista, M., Benazzo, M., Briatore, R., Cacciola, S., Cocuzza, S., Colombo, A., Conti, B., Costanzo, A., Della Vecchia, L., Russi, E. G., Fantozzi, C., Galizia, D., Garzaro, M., Genta, I., Iasi, G. A., . . . Zigliani, A. (2020). Metastatic disease in head & neck oncology. Acta Otorhinolaryngologica Italica, 40(SUPPL. 1), S1–S86. https://doi.org/10.14639/0392-100x-suppl.1-40-2020

7 Leukemia – Cancer Stat Facts. (n.d.). National Cancer Institute. https://seer.cancer.gov/statfacts/html/leuks.html

8 Acute Myeloid Leukemia – Cancer Stat Facts. (n.d.). National Cancer Institute. https://seer.cancer.gov/statfacts/html/amyl.html

PureTech's Founded Entities

Founded Entities in Order of Approximate Value of PureTech's Holdings

KARUNA THERAPEUTICS

Karuna Therapeutics is a clinical-stage biopharmaceutical company driven to create and deliver transformative medicines for people living with psychiatric and neurological conditions.

Program discovery process by the PureTech team	• We and our collaborators, including leading schizophrenia experts, were excited about efficacy data generated in schizophrenia and Alzheimer's disease by Eli Lilly with xanomeline, which had notable efficacy stemming from its activation of muscarinic receptors (M1 and M4) but had been held back by gastrointestinal tolerability issues. To overcome this, we invented KarXT, an oral M1/M4-preferring muscarinic agonist, by combining xanomeline (a muscarinic agonist) with trospium (a peripherally acting muscarinic antagonist that doesn't cross the blood brain barrier). This enabled the beneficial effects of M1/M4 activation in the brain without the peripheral side effects. We conducted key human tolerability proof-of-concept studies with KarXT that allowed Karuna to advance it further in schizophrenia patients. Karuna licensed the key KarXT intellectual property from PureTech. If approved, we would have pioneered the development of the first new class of medicine for schizophrenia in over 50 years.
Key milestones achieved and development status	• In August 2022, Karuna announced positive results from the Phase 3 EMERGENT-2 trial evaluating the efficacy, safety and tolerability of its lead investigational therapy, KarXT (xanomeline-trospium), in adults with schizophrenia. The trial met its primary endpoint, with KarXT demonstrating a statistically significant and clinically meaningful 9.6-point reduction in Positive and Negative Syndrome Scale (PANSS) total score compared to placebo (-21.2 KarXT vs. -11.6 placebo; p<0.0001) at Week 5 (Cohen's d effect size of 0.61). KarXT also met key secondary endpoints. KarXT was generally well tolerated, with a side effect profile substantially consistent with prior trials of KarXT in schizophrenia. • In the March 2023 post-period, Karuna announced positive topline results from the Phase 3 EMERGENT-3 trial evaluating the efficacy, safety, and tolerability of KarXT in adults with schizophrenia. The trial met its primary endpoint, with KarXT demonstrating a statistically significant and clinically meaningful 8.4-point reduction in Positive and Negative Syndrome Scale (PANSS) total score compared to placebo (-20.6 KarXT vs. -12.2 placebo; p<0.0001) at Week 5 (Cohen's d effect size of 0.60). Consistent with prior trials, KarXT demonstrated an early and sustained statistically significant reduction of symptoms from Week 2 (p<0.05) through the end of the trial as assessed by PANSS total score. KarXT also demonstrated reductions in positive and negative symptoms of schizophrenia as measured by PANSS positive and PANSS negative Marder factor subscales. KarXT was generally well tolerated, with a side effect profile substantially consistent with previous trials of KarXT in schizophrenia.

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VOR

Vor Bio is a clinical-stage cell and genome engineering company that aims to change the standard of care for patients with blood cancers by engineering hematopoietic stem cells (HSC) to unlock the potential of Vor's highly potent targeted therapies which have an improved safety profile for patients, several of which Vor is also developing.

Program discovery process by the PureTech team	• We were interested in approaches to treat hematological malignancies that currently have poor response rates or poor adverse event profiles despite recent advances in cell therapies and targeted therapies. We worked with Vor Bio Scientific Board Chair, Siddhartha Mukherjee, M.D., Ph.D., on key intellectual property, which Vor Bio exclusively in-licensed from Columbia in April 2016, and on advancing this concept through critical POC experiments.
Key milestones achieved and development status	• In December 2022, Vor announced initial clinical data from VBP101, Vor's Phase 1/2a multicenter, open-label, first-in-human study of tremtelectogene empogeditemcel or "trem-cel" (formerly VOR33) in patients with AML. The data observed that the first AML patient transplanted with trem-cel demonstrated durable engraftment through three cycles of Mylotarg (gemtuzumab ozogamicin), which was well tolerated at the initial dose level. • In the February 2023 post-period, Vor announced a second patient also successfully received a trem-cel transplant and engrafted normally.

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AKILI

Akili is pioneering the development of cognitive treatments through game-changing technologies. Akili's approach of leveraging technologies designed to directly target the brain establishes a new category of medicine – medicine that is validated through clinical trials like a drug or medical device but experienced like entertainment.

Program discovery process by the PureTech team	• We engaged with leading neuroscientists and clinicians who had been studying the effects of video games on cognition and the underlying neural processes accessible by sensory stimulation and we collaborated with Dr. Adam Gazzaley, M.D., Ph.D., to translate the underlying academic device into a medical intervention, including overseeing the initial product development and design and the implementation of the initial proof-of-concept studies.
Key milestones achieved and development status	• In August 2022, Akili, Inc. began trading on the Nasdaq Stock Market under the ticker symbol "AKLI". • In November 2022, Akili deployed the first wave of its EndeavorRx®[1] go-to-market sales force in 14 priority territories across the US with a focus on Integrated Behavioral Health Centers and pediatric providers. • In June 2020, Akili announced that the FDA granted clearance to market EndeavorRx as a prescription treatment for improving attention function in children with attention-deficit/hyperactivity disorder (ADHD) and received approval to market EndeavorRx in Europe. • In the January 2023 post-period, Akili announced topline results from STARS-ADHD-Adolescents, its pivotal trial of EndeavorRx (AKL-T01) in adolescents ages 13-17 with ADHD. The study showed robust improvements in attention and broader clinical outcomes, including attention improvements that were nearly three times as large as those seen in Akili's pivotal trial that served as the basis for EndeavorRx's FDA authorization for children with ADHD ages 8-12. • In the January 2023 post-period, Akili announced its 2023 operating plan to focus the company's resources primarily on supporting the commercialization and growth of EndeavorRx as well as efforts related to the potential label expansion for EndeavorRx in broader ADHD populations. This resulted in a reduction of expenses, including a reduction in the company's workforce by approximately 30% and pipeline reprioritization.

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GELESIS

Gelesis is a consumer-centered biotherapeutics company and the maker of Plenity,®[2] which is inspired by nature and FDA cleared for weight management in the broadest patient population of any prescription weight management product. Since launch, Plenity has helped over 200,000 people and generated $39.5 million in revenue. The accumulated safety data demonstrates unprecedented real-world tolerability consistent with clinical studies.

Program discovery process by the PureTech team	• Working with leading obesity experts, we conducted a worldwide search for compelling technologies meeting key criteria for a novel approach to obesity and overweight. We agreed that the ideal characteristics included an orally administered, mechanically acting device with a favorable safety and tolerability profile. We identified and in-licensed the core intellectual property from an academic collaborator and subsequently co-invented additional intellectual property around a novel class of biocompatible, superabsorbent hydrogels, forming the basis for Gelesis' portfolio.
Key milestones achieved and development status	• Gelesis received clearance from the FDA for its first product, Plenity® (Gelesis100), an aid for weight management in adults with excess weight or obesity, BMI of 25-40 kg/m², when used in conjunction with diet and exercise, in April 2019. In June 2020, Gelesis received a CE Mark for Plenity. The product became broadly available in the US in December 2021. • In 2022, Gelesis reported product revenue, net, was $25.6 million compared to $11.2 million in 2021, a 129% increase year-over-year. • In 2022, Gelesis acquired 121,500 new members compared to 61,400 new members during 2021, a 98% increase year-over-year, and sold 374,000 units in 2022 compared to 174,000 units in 2021, a 115% increase. • In the March 2023 post-period, Gelesis announced that it has filed an initial 510(k) application with the FDA to change the classification of Plenity from prescription-only to be available over the counter ("OTC"). Gelesis has stated they believe that this shift would double Plenity's addressable market, should significantly reduce the company's customer acquisition costs, and could open up new, broader partnership opportunities. An OTC classification would make Plenity widely available and easily accessible, empowering individuals struggling with excess weight with an easier path to an effective, affordable, and trusted weight management product. Plenity's unprecedented safety and efficacy profile has been demonstrated in over 200,000 patients to date. As a result of this potential change to OTC and the impact it may have on the company's commercial strategy, as well as its current levels of liquidity, Gelesis significantly reduced its operating costs. Gelesis is evaluating strategic alternatives, including potential financing and commercial partnerships in various geographies. • In the April 2023 post-period, multiple subsequent events occurred related to the future operations of Gelesis, including PureTech submitting a non-binding proposal to acquire all outstanding equity of Gelesis, refer to Note 26 "Subsequent Events" in our annual financial statements for further details.

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1 EndeavorRx is the first-and-only FDA-authorized treatment delivered through a video game experience. EndeavorRx is indicated to improve attention function as measured by computer-based testing in children ages 8 to 12 years old with primarily inattentive or combined-type ADHD, who have a demonstrated attention issue. Patients who engage with EndeavorRx demonstrate improvements in a digitally assessed measure Test of Variables of Attention (TOVA®) of sustained and selective attention and may not display benefits in typical behavioral symptoms, such as hyperactivity. EndeavorRx should be considered for use as part of a therapeutic program that may include clinician-directed therapy, medication, and/or educational programs, which further address symptoms of the disorder. EndeavorRx is available by prescription only. It is not intended to be used as a stand-alone therapeutic and is not a substitution for a child's medication. The most common side effect observed in children in EndeavorRx's clinical trials was a feeling of frustration, as the game can be quite challenging at times. No serious adverse events were associated with its use. EndeavorRx is recommended to be used for approximately 25 minutes a day, 5 days a week, over initially at least 4 consecutive weeks, or as recommended by your child's health care provider. To learn more about EndeavorRx, please visit EndeavorRx.com.

2 Important Safety Information about Plenity: Patients who are pregnant or are allergic to cellulose, citric acid, sodium stearyl fumarate, gelatin, or titanium dioxide should not take Plenity. To avoid impact on the absorption of medications: For all medications that should be taken with food, take them after starting a meal. For all medications that should be taken without food (on an empty stomach), continue taking on an empty stomach or as recommended by your physician. The overall incidence of side effects with Plenity was no different than placebo. The most common side effects were diarrhea, distended abdomen, infrequent bowel movements, and flatulence. Contact a doctor right away if problems occur. If you have a severe allergic reaction, severe stomach pain, or severe diarrhea, stop using Plenity until you can speak to your doctor. Rx Only. For the safe and proper use of Plenity or more information, talk to a healthcare professional, read the Patient Instructions for Use, or call 1-844-PLENITY.

PureTech's Founded Entities — continued
Founded Entities in Order of Approximate Value of PureTech's Holdings

VEDANTA BIOSCIENCES

Vedanta is leading the development of a potential new category of oral therapies based on defined consortia of bacteria isolated from the human microbiome and grown from pure clonal banks. Vedanta is a leader in the field with capabilities and deep expertise to discover, develop and manufacture live bacteria-based therapies.

Program discovery process by the PureTech team	• We engaged with leading world-renowned experts in immunology and identified and in-licensed intellectual property to pioneer the concept of therapeutically defined consortia of microbes that could modulate the immune system or treat bacterial infections.
Key milestones achieved and development status	• In October 2021, Vedanta announced that its Phase 2 clinical trial of VE303, an orally administered investigational live biotherapeutic product (LBP) in development for the prevention of recurrent CDI in high-risk patients, met its primary endpoint. • In April 2022, results from a Phase 1a/1b study evaluating the safety, tolerability, and colonization dynamics of VE303 in healthy adults were published in the journal *Cell Host & Microbe*. • In June 2022, Vedanta announced the opening of a new facility designed to manufacture clinical and commercial supply for its therapeutic portfolio. • In the 2023 post-period, Vedanta announced a $106.5 million financing to advance its pipeline of defined bacterial consortia therapies.
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SONDE

Sonde is developing a voice-based technology platform that detects changes in the sound of voice that are linked to health conditions – like depression, anxiety and respiratory disease – to provide health tracking and monitoring. Sonde's proprietary technology can be integrated into ubiquitous devices such as smartphones, headphone and smart speakers.

Program discovery process by the PureTech team	• We identified vocal features as a leading non-invasive source of health data, particularly given the evolving technology landscape where voice interactions with devices are rapidly increasing and in-licensed proprietary technology from Thomas Quatieri, Ph.D., at MIT's Lincoln Laboratory in May 2016. We developed additional, novel intellectual property around this concept and helped advance the technology from an academic concept to a commercially focused technology.
Key milestones achieved and development status	• In January 2022, Sonde announced the signing of a multi-year strategic partnership with GN Group to research and develop commercial vocal biomarkers for mild cognitive impairment associated with hearing loss. • In December 2022, Sonde raised a $19.25 million Series B investment round led by Partners Investment, with participation from NEOM Company, KT Corporation and existing investors, including co-founders PureTech Health and M Ventures.
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ESG Report

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Chapter 1: Patients

As a leading clinical-stage biotherapeutics company, our mission is to address devastating diseases and improve the health of patients around the world through differentiated medicines. To achieve this consistently and in a way that prioritizes both business ethics and sustainability, we target three core areas to best support patients:

Commitment 1

Addressing unmet medical needs

Commitment 2

Ensuring patient safety

Commitment 3

Accelerating our R&D engine to unlock new medicines

The patient population we aim to create value for is widespread as we explore potentially life-transforming treatments across many serious diseases.

We continued to develop our Wholly Owned Pipeline in 2022 through the expertise of our dedicated team and in collaboration with our extensive network of scientists, clinicians and industry leaders. For details on our Wholly Owned Pipeline, please see pages 8 to 11.

Commitment 1: Addressing unmet medical needs

Our team is committed to delivering therapeutics where there are unmet medical needs. We do this by applying our unique insights to the great foundational work that was conducted by our industry. For decades, biopharma has devoted time and resources to discovering new modalities and proving they work in patients, but important new medicines were abandoned after running into issues that seemed insurmountable at the time. Our R&D approach is centered on enhancing on-target efficacy, enabling oral administration or improving tolerability to unlock new classes of medicine that have been held back by one of these issues.

With our cutting-edge R&D efforts, we are targeting these gaps while creating long-term value for both patients and stakeholders.

Commitment 2: Ensuring patient safety

Patient safety underpins everything we do. Our dedicated team of researchers, together with our external stakeholders, follow strict procedures, processes and guidelines to ensure the upmost safety of our clinical trials and R&D processes.

Delivering Safe Clinical trials

We conduct all clinical trials according to the highest standards of ethics and safety. All our trials follow the standards of the International Conference on Harmonization (ICH) Good Clinical Practice guidelines and the World Medical Association (WMA) Declaration of Helsinki on the Ethical Principles for Medical Research Involving Human Subjects.

To ensure compliance and rigor in our approach, we seek approval from Independent Ethics Committees and local regulatory authorities on all investigative medicine trials. In addition, our employees who are engaged with clinical trials, either as clinical staff or their designees, are responsible for ensuring full compliance with best clinical practice.

When sponsoring an Investigational New Drug (IND) application, we acknowledge our responsibility to both participants and the regulatory agencies who put their trust in us to act responsibly. We have a robust governance framework in place which includes effective policies and protocols such as our Standard Operating Procedure for Adverse Event Reporting, which helps us to monitor, review and act on any incidents.

Clinical trial participants are made fully aware of all risks involved prior to participating in a clinical trial. To confirm this, we ensure that every patient has provided informed consent of their willingness to participate through a signed voluntary commitment. Our informed consent requirements are set out in the PureTech Clinical Research Policy.

We also rely on the use of human biological specimens to develop our innovative therapies through clinical trials, which require informed consent. Our Human Biological Specimens Policy specifies our commitment to respecting both donors and the specimens they provide and that collecting, obtaining, storing and using human biological samples must be obtained through consent.

Our Chief Medical Officer is responsible for ensuring that PureTech follows all US and applicable international regulatory requirements and standards and applicable bioethics principles. In 2022, there were no FDA sponsored inspections related to clinical trial management and pharmacovigilance that resulted in PureTech receiving Voluntary Action Indicated (VAI) and Official Action Indicated (OAI) from FDA.

Bioethics: R&D

Our R&D approach focuses on enhancing on-target efficacy, enabling oral administration or improving tolerability to unlock new classes of medicine that have been held back due to these challenges.

Our ethical and quality management standards allow for continuous improvement through R&D, while helping us to maintain high standards of product quality and safety in compliance with relevant regulations at each phase. In 2022, we spent $152.4 million on research and development projects to develop new and innovative therapeutics (see page 57 for details on R&D expenses).

As we enhance our R&D strategy, we continue to assess and identify areas for improvement across our clinical trial safety, quality and risk management processes. For example, in 2022 we implemented new policies relating to Good Manufacturing Practices (GMP) and regulatory inspections to reinforce ethics into our processes. Looking ahead, additional policies and Standard Operating Procedures (SOPs) specific to GxP risk assessment are planned for 2023.

Pulmonary Fibrosis Foundation™

3 GOOD HEALTH AND WELL-BEING

We are Committed to the Fight Against Idiopathic Pulmonary Fibrosis (IPF)

It's important to note that the work we do at PureTech every day is in service to the patients we hope to help. Our most advanced wholly-owned therapeutic candidate, LYT-100, is being developed for the potential treatment of conditions involving inflammation and fibrosis, including IPF. IPF is a progressive and life-shortening disorder of the lungs with a median survival rate of 2-5 years.[6]

2-5 YEARS
Median survival[6]

~230,000[6]
People are affected by IPF in the US and EU5[7,8]

~75%
IPF patients not on standard of care therapy[9]

2
FDA approved drugs on the market with significant tolerability issues

Consistent with our commitment to improve the care of patients with IPF, we partnered with the Pulmonary Fibrosis Foundation (PFF) in 2022 to help raise awareness of the condition in several ways.

We have a strong relationship with PFF, which is the leading patient advocacy organization for the IPF community. They not only provide support and educational resources to the community but are also working to identify effective treatments for IPF. PFF is also a trusted resource and partner to PureTech as we advance LYT-100 through the clinic.

Our initiatives:

We have undertaken an awareness initiative to inform patients with IPF across the globe of our investigational treatment option in clinical development. We also work to ensure that caregivers of patients with IPF are included in our IPF study by creating caregiver-specific guides inviting them to participate in trial meetings.

In September 2022, we promoted Pulmonary Fibrosis Awareness Month to raise awareness of IPF and to serve as inspiration for our employees.

Virtual Lunch & Learn with PFF IPF Ambassadors

PureTech/PFF Walk

Employee-led fundraising with company match

In September 2022, we sponsored an inaugural PFF Education Symposium, an event to provide an overview and update on the research and development of innovative therapies – like LYT-100 – to improve the lives of those living with pulmonary fibrosis and related conditions.

We believe that working with advocacy groups such as the PFF and hearing from IPF ambassadors with lived experiences of the diseases will help us incorporate the patient voice in our work.

6 Fisher, M., Nathan, S. D., Hill, C., Marshall, J., Dejonckheere, F., Thuresson, P., & Maher, T. M. (2017). Predicting Life Expectancy for Pirfenidone in Idiopathic Pulmonary Fibrosis. *Journal of Managed Care & Specialty Pharmacy*, 23(3-b Suppl), S17 -S24. https://doi.org/10.18553/jmcp.2017.23.3-b.s17
7 GlobalData Epidemiology and Market Size Search.
8 United Kingdom, France, Germany, Italy and Spain.
9 Dempsey, T., Payne, S. C., Sangaralingham, L. R., Yao, X., Shah, N., & Limper, A. H. (2021). Adoption of the Antifibrotic Medications Pirfenidone and Nintedanib for Patients with Idiopathic Pulmonary Fibrosis. *Annals of the American Thoracic Society*, 18(7), 1121–1128. https://doi.org/10.1513/annalsats.202007-901oc

Environmental considerations continue to play a key role in R&D as we strive to reduce or eliminate hazardous chemicals from our R&D process. We also ensure that we remain aware of the latest developments in green chemistry and we intend to evaluate the adoption of eco-design principles in the future. To that end, in the 2023 post-period, we have already managed to optimize some of our large scale drug substance processes to replace more hazardous solvents that negatively impact the environment.

Bioethics: Animal Research

Animal research plays an essential and irreplaceable role in the advancement of drug discovery as it helps researchers answer questions of biological uncertainty.

PureTech conducts animal testing only when necessary to advance the development of therapeutics and is required by regulatory authorities, before human testing of new medicines can take place.

We follow the guidelines set out under the USDA Animal Welfare Act and are committed to the humane and ethical treatment of animals. Studies involving animals are reviewed and approved by the Executive Team and are conducted at externally qualified and certified vendors that meet our principles and expected practices for the care, welfare and treatment of animals.

We are committed to applying the replacement, reduction and refinement of animal studies (3Rs) each time we consider the use of animal testing. This includes the following commitments:

We use alternative methods to animal testing wherever possible.	We use the minimum number of animals in trials.	We minimize pain, suffering and distress, and improve the welfare of animals used in trials.

Bioethics: Quality Management

We have a robust Quality Management System (QMS) in place to oversee our raw material suppliers. Our QMS consists of various SOPs which describe our controlled processes that result in consistent quality control as per PureTech's quality system. SOPs include, but are not limited to, the processes relating to the:

- Qualification of New Vendors
- Qualification of Existing Vendor for New Materials
- Management of Changes related to Vendor
- Evaluation of Supply for Quality
- Change Control
- Batch Disposition
- Employee Training on New Materials

To ensure our QMS is robust and up to date, risk assessment protocol is built into our procedures for vendor audits, vendor oversight, and data integrity for Chemistry, Manufacturing, and Controls (CMC). This allows us to quickly determine vendor risks and accelerate new vendor onboarding to meet business demands.

Ensuring Drug Efficacy and Safety

None of the therapeutic candidates from within PureTech's Wholly Owned Pipeline are currently on the market. Therefore, in 2022, PureTech received no FDA warning letters, no products were delayed due to a lack of regulatory approval and no product recalls took place.

As we continue to advance our therapeutic candidates towards commercialization, we will continue to practice our clinical protocols diligently to ensure ongoing safety and compliance across our operations and clinical trials.

Commitment 3: Accelerating our R&D engine to unlock new medicines

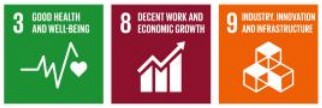
R&D has been the bedrock of progress in global health and a key component in the successful discovery and development of our therapeutic candidates.

Currently, our Wholly Owned Pipeline consists of five therapeutic candidates, including one that has been licensed to and is being developed by a partner.

5	4
Therapeutic candidates	**Therapeutic candidates in clinical stage**

Generating such a robust pipeline that has the potential to address millions of patients with unmet medical needs has been made possible through our strong R&D model.

We are proud of our model which allows us to fulfill our unyielding commitment to delivering potentially life-changing new therapies for patients in need. We will continue to leverage this model, our scientific insight and our network of scientists, clinicians and industry leaders to unlock new medicines and deliver highly innovative therapeutics for patients.



Chapter 2: People

"PureTech is committed to developing medicines that have the potential to transform lives. We are equally committed to our own PureTech team who drive our ongoing success. Our ESG initiatives aim to reflect this dedication as we work to consistently deliver a truly sustainable business."

Bharatt Chowrira
President and Chief Business, Finance and Operating Officer

Our employees are critical to bringing our vision to life. Through their hard work and passion, we aim to deliver innovative therapeutics that improve patients' lives while also creating long-term value for our stakeholders.

We believe that a collaborative and respectful working environment is vital to cultivating a safe and creative space where employees can thrive. To achieve this, we are committed to delivering on the following four priority areas:

Commitment 1

Building a diverse, equitable and inclusive workplace

Commitment 2

Promoting employee development to attract and retain the best talent

Commitment 3

Maintaining a robust Employee Health and Safety (EHS) program

Commitment 4

Strengthening engagement and collaboration between people, communities and partners

Our employees are predominantly located near our headquarters in Boston, MA, with two individuals based in London. As of December 31, 2022, we had a total of 111 employees. Of these, 66 employees work in R&D roles while 45 are engaged in PureTech's general and administrative functions.

Commitment 1: Building a diverse, equitable and inclusive workplace

Diversity, Equity and Inclusion

We believe that the best ideas come from diversity in thought, ideas and perspectives, which all contribute to helping unlock our maximum potential as an organization. This is why we promote a diverse, equitable and inclusive work environment in which all people are treated with the upmost dignity and respect.

Under our Equal Opportunity Policy of non-discrimination and equal opportunity, we are committed to treating all employees and qualified applicants fairly and equally regardless of their race, color, religion, gender or gender identity, sexual orientation, nationality, ancestry, age, physical or mental disability, veteran or military service, or any other status protected by law.

Our commitment to diversity and inclusion is evident across all aspects of our employment practices and covers all stages from hiring, job assignment, promotion and compensation to discipline, discharge, benefits and training.

Championing Gender Diversity

We pride ourselves on our strong commitment to gender diversity and towards enhancing gender balance within the medical sector. We are committed to promoting diversity within our leadership team and at the employee level to ensure a balanced approach. Our gender diversity rate as of December 31, 2022, sits at 44% at Board level, and a 50% across the total workforce:

	Total employees		Managers		Board	
Gender	2021	2022	2021	2022	2021	2022
Female	45%	50%	33%	41%	44%	44%
Male	55%	50%	67%	59%	56%	56%

We continue to make strong progress in embedding diversity at a leadership level. We believe that a diverse board and senior management team can help to generate better performance, retain exceptional talent and enhance shareholder value.

The 2022 Hampton-Alexander Review into Boardroom gender diversity reported that only 12 FTSE 250 companies have female CEOs – and we are proud to be one of those companies. Our founder and CEO, Daphne Zohar, is a successful entrepreneur who runs our standout team. She has been the leading figure in PureTech's fundraising and business development since inception and is vital to establishing our therapeutic pipeline across our Wholly Owned Programs and Founded Entities. Additionally, we were recognized in the 2022 FTSE Women Leaders Review for our efforts to improve the number of women in senior leadership positions – achieving 44% gender diversity at Board-level.

Promoting Cultural Diversity

As well as championing gender equality, we take great pride in celebrating and enhancing the cultural diversity of our workforce and the communities we serve.

We are US Equal Employment Opportunity Commission compliant with an annual EEO-1 Report filing, disclosing information about our employees' job categories, ethnicity, race and gender. This helps us to enhance transparency and see where we can better target efforts to further enhance the diversity of our workplace.

We are proud to report that as of 2022, our cultural diversity rate at the Board-level is 44%, and we are continuing to enhance the cultural diversity of our wider management team and workforce.

In 2022, we enhanced our support to promote all forms of cultural diversity, led by the employee-led Cultural and Social Committee. The joint committee, formed in 2021, aims to create programs that celebrate diversity, promote equity and encourage respect for one another. Some of the 2022 initiatives included:

Supporting Asian American and Pacific Islander (AAPI) Heritage Month	In May 2022, we held an initiative to recognize the contributions of Asian Americans and Pacific Islander Americans to the history, culture and achievements in the US In honor of AAPI month, we hosted a month-long initiative to circulate company-wide materials discussing AAPI history, culture, events and resources.
Celebrating LGBTQ+ Pride Month	In June 2022, we celebrated LGBTQ+ Pride Month, dedicated to the celebration and recognition of the impact lesbian, gay, bisexual, and transgender (LGBTQ+) individuals have had and continue to have. We celebrated in a few ways, notably: • Distributed resources to employees highlighting LGBTQ+ life science professionals • Updated our company logo to raise awareness and solidarity for LGBTQ+ causes • Hosted Jessica Halem, an award-winning educator, advocate and consultant on LGBTQ+ issues, to speak on how to enhance inclusive and equitable environments
Celebrating Juneteenth	In June 2022, we celebrated Juneteenth, commemorating the emancipation of slavery in the US. To acknowledge and learn more about this historical event, we distributed resources to employees highlighting the history, culture and events of Juneteenth. As of 2023, PureTech has also added June 19th as a company holiday to observe this important day in history.

Enhancing Pay Equity

We believe in providing equal pay opportunities to our people regardless of their gender, race, ethnicity or any other characteristics not relevant to their role or performance in it.

Due to the size of our business, we are not legally obliged to produce a Gender Pay Gap Report, however, we ensure full compliance with all local laws relating to equal pay and remuneration. We are also committed to enhancing workplace transparency and equality through our human capital programs which promote career development, workplace equity, as well as diversity and inclusion.

Commitment 2: Promoting employee development to attract and retain the best talent

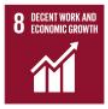
Human capital is vital to a successful business operation to identify new opportunities, innovate and lead. We depend on our people, their scientific knowledge, skills and commitment to thrive. As such, the personal development, retention and recruitment of industry-leading talent is one of the top priorities for PureTech.

Recruitment and Retention

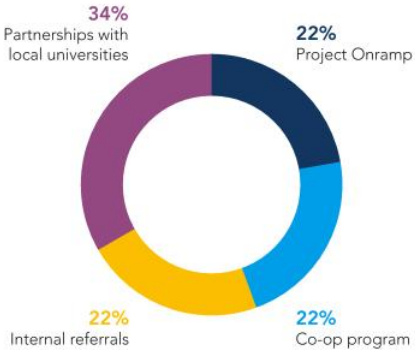
Our business continues to grow rapidly as our Wholly Owned Programs advance. As a result, the PureTech team too has grown rapidly in 2022, with our head count growing by 16.8% year-over-year. This growth has enabled us to create new roles internally and attract new talent to broaden our business and expertise.

	2021	2022
Total number of employees	95	111
Year-over-year growth (%)	44%	16.8%
Employee turnover (%)	25%	30.62%
Internal promotions (%)	17%	17%

Developing a sustainable and diverse pipeline of talent is the principal focus of our recruitment strategy. We source our talent through our outstanding network of world leading scientists. We also source emerging talent from local top tier universities in Boston – the heart of the world's biotech hub – as well as through partnerships with local university cooperative education programs. Co-op programs provide students with opportunities to alternate periods of academic study with several months of full-time employment related to their academic majors and interests. Undergraduate co-op students can join PureTech for six month paid internships in our Research department, adding to our talent acquisition pipeline. Participating in life science career fairs is another way of targeting skilled candidates.



Beyond this, we are passionate about providing opportunities to those hoping to pursue a career in life sciences. To support first-generation students from under-resourced and under-represented communities, we partner with local organizations like Project Onramp to offer paid summer internships. In 2022, we welcomed 9 interns through our various programs.



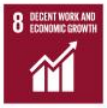
Happy Intern Day In July 2022, we hosted an intern day coffee break at our Boston HQ to celebrate the future generations of the life sciences industry. This provided an opportunity not only for PureTech to thank our interns for their work but also for participating interns to meet PureTech employees across all functions in order to better understand our business and how they can build their skillsets for an exciting career in biotech.

Training and Development

We uphold the value of human capital development at PureTech, encouraging managers and employees to discuss job performance and goals on an informal, day-to-day basis while also conducting formal performance evaluations annually. We encourage regular one-on-ones between employees and their supervisors, and progress is monitored via an online portal. This enables employees and managers to have clear visibility over their goals throughout the year, which in turn facilitates ongoing constructive feedback and development. In 2022, 100% of our employees received performance appraisals.

For PureTech, career development goes beyond providing opportunities for promotions. We believe an effective career development program entails providing opportunities to enhance employees' competitive capabilities. To achieve this, we offer a broad range of training to and also fund participations in development programs on a case-by-case basis. Some of the development trainings include:

IT training	• Mandatory annual IT training provided by Risk Management Solutions (RMS) for all employees • Mandatory annual cybersecurity training for all employees, with follow-on assignment to be completed
HR training	• Mandatory training at onboarding covering PureTech practices and policies • Special training based on job function; e.g., employees who perform GxP work are assigned matrices by the Quality Assurance department • Leadership coaching for managers
Governance training	• Mandatory annual anti-harassment training provided by an external partner for all employees • Mandatory annual anti-harassment training provided by an external partner to all managers
Employee safety training	• Mandatory annual safety training provided to all employees in accordance with the Occupational Safety and Health Administration (OSHA) • Mandatory annual active shooter training provided to all employees • Optional annual first aid training provided to all employees by Safety Trainers • Optional annual CRP training provided to all employees • Mandatory DOT/HAZMAT training provided to all lab staff every three years • Mandatory Personal Protective Equipment (PPE) policy training provided to all lab staff year round
R&D training	• Optional training on how to conduct effective scientific presentations; offered four times a year for R&D team



Employee Benefits

The physical, financial, social and emotional well-being of our employees is a priority at PureTech. As a result, we provide a range of benefits for employees.

An enrollment session is held annually with our benefits administrator, Baystate Benefit Services, to help our employees understand how they can make best use of the benefits available to them. Following a US model since this is where the majority of our employees are based, our benefits and perks include:

- Premium health plan with an option to choose from a PPO or HMO plan
- Dental plan
- Vision plan
- Short-term and long-term disability plans
- 401(k) retirement plan with 3% non-elective contribution by the company
- Performance share plan
- One-on-one financial coaching
- Technology reimbursement program
- Health Reimbursement Account (HRA)
- Benefits continuation (COBRA)
- Paid parental leave (up to 12 weeks)
- Onsite nursing and wellness room
- Employee led Cultural Committee
- Onsite free snacks & drinks
- Flexible working plans
- 24/7 unlimited assistance by ComPsych® on resources and information on life's challenges
- Pre-tax parking and transit benefits
- Gym membership reimbursement in addition to an onsite gym facility in Boston
- Entertainment discounts
- Life insurance
- Medical FSA
- Dependent Care FSA

PureTech's performance share plan provides the majority of employees stock options upon joining the organization. We also provide appropriate market-based compensation and incentives in alignment with the goals of the organization and its shareholders.

As of 2022, none of our employees are subject to collective bargaining agreements or represented by a trade or labor union. As an employer we are, however, respectful of the rights of our employees, we thus support their right to collective bargaining and freedom of association.

Commitment 3: Maintaining a robust Employee Health and Safety (EHS) program

It is our unyielding commitment to provide a healthy and safe working environment for our employees that supports their physical and mental wellbeing. Throughout the COVID-19 pandemic, we have prioritized the health of our people while ensuring ongoing business continuity through detailed and regularly updated action plans.

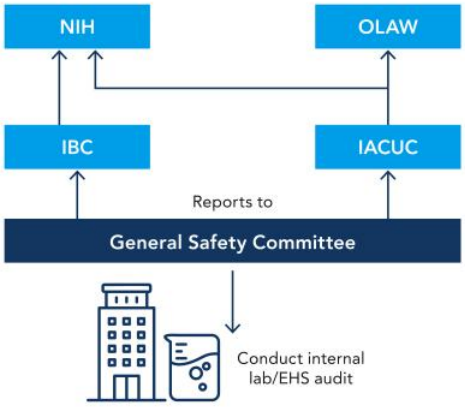
In 2021, PureTech took steps to evolve its hybrid working model in response to the pandemic. In 2022, we have continued to implement flexible/remote working while maintaining the safety protocols established at the beginning of COVID-19. We continue to conduct mandatory PCR tests for onsite staff and employees can track COVID-19 cases on the employee intranet to mitigate risk.

EHS Governance

We have a robust Employee Health and Safety Management System (EHSMS) in place that tracks and ensures adherence to all EHS-related activities including employee safety training, lab safety protocols and emergency action planning.

Our EHS activities are overseen by a Safety Committee consisting of three underlying sub-committees, with support from an external EHS expert who is certified through the National Registry of Certified Microbiologists (NRCM) and is a Registered Biosafety Professional (RBP).

General Safety Committee	Establishes EHS-related protocols and applications and submits to IBC and IACUC for review/approval. The committee meets monthly and is formed by PureTech lab operations staff.
Institutional Biosafety Committee (IBC)	Ensures all research, teaching, and training involving potentially biohazardous agents at our labs are conducted in compliance with US National Institutes of Health (NIH) guidelines, in accordance with Centers for Disease Control (CDC), Prevention Biosafety in Microbiological and Biomedical Laboratories (CDC, BMBL), Occupational Safety and Health Administration (OSHA) and local regulations, and with proper concern for the safety, the environment, and the surrounding communities. The committee meets monthly and reports to US National Institutes of Health (NIH).
Institutional Animal Care & Use Committee (IACUC)	Ensures our animal testing upholds the US federal regulations on animal care and use. Compliance is recorded through our Public Health Service Assurance document, which is approved by the Office of Laboratory Animal Welfare (OLAW) at NIH.



PureTech's EHS team is led by three specific roles as per the requirements of OSHA. The roles and the responsibilities involved are as follows:

Biological Safety Officer (BSO)	Oversees all ongoing scientific projects in the company, ensuring compliance with local regulations and guidelines as well as providing guidance to all members of staff conducting biological work. The BSO is also a member of the Institutional Biosafety Committee (IBC).
Chemical Hygiene Officer (CHO)	Appointed under the Chemical Hygiene Plan, the CHO is responsible for designing, developing, implementing, and maintaining the Company's chemical hygiene policies and practices. They are also responsible for ensuring appropriate safety procedures and training are in place and ensuring that all hazardous waste is disposed of correctly.
Emergency Coordinator	The role involves keeping PureTech's Emergency Plan up to date and reviewing and amending it where necessary.

As well as overseeing day-to-day activities, the EHS team reviews EHS protocols on an annual basis, or when emerging reasons demand a process review, such as a lab incident, new project, or the introduction of a new piece of equipment.

EHS Training and Audits

We provide a mandatory safety training program for all our staff and conduct regular internal audits to maintain industry-leading health and safety (H&S) standards. Our H&S training modules consist of the following to integrate and maintain highly effective H&S culture:

- Mandatory annual safety training provided to all employees in accordance with the Occupational Safety and Health Administration (OSHA)
- Optional annual first aid training provided to all employees by dedicated Safety Trainers
- Optional annual CPR training provided to all employees
- Mandatory annual active shooter training provided to all employees
- Mandatory year-round Personal Protective Equipment (PPE) training provided to all lab staff
- Mandatory DOT hazmat training provided to all lab staff

Key safety information is communicated to employees through regular internal communication channels such as town hall meetings, bulletin boards, memoranda, and other written internal communications. Employees must report any concerns to a supervisor or PureTech's operations team.

A lab audit is conducted on a quarterly basis to ensure employee safety and compliance with all appropriate regulations. The audit captures action items as required and is reviewed monthly by the Safety Committee.

Reporting on Incidents

PureTech's operation is classified as a 'research and development laboratory' according to the Standard Industrial Classification (SIC) or North American Industrial Classification System (NAICS) codes and hence we are exempt from reporting on incidents to OSHA. With that said, we continue to practice thorough safety protocols at our lab facilities and are committed to continuously improving our EHS measures driven by our Safety Committee.

Commitment 4: Strengthening engagement and collaboration between people, communities and partners

We consider stakeholder engagement and collaboration to be the cornerstone of innovation and key to unlocking the solutions we need to address pressing medical needs. As such, we promote a positive and interconnected company culture among our stakeholders, while ensuring we make a positive difference to the communities closest to us.

Employee Engagement

We have series of initiatives to promote employee engagement which have been received with great enthusiasm:

Employee Intranet, a Connection Hub

Features important company information and employee resources in one easily accessible portal. Some of the featured contents include company news, new hire highlights, upcoming company events, employee directory, social gallery and an opportunity to provide feedback.

Employee-led Cultural and Social Committee

Plan and host D&I-related programs to foster engagement and respect and to create a sense of community belonging for our people.

Employee Engagement Survey

Anticipated to be conducted every two years, our inaugural employee survey was conducted in 2021 to better understand our employees' needs, concerns, and satisfaction rate. The results revealed how well PureTech performed in areas such as teamwork, providing a respectful work environment and building strong interconnected teams. The results of our next survey are expected to be reported in our 2023 ESG report.

Promoting Employee Wellbeing

A shift to a hybrid working model has impacted work-life balance for many around the globe. At PureTech, we believe that wellbeing is critical to developing a sustainable and happy workplace. This includes ensuring physical, emotional, financial, social factors as well as a sense of community belonging, and purpose are prioritized. In 2022, we hosted periodic happy hours for all employees to wind down and connect with one another and organized various initiatives and activities to promote employee wellbeing:

PureTech Coffee Chat Program

We introduced our inaugural PureTech Coffee Chat Program to foster engagement, collaboration and connection amongst our peers. This optional program randomly paired participating employees across various departments to meet in-person or virtually to talk about their work and interests over coffee. The initiative proved to be very successful, with a 47% participation rate and positive feedback from participants.

Mental Health Awareness Program

In support of Mental Health Awareness month, resources and discounts for wellness programs, such as expert resources and virtual wellness classes, were introduced to all employees. Additionally, we hosted Krista Quinn, a wellness trainer and somatic therapy coach, to provide a guided mediation session to help employees unwind.

Employee Outings

We hosted a company retreat, joined a corporate sports league, and offered multiple online competition/ entertainment activities throughout the year as opportunities for employees to connect with one another outside of work. In some instances, employees' family members were welcomed to join the fun.

Community Engagement

As a community member within Boston's thriving biotech hub, we are committed to giving back to our community. In 2022, we contributed to several community initiatives and charitable events, which included:

CLIMB TO FIGHT CANCER	**Fred Hutch – Climb to Fight Cancer**	In January 2022, Bharatt Chowrira, PureTech's President and Chief Business, Finance and Operating Officer, participated in the Fred Hutch Climb to Fight Cancer fundraiser by trekking to the Mt. Everest Base Camp. The goal of the expedition, which was led by Luke Timmerman and comprised of entrepreneurs, executives and investors from the biotech and pharmaceutical industries, was to collectively raise $1M to support cancer research. PureTech is proud to have contributed $15,000 towards the cause, which collectively raised over $1.3M to fund innovative cancer and infectious disease research. In February 2023, Bharatt Chowrira again participated in the Fred Hutch Climb to Fight Cancer fundraiser by climbing Mt. Kilimanjaro, Tanzania. The team collectively raised more than $1.1M to support cancer research.
INTERNATIONAL RESCUE COMMITTEE	**Supporting Ukraine – International Rescue Committee (IRC)**	In March 2022, PureTech employees supported the International Rescue Committee relief fund to provide vital funds to support Ukrainian humanitarian efforts. With PureTech committed to matching up to $10,000 of employee donations, we were proud to see employee donations reach $6,250, which we matched to contribute a total of $12,500 for the charity.
American Red Cross	**American Red Cross Blood Drive**	In April 2022, we hosted an American Red Cross blood drive at our HQ in Boston, MA. With millions of patients needing blood transfusions each year, this important initiative aligns to our purpose of helping patients in need, while bringing together our employees to save lives.

catie'scloset	**Catie's Closet Drive**	In April 2022, we hosted a clothing drive to serve schools with over 50% poverty rate. Catie's Closet improves school attendance and graduation rates, as well as the mental, emotional, and physical health of students facing poverty, homelessness, and other crises by providing free, in-school access to clothing and basic necessities and uniting with community partners to meet students' other immediate needs. Catie's Closet serves over 100 schools across Massachusetts and New Hampshire, helping more than 75,000 students daily.
Lymphatic Education & Research Network	**Lymphatic Education & Research Network (LE&RN) Walk**	In May 2022, we hosted a global walk for LE&RN to raise awareness of lymphatic diseases. We are a proud sponsor of LE&RN, which is a non-profit organization to fight lymphatic diseases through education, research and advocacy. Being a sponsor has given us the opportunity to connect with designated institutions who provide the best possible multi-disciplinary clinical care and services for patients affected by lymphatic diseases.
Pulmonary™ Fibrosis Foundation	**Pulmonary Fibrosis Foundation (PFF) Walk**	In September 2022, we hosted an in-person charity walk and a fundraiser in honor of Pulmonary Fibrosis Awareness Month, a cause close to our hearts as seen from our most advanced therapeutic candidate LYT-100, which is being developed for the potential treatment of IPF (see page 8 for more). We are proud to have contributed towards the PFF fundraiser walk, which collectively raised over $1M this year.
RELATED BEAL PURETECH GIVING LIFE TO SCIENCE®	**Halloween Candy Drive**	In September 2022, we participated in the Halloween candy drive hosted by Related Beal to support South Boston Community House – a non-profit organization providing support to family and neighborhood life in South Boston through access to Early Education and Care Preschool, School Age, Education and Career Development Programs, Senior Programs and Family Engagement – and Tierney Learning Center – a Boston based organization with a mission to address the educational, employment, financial stability, and health & wellness goals of low-income families in South Boston.
Hunger Free Holidays GBFB.org	**The Greater Boston Food Bank – Hunger Free Holidays Campaign**	In November 2022, we participated in a fundraiser for the Hunger Free Holidays campaign hosted by the Greater Boston Food Bank to raise awareness and funds during the holiday season for the 1 in 3 who are food insecure. We are proud to have contributed nearly $8K to this cause.
RELATED BEAL PURETECH GIVING LIFE TO SCIENCE®	**Holiday Clothing Drive**	In December 2022, we participated in the holiday clothing drive hosted by Related Beal to support men, women, and children at the Commonwealth Land Trust in Roxbury and Dorchester – a non-profit organization providing affordable housing and supportive services to the most vulnerable individuals and families in Massachusetts to prevent homelessness, rebuild lives, and preserve neighborhoods – as well as elders at the Edgar P. Benjamin Healthcare Center in Roxbury – a non-profit skilled Nursing and Rehabilitation Center servicing the greater Boston community.

[Pages 32-43 have been removed]

14 All data in this section is taken from the Article 37 Green Building Report and LEED checklist developed by WSP for the building's landlords, Related Beal.

Risk management

The execution of the Group's strategy is subject to a number of risks and uncertainties. As a clinical-stage biotherapeutics company, the Group operates in an inherently high-risk environment. The overall aim of the Group's risk management effort is to achieve an effective balancing of risk and reward, although ultimately no strategy can provide an assurance against loss.

Risks are formally identified by the Board and appropriate processes are put in place to monitor and mitigate them on an ongoing basis. If more than one event occurs, it is possible that the overall effect of such events would compound the possible effect on the Group. The principal risks that the Board has identified as the key business risks facing the Group are set out in the table below along with the consequences and mitigation of each risk. These risks are only a high-level summary of the principal risks affecting our business; any number of these or other risks could have a material adverse effect on the Group or its financial condition, development, results of operations, subsidiary companies and/or future prospects. Further information on the risks facing the Group can be found on pages 175 to 211 which also includes a description of circumstances under which principal and other risks and uncertainties might arise in the course of our business and their potential impact.

Risk	Impact*	Management Plans/Actions
1 Risks related to science and technology failure The science and technology being developed or commercialized by some of our businesses may fail and/or our businesses may not be able to develop their intellectual property into commercially viable therapeutics or technologies. There is also a risk that certain of the businesses may fail or not succeed as anticipated, resulting in significant decline of our value.	The failure of any of our businesses could decrease our value. A failure of one of the major businesses could also impact the perception of PureTech as a developer of high value technologies and possibly make additional fundraising at PureTech or any Founded Entity more difficult.	Before making any decision to develop any technology, extensive due diligence is carried out that covers all the major business risks, including technological feasibility, market size, strategy, adoption and intellectual property protection. A capital efficient approach is pursued such that some level of proof of concept has to be achieved before substantial capital is committed and thereafter allocated. Capital deployment is generally tranched so as to fund programs only to their next value milestone. Members of our Board or our management team serve on the board of directors of several of the businesses so as to continue to guide each business's strategy and to oversee proper execution thereof. We use our extensive network of advisors to ensure that each business has appropriate domain expertise as it develops and executes on its strategy and the R&D Committee of our Board reviews each program at each stage of development and advises our Board on further actions. Additionally, we have a diversified model with numerous assets such that the failure of any one of our businesses or therapeutic candidates would not result in a failure of all of our businesses.
2 Risks related to clinical trial failure Clinical trials and other tests to assess the commercial viability of a therapeutic candidate are typically expensive, complex and time-consuming, and have uncertain outcomes. Conditions in which clinical trials are conducted differ, and results achieved in one set of conditions could be different from the results achieved in different conditions or with different subject populations. If our therapeutic candidates fail to achieve successful outcomes in their respective clinical trials, the therapeutics will not receive regulatory approval and in such event cannot be commercialized. In addition, if we fail to complete or experience delays in completing clinical tests for any of our therapeutic candidates, we may not be able to obtain regulatory approval or commercialize our therapeutic candidates on a timely basis, or at all.	A critical failure of a clinical trial may result in termination of the program and a significant decrease in our value. Significant delays in a clinical trial to support the appropriate regulatory approvals could impact the amount of capital required for the business to become fully sustainable on a cash flow basis.	We have a diversified model such that any one clinical trial outcome would not significantly impact our ability to operate as a going concern. We have dedicated internal resources to establish and monitor each of the clinical programs in order to try to maximise successful outcomes. We also engage outside experts to help design clinical programs to help provide valuable information and mitigate the risk of failure. Significant scientific due diligence and preclinical experiments are done prior to a clinical trial to attempt to assess the odds of the success of the trial. In the event of the outsourcing of these trials, care and attention are given to assure the quality of the vendors used to perform the work.

* When assessing potential impact of a given risk, we looked at the potential effects on our research and development activities, financial health and overall business operations.

Risk	Impact*	Management Plans/Actions
3 Risks related to regulatory approval The pharmaceutical industry is highly regulated. Regulatory authorities across the world enforce a range of laws and regulations which govern the testing, approval, manufacturing, labelling and marketing of pharmaceutical therapeutics. Stringent standards are imposed which relate to the quality, safety and efficacy of these therapeutics. These requirements are a major determinant of whether it is commercially feasible to develop a drug substance or medical device given the time, expertise and expense which must be invested. We may not obtain regulatory approval for our therapeutic candidates. Moreover, approval in one territory offers no guarantee that regulatory approval will be obtained in any other territory. Even if therapeutics are approved, subsequent regulatory difficulties may arise, or the conditions relating to the approval may be more onerous or restrictive than we expect.	The failure of one of our therapeutics to obtain any required regulatory approval, or conditions imposed in connection with any such approval, may result in a significant decrease in our value.	We manage our regulatory risk by employing highly experienced clinical managers and regulatory affairs professionals who, where appropriate, will commission advice from external advisors and consult with the regulatory authorities on the design of our preclinical and clinical programs. These experts ensure that high-quality protocols and other documentation are submitted during the regulatory process, and that well-reputed contract research organizations with global capabilities are retained to manage the trials. We also engage with experts, including on our R&D Committee, to help design clinical trials to help provide valuable information and maximize the likelihood of regulatory approval. Additionally, we have a diversified model with numerous assets such that the failure to receive regulatory approval or subsequent regulatory difficulties with respect to any one therapeutic would not adversely impact all of our therapeutics and businesses.
4 Risks related to therapeutic safety There is a risk of adverse reactions with all drugs and medical devices. If any of our therapeutics are found to cause adverse reactions or unacceptable side effects, then therapeutic development may be delayed, additional expenses may be incurred if further studies are required, and, in extreme circumstances, it may prove necessary to suspend or terminate development. This may occur even after regulatory approval has been obtained, in which case additional trials may be required, the approval may be suspended or withdrawn or additional safety warnings may have to be included on the label. Adverse events or unforeseen side effects may also potentially lead to product liability claims being raised against us as the developer of the therapeutics and sponsor of the relevant clinical trials. These risks are also applicable to our Founded Entities and any trials they conduct or therapeutic candidates they develop.	Adverse reactions or unacceptable side effects may result in a smaller market for our therapeutics, or even cause the therapeutics to fail to meet regulatory requirements necessary for sale of the therapeutic. This, as well as any claims for injury or harm resulting from our therapeutics, may result in a significant decrease in our value.	We design our therapeutics with safety as a top priority and conduct extensive preclinical and clinical trials which test for and identify any adverse side effects. Despite these steps and precautions, we cannot fully avoid the possibility of unforeseen side effects. To mitigate the risk further we have insurance in place to cover product liability claims which may arise during the conduct of clinical trials.
5 Risks related to therapeutic profitability We may not be able to sell our therapeutics profitably if reimbursement from third-party payers such as private health insurers and government health authorities is restricted or not available because, for example, it proves difficult to build a sufficiently strong economic case based on the burden of illness and population impact. Third-party payers are increasingly attempting to curtail healthcare costs by challenging the prices that are charged for pharmaceutical therapeutics and denying or limiting coverage and the level of reimbursement. Moreover, even if the therapeutics can be sold profitably, they may not be accepted by patients and the medical community. Alternatively, our competitors – many of whom have considerably greater financial and human resources – may develop safer or more effective therapeutics or be able to compete more effectively in the markets targeted by us. New companies may enter these markets and novel therapeutics and technologies may become available which are more commercially successful than those being developed by us. These risks are also applicable to our Founded Entities and could result in a decrease in their value.	The failure to obtain reimbursement from third party payers, as well as competition from other therapeutics, could significantly decrease the amount of revenue we may receive from therapeutic sales for certain therapeutics. This may result in a significant decrease in our value.	We engage reimbursement experts to conduct pricing and reimbursement studies for our therapeutics to ensure that a viable path to reimbursement, or direct user payment, is available. We also closely monitor the competitive landscape for all of our therapeutics and adapt our business plans accordingly. Not all therapeutics that we are developing will rely on reimbursement. Also, while we cannot control outcomes, we try to design studies to generate data that will help support potential reimbursement.

Risk	Impact*	Management Plans/Actions
6 Risks related to intellectual property protection We may not be able to obtain patent protection for some of our therapeutics or maintain the secrecy of their trade secrets and know-how. If we are unsuccessful in doing so, others may market competitive therapeutics at significantly lower prices. Alternatively, we may be sued for infringement of third-party patent rights. If these actions are successful, then we would have to pay substantial damages and potentially remove our therapeutics from the market. We license certain intellectual property rights from third parties. If we fail to comply with our obligations under these agreements, it may enable the other party to terminate the agreement. This could impair our freedom to operate and potentially lead to third parties preventing us from selling certain of our therapeutics.	The failure to obtain patent protection and maintain the secrecy of key information may significantly decrease the amount of revenue we may receive from therapeutic sales. Any infringement litigation against us may result in the payment of substantial damages by us and result in a significant decrease in our value.	We spend significant resources in the prosecution of our patent applications and maintenance of our patents, and we have in-house patent counsel and patent group to help with these activities. We also work with experienced external attorneys and law firms to help with the protection, maintenance and enforcement of our patents. Third party patent filings are monitored to ensure the Group continues to have freedom to operate. Confidential information (both our own and information belonging to third parties) is protected through use of confidential disclosure agreements with third parties, and suitable provisions relating to confidentiality and intellectual property exist in our employment and advisory contracts. Licenses are monitored for compliance with their terms.
7 Risks related to enterprise profitability We expect to continue to incur substantial expenditure in further research and development activities. There is no guarantee that we will become operationally profitable, and, even if we do so, we may be unable to sustain operational profitability.	The strategic aim of the business is to generate profits for our shareholders through the commercialization of technologies through therapeutic sales, strategic partnerships and sales of businesses or parts thereof. The timing and size of these potential inflows are uncertain. Should revenues from our activities not be achieved, or in the event that they are achieved but at values significantly less than the amount of capital invested, then it would be difficult to sustain our business.	We retain significant cash in order to support funding of our Founded Entities and our Wholly Owned Pipeline. We have close relationships with a wide group of investors and strategic partners to ensure we can continue to access the capital markets and additional monetization and funding for our businesses. Additionally, our Founded Entities are able to raise money directly from third party investors and strategic partners.
8 Risks related to hiring and retaining qualified employees We operate in complex and specialized business domains and require highly qualified and experienced management to implement our strategy successfully. We and many of our businesses are located in the United States which is a highly competitive employment market. Moreover, the rapid development which is envisaged by us may place unsupportable demands on our current managers and employees, particularly if we cannot attract sufficient new employees. There is also the risk that we may lose key personnel.	The failure to attract highly effective personnel or the loss of key personnel would have an adverse impact on our ability to continue to grow and may negatively affect our competitive advantage.	The Board regularly seeks external expertise to assess the competitiveness of the compensation packages of its senior management. Senior management continually monitors and assesses compensation levels to ensure we remain competitive in the employment market. We maintain an extensive recruiting network through our Board members, advisors and scientific community involvement. We also employ an executive as a full-time in-house recruiter and retain outside recruiters when necessary or advisable. Additionally, we are proactive in our retention efforts and include incentive-based compensation in the form of equity awards and annual bonuses, as well as a competitive benefits package. We have a number of employee engagement efforts to strengthen our PureTech community.

Risk	Impact*	Management Plans/Actions
9 Risks related to business, economic or public health disruptions Business, economic, financial or geopolitical disruptions or global health concerns could seriously harm our development efforts and increase our costs and expenses.	Broad-based business, economic , financial or geopolitical disruptions could adversely affect our ongoing or planned research and development activities. Global health concerns, such as a further pandemic, or geopolitical events, like the ongoing consequences of the invasion of Ukraine, could also result in social, economic, and labor instability in the countries in which we operate or the third parties with whom we engage. We consider the risk to be increasing since the prior year and note further risks associated with the banking system and global financial stability. We cannot presently predict the scope and severity of any potential business shutdowns or disruptions, but if we or any of the third parties with whom we engage, including the suppliers, clinical trial sites, regulators, providers of financial services and other third parties with whom we conduct business, were to experience shutdowns or other business disruptions, our ability to conduct our business in the manner and on the timelines presently planned could be materially and negatively impacted. It is also possible that global health concerns or geopolitical events such as these ones could disproportionately impact the hospitals and clinical sites in which we conduct any of our current and/or future clinical trials, which could have a material adverse effect on our business and our results of operation and financial impact.	We regularly review the business, economic, financial and geopolitical environment in which we operate. It is possible that we may see further impact as a result of current geopolitical tensions. We monitor the position of our suppliers, clinical trial sites, regulators, providers of financial services and other third parties with whom we conduct business. We develop and execute contingency plans to address risks where appropriate.

Viability

PureTech Health plc Viability Statement

In accordance with the UK Corporate Governance Code (Governance Code) published in July 2018, the Directors have assessed the prospects of the Company, and with respect to the December 31, 2022, financial position, we have sufficient available funding to extend operations into the first quarter of 2026. This period is deemed appropriate having assessed the financial health as of December 31, 2022. Further, we expect our Wholly Owned Programs (or "Internal segment") to significantly progress during this period and for key Controlled Founded Entities and Non-Controlled Founded Entities to reach significant development milestones over the period of the assessment.

We anticipate our funding to be used to advance our Wholly Owned Programs, to continue research and development efforts, to discover and progress new therapeutic candidates and to fund the Company's head office costs into the first quarter of 2026. We have also reserved capital to support our Founded Entities, should they require it, to reach significant development milestones over the period of the assessment in conjunction with our external partners. It should be noted that the majority of funding has been allocated to the advancement of the Wholly Owned Programs.

The Directors confirm that they have a reasonable expectation that we will continue to operate and meet our obligations as they fall due over the period of the assessment. In making this statement the Directors carried out a robust assessment of the principal risks, including those that would threaten our business model, future performance, solvency or liquidity.

This assessment was made in consideration of our strong financial position, current strategy and management of principal risks. The following facts support the Directors' view of the viability:

- We have significant influence over the spending and strategic direction of our Wholly Owned Programs and Controlled Founded Entities.
- Our business model is structured so that we are not reliant on the successful outcomes of any one therapeutic or technology within the Wholly Owned Programs, or any Controlled Founded Entity or Non-Controlled Founded Entity.

In addition, the fact that the Wholly Owned Programs, Controlled Founded Entities and Non-Controlled Founded Entities (with the exception of Gelesis and Akili) are currently in the research and development stage mean that these therapeutics, technologies and entities are not reliant on cash inflows from product sales or services during the period of this assessment. This also means that we are not highly susceptible to conditions in one or more market sectors in this time frame. Although engaging with collaboration partners is highly valuable from a validation and, in some cases, funding perspective, we are not solely reliant on cash flows from such sources over the period of assessment.

Our consolidated cash, cash equivalents and short-term investments as of December 31, 2022, were $350.1 million. Our PureTech Level cash, cash equivalents and short-term investments as of December 31, 2022, were $339.5 million (see our financial review section below with regard to information on this non-IFRS measure). Our PureTech Level cash, cash equivalents and short-term investment position is highly liquid and is forecasted to support infrastructure costs, Wholly Owned Program research and development activities and the appropriate funding of key Controlled Founded Entities and Non-Controlled Founded Entities, in order to reach significant developmental milestones over the period of the assessment.

The Board reviews the near-term liquidity and regularly considers funding plans of our Wholly Owned Programs, Controlled Founded Entities and Non-Controlled Founded Entities in our assessment of long-term cash flow projections.

While the review has considered all of the principal risks identified, the Board is focused on the pathway to regulatory approval of each therapeutic candidate being developed within our Wholly Owned Pipeline as well as those of our Founded Entities. Further, the Board has considered milestone and royalty funding based on existing collaboration and partnership arrangements, and the ability of the Wholly Owned Program, and each Controlled Founded Entity and Non-Controlled Founded Entity to enter into new collaboration agreements, all of which could be expected to generate cash in-flows but were not included in the assessment. Additionally, given that spending and investment decisions are largely discretionary, there is management control on reducing discretionary spending if unforeseen liquidity risks arise.

The Directors note that our ownership stakes in the Controlled Founded Entities and Non-Controlled Founded Entities are expected to be illiquid in nature, with the exception of our ownership stakes in Karuna, Vor and Akili, which are all publicly traded on Nasdaq as well as Gelesis, which was listed on the New York Stock Exchange as of December 31, 2022. In April 2023, Gelesis was delisted from the New York Stock Exchange, refer to Note 26 in our consolidated financial statements for further information. While we anticipate holding these ownership stakes through the achievement of significant milestones or other events, we will continue to be diligent in exploring monetization opportunities after key value accretion has occurred similar to the execution of the sale of 1,000,000 common shares of Karuna for aggregate proceeds of $118.0 million in February 2021, the sale of 750,000 common shares of Karuna for an aggregate proceeds of 100.1 million in November 2021, the sale of 602,100 common shares of Karuna for an aggregate proceeds of $115.5 million in August and September 2022, and the the sale of 535,400 common shares of Vor for an aggregate proceeds of $3.3 million in September and December 2022. We also expect that certain of these Founded Entities may not be successful and this could result in a loss of the amounts previously invested. However, even in this scenario, our liquidity is expected to remain sufficient to achieve the remaining milestone events and fund infrastructure costs.

The Directors have concluded, based on our strong financial position and readily available cash, cash equivalents and short-term investments, that we are highly likely to be able to fund our infrastructure requirements, advance multiple clinical trials within our Wholly Owned Pipeline, including trials in more advanced stages, and contribute the amounts considered necessary for the Controlled Founded Entities and Non-Controlled Founded Entities to reach significant development milestones over the period of the assessment. Therefore, there is a reasonable expectation that we have adequate resources and will continue to operate and meet our obligations over the period of the assessment.

Key Performance Indicators – 2022

The key performance indicators (KPIs) below measure our performance against our strategy. As PureTech's strategy has evolved, new KPIs have replaced older metrics that are no longer representative of our progress.

Amount of funding secured for Founded Entities

$1.28b[1,2]

$1.25b (98%) came from third parties

2021: $731.9m
2020: $247.8m
2019: $666.8m
2018: $274.0m
2017: $102.9m

Progress
Karuna, Vor, Gelesis, Akili and Sonde all raised funds in the form of financings and non dilutive grants in 2022, including $1.25 billion by third party financial and strategic investors.

Number of programs created for pipeline expansion

1[2]

2021: 2
2020: 3
2019: 1
2018: 1
2017: 1

Progress
In 2022, we expanded our Wholly Owned Pipeline with the nomination of of a new therapeutic candidate, LYT-310. LYT-310 is an oral cannabidiol (CBD) prodrug and the second therapeutic candidate developed from our Glyph™ platform to be advanced toward the clinic.

Proceeds generated from sales of Founded Entity equity

$115.4m[2]

2021: $218.1 million
2020: $350.6 million
2019: $9.3 million

Progress
A key component of our strategy is to derive value from the equity growth of our Founded Entities. In 2022, we generated cash proceeds of approximately $115.4 million from the sale of equity in one of our Founded Entities, which we intend to use to fund our operations and growth and to further expand and advance our clinical-stage Wholly Owned Pipeline, while still maintaining significant equity ownership.

Number of Wholly Owned Programs advanced through clinical phases[2]

1[2]

2021: 1
2020: 3
2019: 0

Progress
We advanced one of our Wholly Owned Programs, LYT-100, into late-stage clinical development in 2022. We initiated a Phase 2b dose-ranging trial in idiopathic pulmonary fibrosis (IPF), which is expected to serve as the first of two registration-enabling studies.

Number of clinical trial initiations

4[2,3]

2021: 11
2020: 6
2019: 6

Progress
PureTech initiated two clinical trials, PureTech's partner initiated one clinical trial for LYT-503, and Karuna initiated one clinical trial in 2022.

Number of clinical readouts

6[2,4]

2021: 6
2020: 5
2019: 5

Progress
PureTech completed five clinical trials, and Karuna completed one clinical trial in 2022.

1 Funding figure includes private equity financings, loans and promissory notes, public offerings or grant awards. Funding figure excludes future milestone considerations received in conjunction with partnerships and collaborations. Funding figure does not include proceeds from Vedanta's 2023 post-period financing.
2 Number represents figure for the relevant fiscal year only and is not cumulative.
3 PureTech initiated two clinical trials, PureTech's partner initiated one clinical trial for LYT-503, and Karuna initiated one clinical trial in 2022.
4 PureTech completed five clinical trials, and Karuna completed one clinical trial in 2022.

Financial Review

Reporting Framework

You should read the following discussion and analysis together with our Consolidated Financial Statements, including the notes thereto, set forth elsewhere in this report. Some of the information contained in this discussion and analysis or set forth elsewhere in this report, including information with respect to our plans and strategy for our business and financing our business, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including the risks set forth on pages 44 to 47 and in the Additional Information section from pages 175 to 212, our actual results could differ materially from the results described in or implied by these forward-looking statements.

Our audited Consolidated Financial Statements as of December 31, 2022 and 2021, and for the years ended December 31, 2022, 2021 and 2020, have been prepared in accordance with UK-adopted International Financial Reporting Standards (IFRS). The Consolidated Financial Statements also comply fully with IFRSs as issued by the International Accounting Standards Board (IASB).

The following discussion contains references to the Consolidated Financial Statements of PureTech Health plc, or the Company, and its consolidated subsidiaries, together the Group. These financial statements consolidate the Company's subsidiaries and include the Company's interest in associates and investments held at fair value. Subsidiaries are those entities over which the Company maintains control. Associates are those entities in which the Company does not have control for financial accounting purposes but maintains significant influence over financial and operating policies. Where the Company has neither control nor significant influence for financial accounting purposes, or when the Company does not hold common shares (or shares similar to common shares) we recognize our holding in such entity as an investment at fair value. For purposes of our Consolidated Financial Statements, each of our Founded Entities are considered to be either a "subsidiary", an "associate" or an "investment held at fair value" depending on whether PureTech Health plc controls or maintains significant influence over the financial and operating policies of the respective entity at the respective period end date. For additional information regarding the accounting treatment of these entities, see Note 1 to our Consolidated Financial Statements included in this report. For additional information regarding our operating structure, see "Basis of Presentation and Consolidation" below. Fair value of Investments held at fair value does not take into consideration contribution from milestones that occurred after December 31, 2022, the value of our interests in our consolidated Founded Entities (Vedanta, Follica, and Entrega), our Wholly Owned Programs, or our cash.

Business Background and Results Overview

The business background is discussed above from pages 1 to 14, which describes in detail the business development of our Wholly Owned Programs and Founded Entities.

Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of one or more of our wholly-owned or Controlled Founded Entities' therapeutic candidates, which may or may not occur. Our Founded Entities, Gelesis, Inc. ("Gelesis"), and Akili Interactive Labs, Inc. ("Akili"), which we have not controlled since 2019 and 2018, respectively, have therapeutics cleared for sale, but our Wholly Owned Programs and our Controlled Founded Entities have not yet generated any meaningful revenue from product sales, to date. However, we do generate significant cash from the sale of shares of our public Founded Entities. See also Recent Developments section below with regard to the Royalty Pharma agreement signed after balance sheet date.

We deconsolidated a number of our Founded Entities, specifically Sonde Health Inc. ("Sonde") in May 2022, Karuna Therapeutics, Inc. ("Karuna"), Vor Biopharma Inc. ("Vor"), and Gelesis in 2019, and Akili in 2018. We expect this trend to continue into the foreseeable future as our Controlled Founded Entities raise additional funding that reduces our ownership interest. Any deconsolidation affects our financials in the following manner:

- our ownership interest does not provide us with a controlling financial interest;
- we no longer control the Founded Entity's assets and liabilities and as a result we derecognize the assets, liabilities and non-controlling interests related to the Founded Entity from our Consolidated Statements of Financial Position;
- we record our non-controlling financial interest in the Founded Entity at fair value; and
- the resulting amount of any gain or loss is recognized in our Consolidated Statements of Comprehensive Income/(Loss).

We anticipate our expenses to continue to increase proportionally in connection with our ongoing development activities related mostly to the advancement into late-stage studies of the clinical programs within our Wholly Owned Pipeline and Controlled Founded Entities. We also expect that our expenses and capital requirements will increase substantially in the near to mid-term as we:

- continue our research and development efforts;
- seek regulatory approvals for any therapeutic candidates that successfully complete clinical trials; and
- add clinical, scientific, operational financial and management information systems and personnel, including personnel to support our therapeutic development and potential future commercialization claims.

In addition, our internal research and development spend will increase in the foreseeable future as we may initiate additional clinical studies for LYT-100, LYT-200 and LYT-300, and progress additional therapeutic candidates into the clinic, such as LYT-310, as well as advance our technology platforms.

In addition, with respect to our Founded Entities' programs, we anticipate that we will continue to fund a small portion of development costs by strategically participating in such companies' financings when we believe participation in such financings is in the best interests of our shareholders. The form of any such participation may include investment in public or private financings, collaboration, partnership arrangements, and/or licensing arrangements, among others. Our management and strategic decision makers consider the future funding needs of our Founded Entities and evaluate the needs and opportunities for returns with respect to each of these Founded Entities routinely and on a case-by-case basis.

As a result, we may need substantial additional funding in the future, following the period described below in the Funding Requirement section, to support our continuing operations and pursue our growth strategy until such time as we can generate sufficient revenue from product sales to support our operations, if ever. Until such time we expect to finance our operations through a combination of monetization of our interests in our Founded Entities, collaborations with third parties, or other sources. We may be unable to raise additional funds or enter into such other agreements or arrangements when needed on favorable terms, or at all. If we are unable to raise capital or enter into such agreements, as and when needed, we may have to delay, scale back or discontinue the development and commercialization of one or more of our wholly-owned therapeutic candidates.

Measuring Performance

The Financial Review discusses our operating and financial performance, our cash flows and liquidity as well as our financial position and our resources. The results for each year are compared primarily with the results of the preceding year.

Reported Performance

Reported performance considers all factors that have affected the results of our business, as reflected in our Consolidated Financial Statements.

Core Performance

Core performance measures are alternative performance measures (APM) which are adjusted and non-IFRS measures. These measures cannot be derived directly from our Consolidated Financial Statements. We believe that these non-IFRS performance measures, when provided in combination with reported performance, will provide investors, analysts and other stakeholders with helpful complementary information to better understand our financial performance and our financial position from period to period. The measures are also used by management for planning and reporting purposes. The measures are not substitutable for IFRS financial information and should not be considered superior to financial information presented in accordance with IFRS.

Cash flow and liquidity

PureTech Level Cash, cash equivalents and short-term investments	**Measure type:** Core performance **Definition:** Cash and cash equivalents, and Short-term investments held at PureTech Health plc and wholly-owned subsidiaries (PureTech LYT, PureTech LYT-100, Alivio Therapeutics, Inc., PureTech Management, Inc., PureTech Health LLC, PureTech Securities Corp, PureTech Securities II Corp) **Why we use it:** PureTech Level Cash, cash equivalents and short-term investments is a measure that provides valuable additional information with respect to cash, cash equivalents and short-term investments available to fund the Wholly Owned Programs and make certain investments in Founded Entities

Recent Developments (subsequent to December 31, 2022)

The Company has evaluated subsequent events after December 31, 2022 up to the date of issuance of the Consolidated Financial Statements, and has not identified any recordable or disclosable events, except for the following:

On March 1, 2023 Vedanta issued convertible debt to a syndicate of investors. The initial close of the debt was for proceeds of approximately $88.5 million. The note carries an interest rate of 9 percent per annum. The debt has various conversion triggers and the conversion price is established at the lower of 80% of the equity price of the last financing round, or a certain pre-money valuation cap established in the agreement. As part of the issuance of the debt, the convertible debt holders were granted representation in Vedanta's Board of Directors and PureTech lost control over Vedanta. On April 24, 2023, Vedanta closed the second tranche of the convertible debt for additional proceeds of $18.0 million, of which $5.0 million were invested by the Company.

On March 22, 2023, the Company entered into an agreement with Royalty Pharma according to which Royalty Pharma acquired an interset in our royalty from Karuna's KarXT, with $100.0 million in cash up-front, and up to $400.0 million in additional cash consideration, contingent on the achievement of certain regulatory and commercial milestones.

Gelesis

On February 21, 2023, the Company entered into a Note and Warrant Purchase agreement with Gelesis for $5.0 million cash consideration. As part of the agreement, the Company received a short term convertible senior secured note of $5.0 million and warrants to purchase additional shares of Gelesis' common stock. The note carries an interest rate of 12 percent per annum and holds an initial maturity date of July 31, 2023 unless the note is converted earlier or redeemed by the issuer.

Subsequent to balance sheet date, on April 10, 2023, the NYSE commenced proceedings to delist the common stock of Gelesis from the NYSE due to Gelesis ceasing to meet certain conditions to trade on such stock exchange. Trading in Gelesis's common stock was suspended immediately, and it was subsequently delisted from the NYSE. The common stock of Gelesis is currently available for trading in the over-the-counter ("OTC") market under the symbol GLSH.

In addition, in April 2023 PureTech submitted a non-binding proposal to acquire all of the outstanding equity of Gelesis. Negotiations related to the proposal and any potential deal remain ongoing and are subject to, among other things, approval of any definitive transaction by independent committees of the boards of both Gelesis and PureTech.

Financial Highlights

The following is the reconciliation of the amounts appearing in our Statement of Financial Position to the Alternative Performance Measure described above:

(in thousands)	As of: December 31, 2022	December 31, 2021
Cash and Cash Equivalents	149,866	465,708
Short-term investments	200,229	—
Consolidated Cash, cash equivalents and short-term investments	350,095	465,708
Less: Cash and Cash Equivalents held at non-wholly owned subsidiaries	(10,622)	(46,856)
PureTech Level Cash, cash equivalents and short-term investments	$339,473	$418,851

Basis of Presentation and Consolidation

Our Consolidated Financial Information consolidates the financial information of PureTech Health plc, as well as its subsidiaries, and includes our interest in associates and investments held at fair value, and is reported in four operating segments as described below.

Basis for Segmentation

Our Directors are our strategic decision-makers. Our operating segments are based on the financial information provided to our Directors periodically for the purposes of allocating resources and assessing performance. We have determined that each consolidated Founded Entity is representative of a single operating segment as our Directors monitor the financial results at this level. When identifying the reportable segments, we have determined that it is appropriate to aggregate multiple operating segments into a single reportable segment given the high level of operational and financial similarities across the entities. We have identified multiple reportable segments, as presented below. Substantially all of our revenue and profit generating activities are generated within the United States and, accordingly, no geographical disclosures are provided.

There was no change to reportable segments in 2022, except for the transfer of Sonde Health, Inc. to the Non-Controlled Founded Entities segment due to the deconsolidation of Sonde Health, Inc on May 25, 2022.

The Non-Controlled Founded Entities segment is comprised of the entities in respect of which PureTech Health (i) no longer holds majority voting control as a shareholder or (ii) no longer has the right to elect a majority of the members of the subsidiaries' Board of Directors. Upon deconsolidation of an entity, the segment disclosure is restated to reflect the change on a retrospective basis, as this constitutes a change in the composition of reportable segments.

As of December 31, 2022, the Non-Controlled Founded Entities segment includes Sonde Health, Inc. which was deconsolidated on May 25, 2022. Segment results incorporate the operational results of Sonde Health, Inc. to the date of deconsolidation. Following the date of deconsolidation, the Company accounts for its investment in Sonde Health, Inc. at the parent level, and therefore the results associated with investment activity following the date of deconsolidation is included in the Parent Company and Other section.

The Company has revised in this report the prior year segment financial information to conform to the presentation as of and for the year ending December 31, 2022 to include Sonde in the Non-Controlled Founded Entities segment. This change in segments reflects how the Company's Board of Directors reviews the Group's results, allocates resources and assesses performance of the Group at this time.

Following is the description of our reportable segments:

Internal

The Internal segment is advancing Wholly Owned Programs, which is focused on improving the lives of patients with devastating diseases. The Internal segment is comprised of the technologies that are wholly owned and will be advanced through either PureTech Health funding or non-dilutive sources of financing in the near-term. The operational management of the Internal segment is conducted by the PureTech Health team, which is responsible for the strategy, business development, and research and development. As of December 31, 2022, this segment included PureTech LYT, Inc. (formerly Ariya Therapeutics Inc.), PureTech LYT-100, Inc and Alivio Therapeutics, Inc.

Controlled Founded Entities

The Controlled Founded Entities segment is comprised of our subsidiaries that are currently consolidated operational subsidiaries that either have, or have plans to hire, independent management teams and have previously raised, or are currently in the process of raising, third-party dilutive capital. These subsidiaries have active research and development programs and either have entered into or plan to seek a strategic partnership with an equity or debt investment partner, who will provide additional industry knowledge and access to networks, as well as additional funding to continue the pursued growth of the company. As of December 31, 2022, this segment included Entrega, Inc., Follica, Inc., and Vedanta Biosciences, Inc.

Non-Controlled Founded Entities

The Non-Controlled Founded Entities segment is comprised of the entities in respect of which PureTech Health no longer has control over the entity. Upon deconsolidation of an entity the segment disclosure is restated to reflect the change on a retrospective basis, as this constitutes a change in the composition of its reportable segments. The Non-Controlled Founded Entities segment included Sonde Health, Inc.

The Non-Controlled Founded Entities segment incorporates the operational results of the aforementioned entities to the date of deconsolidation. Following the date of deconsolidation, we account for our investment in each entity at the parent level, and therefore the results associated with investment activity (including the share in the net loss of associates) following the date of deconsolidation is included in the Parent Company and Other segment (the "Parent Company and Other segment").

Parent Company and Other

Parent Company and Other includes activities that are not directly attributable to the operating segments, such as the activities of the Parent, corporate support functions and certain research and development support functions that are not directly attributable to a strategic business segment as well as the elimination of intercompany transactions. Parent Company and Other also captures the accounting for our holdings in entities for which control has been lost, which is inclusive of the following items: gain on deconsolidation, gain or loss on investments held at fair value, realized loss on sale of investments, the share of net income/ (loss) of associates accounted for using the equity method, gain on dilution of ownership interest in associate, impairment of investment in associate. As of December 31, 2022, this segment included PureTech Health plc, PureTech Health LLC, PureTech Management, Inc., PureTech Securities Corp., and PureTech Securities II Corp. as well as certain other dormant, inactive and shell entities.

The table below summarizes the entities that comprised each of our segments as of December 31, 2022:

Internal Segment	
PureTech LYT	100.0%
PureTech LYT-100, Inc.	100.0%
Alivio Therapeutics, Inc.	100.0%
Controlled Founded Entities	
Entrega, Inc.	77.3%
Follica, Incorporated	85.4%
Vedanta Biosciences, Inc.	47.0%
Non-Controlled Founded Entities	
Sonde Health, Inc.	40.2%
Parent Segment[1]	
Puretech Health plc	100.0%
PureTech Health LLC	100.0%
PureTech Securities Corporation	100.0%
PureTech Securities II Corporation	100.0%
PureTech Management, Inc.	100.0%

1 Includes dormant, inactive and shell entities that are not listed here.

Components of Our Results of Operations

Revenue

To date, we have not generated any meaningful revenue from product sales and we do not expect to generate any meaningful revenue from product sales for the near term future. We derive our revenue from the following:

Contract revenue

We generate revenue primarily from licenses, services and collaboration agreements, including amounts that are recognized related to upfront payments, milestone payments, royalties and amounts due to us for research and development services. In the future, revenue may include additional milestone payments and royalties on any net product sales under our licensing agreements. We expect that any revenue we generate will fluctuate from period to period as a result of the timing and amount of license, research and development services and milestone and other payments.

Grant Revenue

Grant revenue is derived from grant awards we receive from governmental agencies and non-profit organizations for certain qualified research and development expenses. We recognize grants from governmental agencies as grant income in the Consolidated Statement of Comprehensive Income/(Loss), gross of the expenditures that were related to obtaining the grant, when there is reasonable assurance that we will comply with the conditions within the grant agreement and there is reasonable assurance that payments under the grants will be received. We evaluate the conditions of each grant as of each reporting date to ensure that we have reasonable assurance of meeting the conditions of each grant arrangement and it is expected that the grant payment will be received as a result of meeting the necessary conditions.

For proceeds from sale of our investments held at fair value, please see our Consolidated Cash flow Statements, Net cash provided by investing activities.

Operating Expenses

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research activities, including our discovery efforts, and the development of our wholly-owned and our Controlled Founded Entities' therapeutic candidates, which include:

- employee-related expenses, including salaries, related benefits and equity-based compensation;
- expenses incurred in connection with the preclinical and clinical development of our wholly-owned and our Founded Entities' therapeutic candidates, including our agreements with contract research organizations, or CROs;
- expenses incurred under agreements with consultants who supplement our internal capabilities;
- the cost of lab supplies and acquiring, developing and manufacturing preclinical study materials and clinical trial materials;
- costs related to compliance with regulatory requirements; and
- facilities, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance and other operating costs.

We expense all research costs in the periods in which they are incurred and development costs are capitalized only if certain criteria are met. For the periods presented, we have not capitalized any development costs since we have not met the necessary criteria required for capitalization.

Research and development activities are central to our business model. Therapeutic candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect that our research and development expenses will continue to increase for the foreseeable future in connection with our planned preclinical and clinical development activities in the near term and in the future. The successful development of our wholly-owned and our Founded Entities' therapeutic candidates is highly uncertain. As such, at this time, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete the remainder of the development of these therapeutic candidates. We are also unable to predict when, if ever, material net cash inflows will commence from our wholly-owned or our Founded Entities' therapeutic candidates. This is due to the numerous risks and uncertainties associated with developing therapeutics, including the uncertainty of:

- progressing research and development of our Wholly Owned Pipeline, including LYT-100, LYT-200, LYT-300, LYT-310 and continuing to progress our various technology platforms and other potential therapeutic candidates based on previous human efficacy and clinically validated biology within our Wholly Owned Programs;
- establishing an appropriate safety profile with investigational new drug application;
- the success of our Founded Entities and their need for additional capital;
- identifying new therapeutic candidates to add to our Wholly Owned Pipeline;
- successful enrollment in, and the initiation and completion of, clinical trials;
- the timing, receipt and terms of any marketing approvals from applicable regulatory authorities;
- commercializing our wholly-owned and our Founded Entities' therapeutic candidates, if approved, whether alone or in collaboration with others;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- addressing any competing technological and market developments, as well as any changes in governmental regulations;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter and performing our obligations under such arrangements;
- maintaining, protecting and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how, as well as obtaining and maintaining regulatory exclusivity for our wholly-owned and our Founded Entities' therapeutic candidates;
- continued acceptable safety profile of our therapeutics, if any, following approval; and
- attracting, hiring and retaining qualified personnel.

A change in the outcome of any of these variables with respect to the development of a therapeutic candidate could mean a significant change in the costs and timing associated with the development of that therapeutic candidate. For example, the FDA, the EMA, or

another comparable foreign regulatory authority may require us to conduct clinical trials beyond those that we anticipate will be required for the completion of clinical development of a therapeutic candidate, or we may experience significant trial delays due to patient enrollment or other reasons, in which case we would be required to expend significant additional financial resources and time on the completion of clinical development. In addition, we may obtain unexpected results from our clinical trials and we may elect to discontinue, delay or modify clinical trials of some therapeutic candidates or focus on others. Identifying potential therapeutic candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our wholly-owned and our Founded Entities' therapeutic candidates, if approved, may not achieve commercial success.

General and Administrative Expenses
General and administrative expenses consist primarily of salaries and other related costs, including stock-based compensation, for personnel in our executive, finance, corporate and business development and administrative functions. General and administrative expenses also include professional fees for legal, patent, accounting, auditing, tax and consulting services, travel expenses and facility-related expenses, which include direct depreciation costs and allocated expenses for rent and maintenance of facilities and other operating costs.

We expect that our general and administrative expenses will increase in the future as we increase our general and administrative headcount to support our continued research and development and potential commercialization of our portfolio of therapeutic candidates.

Total Other Income/(Loss)

Gain on Deconsolidation of Subsidiary
Upon losing control over a subsidiary, the assets and liabilities are derecognized along with any related non-controlling interest ("NCI"). Any interest retained in the former subsidiary is measured at fair value when control is lost. Any resulting gain or loss is recognized as profit or loss in the Consolidated Statements of Comprehensive Income/(Loss).

Gain/(Loss) on Investments Held at Fair Value
Investments held at fair value include both unlisted and listed securities held by us, which include investments in Akili, Gelesis, Karuna, Vor and Sonde and certain insignificant investments. We account for investments in preferred shares of our associates in accordance with IFRS 9 as Investments Held at Fair Value when the preferred shares do not provide access to returns underlying ownership interests.

Our ownership in Akili was in preferred shares until August 2022 at which time the preferred shares were exchanged into common shares as part of Akili SPAC merger (See Note 5 in the Consolidated financial statements). Our ownership in Vor was in preferred shares until February 2021 at which time the preferred shares were converted into common shares as part of Vor Initial Public Offering. Preferred shares formed part of our ownership in Gelesis and such preferred shares were accounted for as Investments Held at Fair value while the common stock investment is accounted for under the equity method. When the investment in common stock was reduced to zero by equity method losses, subsequent equity method losses were applied to the preferred share investment, which was considered to be a Long-term Interest. In January 2022, as part of the Gelesis SPAC merger with Capstar, the Gelesis preferred shares were exchanged for common shares in the new Gelesis entity and were treated as an additional investment in Gelesis equity interest accounted for under the equity method (for further details see Note 6 in the consolidated financial statements). Our common stock investment in Karuna is accounted for under IFRS 9 as an investment held at fair value. Our A-2 and B preferred share investments in Sonde are accounted for as investments held at fair value

Realized loss on sale of Investments
Realized loss on sale of investments held at fair value relates to realized differences in the per share disposal price of a listed security as compared to the per share exchange quoted price at the time of disposal. The difference in 2020 and 2021 is attributable to a block sale discount, due to a variety of market factors, primarily the number of shares being transacted was significantly larger than the daily trading volume of the security. The difference in 2022 is attributed to the settlement of call options written by the Company on Karuna stock.

Other Income (Expense)
Other income (expense) consists primarily of gains and losses on financial instruments and in 2022 relates primarily to the backstop agreement with Gelesis (see Note 6 in the consolidated financial statements). In prior years includes also sub-lease income.

Finance Costs/Income
Finance costs consist of loan interest expense and the changes in the fair value of certain liabilities associated with financing transactions, mainly preferred share liabilities in respect of preferred shares issued by our non wholly owned subsidiaries to third parties. Finance income consists of interest income on funds invested in money market funds and U.S. treasuries.

Share of Net Gain (Loss) of Associates Accounted for Using the Equity Method, Gain on Dilution of Ownership Interest and Impairment of Investment in Associate
Associates are accounted for using the equity method (equity accounted investees) and are initially recognized at cost, or if recognized upon deconsolidation they are initially recorded at fair value at the date of deconsolidation. The consolidated financial statements include our share of the total comprehensive income and equity movements of equity accounted investees, from the date that significant influence commences until the date that significant influence ceases. When the share of losses exceeds the net investment in the investee, including the investment in preferred shares that are considered Long-term Interests, the carrying amount is reduced to nil and recognition of further losses is discontinued except to the extent that we have incurred legal or constructive obligations or made payments on behalf of an investee.

We compare the recoverable amount of the investment to its carrying amount on a go-forward basis and determine the need for impairment. We recorded an impairment in the common stock investment in Gelesis in the year ended December 31, 2022.

When our share in the equity of the investee changes as a result of equity transactions in the investee (related to financing events of the investee), we calculate a gain or loss on such change in ownership and related share in the investee's equity. During the year ended December 31, 2022 we recorded a gain on dilution of our ownership interest in Gelesis.

Income Tax

The amount of taxes currently payable or refundable is accrued, and deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amount of existing assets and liabilities and their respective tax bases. Deferred tax assets are also recognized for realizable loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using substantively enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled. Net deferred tax assets are not recorded if we do not assess their realization as probable. The effect on deferred tax assets and liabilities of a change in income tax rates is recognized in our financial statements in the period that includes the substantive enactment date or the change in tax status.

Results of Operations

The following table, which has been derived from our audited financial statements for the years ended December 31, 2022, 2021 and 2020, included herein, summarizes our results of operations for the periods indicated, together with the changes in those items in dollars:

	Year ended December 31,				
(in thousands)	**2022**	2021	2020	Change (2021 to 2022)	Change (2020 to 2021)
Contract revenue	**$2,090**	$9,979	$8,341	$(7,889)	$1,638
Grant revenue	**13,528**	7,409	3,427	6,119	3,982
Total revenue	**15,618**	17,388	11,768	(1,770)	5,621
Operating expenses:					
General and administrative expenses	**(60,991)**	(57,199)	(49,440)	(3,792)	(7,760)
Research and development expenses	**(152,433)**	(110,471)	(81,859)	(41,962)	(28,612)
Operating income/(loss)	**(197,807)**	(150,282)	(119,531)	(47,524)	(30,751)
Other income/(expense):					
Gain on deconsolidation of subsidiary	**27,251**	—	—	27,251	—
Gain/(loss) on investment held at fair value	**(32,060)**	179,316	232,674	(211,377)	(53,358)
Realized loss on sale of investment	**(29,303)**	(20,925)	(54,976)	(8,378)	34,051
Other income/(expenses)	**8,131**	1,592	1,035	6,539	557
Other income/(loss)	**(25,981)**	159,983	178,732	(185,965)	(18,749)
Net finance income/(costs)	**138,924**	5,050	(6,115)	133,875	11,164
Share of net income/(loss) of associates accounted for using the equity method	**(27,749)**	(73,703)	(34,117)	45,954	(39,587)
Gain on dilution of ownership interest in associate	**28,220**	—	—	28,220	—
Impairment of investment in associate	**(8,390)**	—	—	(8,390)	—
Income/(loss) before income taxes	**(92,783)**	(58,953)	18,969	(33,830)	(77,922)
Taxation	**55,719**	(3,756)	(14,401)	59,475	10,645
Net income/(loss) including non-controlling interest	**(37,065)**	(62,709)	4,568	25,644	(67,277)
Net income/(loss) for the year attributable to the Owners of the Company	**$(50,354)**	$(60,558)	$5,985	$10,204	$(66,543)

Comparison of the Years Ended December 31, 2022 and 2021

Total Revenue

	Year ended December 31,		
(in thousands)	**2022**	2021	Change
Contract Revenue:			
Internal Segment	**$—**	$8,129	$(8,129)
Controlled Founded Entities	**1,500**	1,500	—
Non-Controlled Founded Entities	**81**	115	(34)
Parent Company and other	**509**	235	274
Total Contract Revenue	**$2,090**	$9,979	$(7,889)
Grant Revenue:			
Internal Segment	**$2,826**	$1,253	$1,573
Controlled Founded Entities	**10,702**	6,156	4,546
Total Grant Revenue	**$13,528**	$7,409	$6,119
Total Revenue	**$15,618**	$17,388	$(1,770)

Our total revenue was $15.6 million for the year ended December 31, 2022, a decrease of $1.8 million, or 10.2 percent compared to the year ended December 31, 2021. The decrease was primarily attributable to a decrease of $8.1 million in Contract Revenue in our Internal Segment due to the conclusion of certain collaboration activities, partially offset by an increase in Grant Revenue of $4.5 million in the Controlled Founded Entities segment, driven by an increase in grants received in our controlled founded entity, as well as an increase of $1.6 million in Grant Revenue within the Internal segment as a result of increased grant-related activities in such segment.

Research and Development Expenses

(in thousands)	Year ended December 31, 2022	2021	Change
Research and Development Expenses:			
Internal Segment	**$(116,054)**	$(65,444)	$50,610
Controlled Founded Entities	**(34,668)**	(40,667)	(5,999)
Non-Controlled Founded Entities	**(826)**	(3,116)	(2,290)
Parent Company and other	**(885)**	(1,244)	(359)
Total Research and Development Expenses:	**$(152,433)**	$(110,471)	$41,962

Our research and development expenses were $152.4 million for the year ended December 31, 2022, an increase of $42.0 million, or 38.0 percent compared to the year ended December 31, 2021. The change was primarily attributable to an increase of $50.6 million in research and development expenses incurred by the Internal segment due to the advancement of programs in clinical testing partially offset by decreases in the research and development expenses of $6.0 million and $2.3 million by the Controlled Founded Entities and the Non-Controlled Founded Entities, respectively. We progressed our ongoing clinical trials of LYT-100, LYT-200 and of LYT 300 in multiple indications, as well as advanced our research activities. The increase in the Internal Segment was primarily driven by an increase in clinical trial and clinical research organization expenditures of $32.7 million, an increase in research and development related employee compensation expense of $10.5 million (including an increase of $2.0 million in non cash stock based compensation expense), an increase in analytical and contract manufacturing testing costs of $4.8 million, and an increase in consulting and professional fees of $3.3 million. The decrease in the Controlled Founded Entities was driven by a $3.5 million reimbursement of expenses related to a settlement reached with a prior collaboration partner as well as additional decreases of approximately $3 million in clinical study costs. The decrease in Non-Controlled Founded Entities was due to the fact that in 2022 the results of operations of Sonde are included only through the date of deconsolidation while in 2021 such results are included for a full year.

General and Administrative Expenses

(in thousands)	Year ended December 31, 2022	2021	Change
General and Administrative Expenses:			
Internal Segment	**$(8,301)**	$(8,673)	$(373)
Controlled Founded Entities	**(16,462)**	(17,504)	(1,042)
Non-Controlled Founded Entities	**(1,296)**	(3,225)	(1,929)
Parent Company and other	**(34,933)**	(27,797)	7,136
Total General and Administrative Expenses	**$(60,991)**	$(57,199)	$3,792

Our general and administrative expenses were $61.0 million for the year ended December 31, 2022, an increase of $3.8 million, or 6.6 percent compared to the year ended December 31, 2021. The change was attributable to an increase of $7.1 million in the Parent Company and other segment, offset by a decreases of $1.9 million in the Non-Controlled Founded Entities segment, $1.0 million in the Controlled Founded Entities, and $0.4 million in the Internal Segment. The increase in the Parent Company and other segment was driven by a $2.5 million increase in employee compensation expense due to increase in headcount and adjustments to compensation due to inflation, as well as a $4.5 million increase in other taxes, while the decrease in Non-Controlled Founded Entities was driven by the fact that in 2022 the results of operations of Sonde are included only through the date of deconsolidation while in 2021 such results are included for a full year. The decrease in Controlled Founded Entities results from a decrease in employee compensation expenses.

Total Other Income (Loss)

Total Other loss was $26.0 million for the year ended December 31, 2022 compared to Other income of $160.0 million for the year ended December 31, 2021, reflecting a change of $186.0 million. The increase in losses was primarily attributable to a loss from investments held at fair value of $32.1 million for the year ended December 31, 2022, compared to a gain of $179.3 million for the year ended December 31, 2021 and to a much lesser extent an increase in realized loss from the sale of an investment of $8.4 million. The loss from investments held at fair value for the year ended December 31, 2022 was primarily attributed to our holdings in Akili, Vor and Gelesis earn-out shares, partially offset by a gain on Karuna holdings (see Note 5 in our consolidated financial statements for further details). The aforementioned increase in losses was partially offset by a one-time gain of $27.3 million as a result of the deconsolidation of Sonde and a gain of $7.6 million in respect of the Gelesis back-stop agreement (See Note 5 to the Consolidated Financial Statements for more details) during the year ended December 31, 2022.

Net Finance Income (Costs)

Net finance Income was $138.9 million for the year ended December 31, 2022, compared to net finance income of $5.0 million for the year ended December 31, 2021, reflecting a change of $133.9 million in Net finance Income (costs). The change was primarily attributable to the fact that during the year ended December 31, 2022 net change in fair value of subsidiaries' preferred shares, warrant and convertible note liabilities was income of $137.1 million, primarily related to change in fair value of Vedanta preferred share liabilities, while for the year ended December 31, 2021 such change was a gain of $9.6 million, leading to increased income of $127.5 million. To a much lesser extent, the increase in finance income was also derived from a $0.8 million decrease in contractual interest expense on subsidiary convertible notes, and a $5.6 million increase in interest income from financial assets during the year ended December 31, 2022, as compared to the year ended December 31, 2021.

Share of Net Income/(loss) of Associates accounted for using the equity method, Gain on Dilution of Interest in Associate and Impairment of Investment in Associate

For the year ended December 31, 2022, the share in net loss of associates reported under the equity method was $27.7 million as compared to the share in net loss of $73.7 million for the year ended December 31, 2021. The change was primarily attributable to a decrease in our equity interest in Gelesis following the SPAC exchange (see Note 6 to our Consolidated Financial Statements), as well as a decrease in Gelesis losses reported under IFRS for the year ended December 31, 2022, as compared to the losses reported for the year ended December 31, 2021. In addition, during the year ended December 31, 2022, PureTech recorded a gain on dilution of its equity ownership interest in Gelesis of $28.2 million as a result of the completion of the merger with CapStar on January 13, 2022 - See Note 6 to the Consolidated Financial Statements for more details. Also, during the year ended December 31, 2022, the Company recorded an impairment in its investment in Gelesis of $8.4 million.

Taxation

Income tax expense was a benefit of $55.7 million for the year ended December 31, 2022, as compared to an expense of $3.8 million for the year ended December 31, 2021. The increase in the income tax benefit was primarily attributable to the increase in gains that are non taxable for the year ended December 31, 2022 as compared to the year ended December 31, 2021 and to a lesser extent to a 2022 change in state apportionment. For a full reconciliation from the statutory tax rate to the effective tax rate, see Note 25 to our Consolidated Financial Statements.

Comparison of the Years Ended December 31, 2021 and 2020

Total Revenue

	Year Ended December 31,		
(in thousands)	2021	2020	Change
Contract Revenue:			
Internal Segment	$8,129	$5,297	$2,833
Controlled Founded Entities	1,500	896	604
Non-Controlled Founded Entities	115	93	22
Parent Company and other	235	2,054	(1,819)
Total Contract Revenue	$9,979	$8,341	$1,638
Grant Revenue:			
Internal Segment	$1,253	$1,563	$(310)
Controlled Founded Entities	6,156	1,864	4,292
Total Grant Revenue	$7,409	$3,427	$3,982
Total Revenue	$17,388	$11,768	$5,621

Our total revenue was $17.4 million for the year ended December 31, 2021, an increase of $5.6 million, or 47.8 percent compared to the year ended December 31, 2020. The increase was primarily attributable to an increase of $2.8 million in contract revenue in the Internal segment, which was primarily driven by a $6.5 million increase in revenue due to payment from Imbrium Therapeutics, Inc. following the exercise of the option to acquire an exclusive license for the Initial Product Candidate. The increase was partially offset by a decrease in contract revenue of $3.7 million recognized under IFRS 15 due to the completion of development activities related to revenues associated with multiple collaborations in the year ended December 31, 2021. The increase was also driven by an increase of $4.3 million in grant revenue in the Controlled Founded Entities segment for the year ended December 31, 2021, which was driven primarily by Vedanta's grant revenue earned pursuant to its CARB-X and BARDA agreements. The aforementioned increases were partially offset by a non-recurrent milestone payment of $2.0 million received from Karuna (and included in Parent Company and Other) in the year ended December 31, 2020.

Research and Development Expenses

	Year Ended December 31,		
(in thousands)	2021	2020	Change
Research and Development Expenses:			
Internal Segment	$(65,444)	$(45,346)	$20,098
Controlled Founded Entities	(40,667)	(33,152)	7,515
Non-Controlled Founded Entities	(3,116)	(3,128)	(12)
Parent Company and other	(1,244)	(234)	1,010
Total Research and Development Expenses:	$(110,471)	$(81,859)	$28,612

Our research and development expenses were $110.5 million for the year ended December 31, 2021, an increase of $28.6 million, or 35.0 percent compared to the year ended December 31, 2020. The change was primarily attributable to an increase of $20.1 million in research and development expenses incurred by the Internal segment due to the advancement of programs in clinical testing. This was primarily driven by an increase in clinical trial and clinical research organization expenditures of $14.0 million, an increase in research and development related consulting and professional fees of $2.5 million and an increase in research and development related salaries and stock compensation of $2.6 million. We progressed our ongoing clinical trials of LYT-100 and LYT- 200 in multiple indications and initiated a clinical trial with respect to LYT 300, as well as advanced pre-clinical studies and research related to multiple candidates and research platforms. The increase was further attributable to an increase of $7.5 million in research and development expenses incurred by the Controlled Founded Entities segment, primarily attributable to Vedanta as they progressed their therapeutic candidates VE202, VE303, VE416 and VE800 towards meaningful milestones.

General and Administrative Expenses

	Year Ended December 31,		
(in thousands)	2021	2020	Change
General and Administrative Expenses:			
Internal Segment	$(8,673)	$(3,482)	$5,191
Controlled Founded Entities	(17,504)	(10,752)	6,752
Non-Controlled Founded Entities	(3,225)	(2,939)	286
Parent Company and other	(27,797)	(32,267)	(4,470)
Total General and Administrative Expenses	$(57,199)	$(49,440)	$7,760

Our general and administrative expenses were $57.2 million for the year ended December 31, 2021, an increase of $7.8 million, or 15.7 percent compared to the year ended December 31, 2020. The increase was primarily attributable to an increase of $7.0 million in the Controlled Founded Entities segment, which was primarily driven by non-cash increases of $2.9 million in stock based compensation expense, $1.4 million increase in payroll-related costs due to increased personnel, an increase in professional fees of $1.1 million, and an increase in legal fees of $0.9 million. The increase was further attributable to an increase of $5.2 million in the Internal segment, which was primarily driven by an increase in the management fee charged by the Parent company of $6.2 million which was partially offset by a decrease in depreciation expense of $0.5 million for the year ended December 31, 2021. The decrease in the Parent Company and other of $4.5 million was primarily attributable to the allocation of management fee charged to other segments of $7.0 million which was partially offset by an increase in professional and recruiting fees of $0.9 million and an increase in business insurance of $1.7 million for the year ended December 31, 2021.

Total Other Income (Loss)

Total other income was $160.0 million for the year ended December 31, 2021 a decrease of $18.7 million, compared to the year ended December 31, 2020. The decline in other income was primarily attributable to a decrease in gains from investments held at fair value of $53.4 million, primarily driven by the change in the fair value of the investment in Karuna. These gains from investments held at fair value were partially offset by losses realized on sale of certain investments held at fair value, as a result of the block sale discount included in the sale. The losses realized on sale of certain investments held at fair value for the year ended December 31, 2021 decreased $34.1 million compared to the year ended December 31, 2020.

Net Finance Income (Costs)

Net finance costs were $5.0 million for the year ended December 31, 2021, a change of $11.2 million, compared to net finance costs of $6.1 million for the year ended December 31, 2020. The change was primarily attributable to a $14.0 million change leading to increased income in respect of the change in the fair value of our preferred shares, warrant and convertible note liabilities held by third parties, partially offset by a $1.8 million increase in contractual finance costs, mainly in our controlled founded entity, Vedanta, and a $1.0 million decline in interest income from financial assets for the year ended December 31, 2021.

Share of Net Gain (Loss) in Associates Accounted for Using the Equity Method, and Impairment of Investment in Associate

For the year ended December 31, 2021, the share in net loss of associates reported under the equity method was $73.7 million as compared to the share of net loss of $34.1 million for the year ended December 31, 2020. The change was primarily attributable to an increase in Gelesis losses reported under IFRS for the year ended December 31, 2021 as compared to the losses reported for the year ended December 31, 2020, due to an increase in the fair value of Gelesis financial instrument liabilities that are accounted for at Fair Value Through Profit and Loss (FVTPL).

Taxation

Income tax expense was $3.8 million for the year ended December 31, 2021,as compared to income tax expense of $14.4 million for the year ended December 31, 2020. The decrease in income tax expense was primarily attributable to the decrease in profit before tax in entities in the U.S. Federal and Massachusetts consolidated return groups of the Company. For information on the change in the tax rate, see Note 25 in the consolidated financial statements.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which we have prepared in accordance with UK-adopted International Financial Reporting Standards (IFRS). The Consolidated Financial Statements also comply fully with IFRSs as issued by the International Accounting Standards Board (IASB). In the preparation of these financial statements, we are required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates under different assumptions or conditions.

Our estimates and assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revisions and future periods if the revision affects both current and future periods.

While our significant accounting policies are described in more detail in the notes to our consolidated financial statements appearing at the end of this report, we believe the following accounting policies to be most critical to the judgments and estimates used in the preparation of our financial statements. See Note 1 to our consolidated financial statements for a further detailed description of our significant accounting policies.

Financial instruments

We account for our financial instruments according to IFRS 9. As such, when issuing preferred shares in our subsidiaries we determine the classification of financial instruments in terms of liability or equity. Such determination involves significant judgement. These judgements include an assessment of whether the financial instruments include any embedded derivative features, whether they include contractual obligations upon us to deliver cash or other financial assets or to exchange financial assets or financial liabilities with another party at any point in the future prior to liquidation, and whether that obligation will be settled by exchanging a fixed amount of cash or other financial assets for a fixed number of the Group's equity instruments.

In accordance with IFRS 9 we carry certain investments in equity securities at fair value as well as our subsidiary preferred share, convertible notes and warrant liabilities, all through profit and loss (FVTPL). Valuation of the aforementioned financial instruments (assets and liabilities) includes making significant estimates, specifically determining the appropriate valuation methodology and making certain estimates such as the future expected returns on the financial instrument in different scenarios, earnings potential of the subsidiary businesses, appropriate discount rate, appropriate volatility, appropriate term to exit and other industry and company specific risk factors.

Consolidation:

The consolidated financial statements include the financial statements of the Company and the entities it controls. Based on the applicable accounting rules, the Company controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Therefore an assessment is required to determine whether the Company has (i) power over the investee; (ii) exposure, or rights, to variable returns from its involvement with the investee; and (iii) the ability to use its power over the investee to affect the amount of the investor's returns. Judgement is required to perform such assessment and it requires that the Company considers, among others, activities that most significantly affect the returns of the investee, its voting shares, representation on the board, rights to appoint board members and management, shareholders agreements, de facto power and other contributing factors.

Investment in Associates

When we do not control an investee but maintain significant influence over the financial and operating policies of the investee the investee is an associate. Significant influence is presumed to exist when we hold 20 percent or more of the voting power of an entity, unless it can be clearly demonstrated that this is not the case. We evaluate if we maintain significant influence over associates by assessing if we have the power to participate in the financial and operating policy decisions of the associate.

Associates are accounted for using the equity method (equity accounted investees) and are initially recognized at cost, or if recognized upon deconsolidation they are initially recorded at fair value at the date of deconsolidation. The consolidated financial statements include our share of the total comprehensive income and equity movements of equity accounted investees, from the date that significant influence commences until the date that significant influence ceases. When our share of losses exceeds the net investment in an equity accounted investee, including preferred share investments that are considered to be Long-Term Interests, the carrying amount is reduced to zero and recognition of further losses is discontinued except to the extent that we have incurred legal or constructive obligations or made payments on behalf of an investee. To the extent we hold interests in associates that are not providing access to returns underlying ownership interests, the instrument held by PureTech is accounted for in accordance with IFRS 9.

Judgement is required in order to determine whether we have significant influence over financial and operating policies of investees. This judgement includes, among others, an assessment whether we have representation on the Board of Directors of the investee, whether we participate in the policy making processes of the investee, whether there is any interchange of managerial personnel, whether there is any essential technical information provided to the investee and if there are any transactions between us and the investee.

Judgement is also required to determine which instruments we hold in the investee form part of the investment in the associate, which is accounted for under IAS 28 and scoped out of IFRS 9, and which instruments are separate financial instruments that fall under the scope of IFRS 9. This judgement includes an assessment of the characteristics of the financial instrument of the investee held by us and whether such financial instrument provides access to returns underlying an ownership interest.

Where the company has other investments in an equity accounted investee that are not accounted for under IAS 28, judgement is required in determining if such investments constitute Long-Term Interests for

the purposes of IAS 28 (please refer to Notes 5 and 6). This determination is based on the individual facts and circumstances and characteristics of each investment, but is driven, among other factors, by the intention and likelihood to settle the instrument through redemption or repayment in the foreseeable future, and whether or not the investment is likely to be converted to common stock or other equity instruments

Recent Accounting Pronouncements
For information on recent accounting pronouncements, see our consolidated financial statements and the related notes found elsewhere in this report.

Cash Flow and Liquidity

Our cash flows may fluctuate and are difficult to forecast and will depend on many factors, including:

- the expenses incurred in the development of wholly-owned and Controlled Founded Entity therapeutic candidates;
- the revenue, if any, generated by wholly-owned and Controlled-Founded Entity therapeutic candidates;
- the revenue, if any, generated from licensing and royalty agreements with Founded Entities;
- the financing requirements of the Internal segment, Controlled-Founded Entities segment and Parent segment; and
- the investing activities related to the Internal, Controlled-Founded Entities, Non-Controlled Founded Entities and Parent segments, including the monetization, through sale, of shares held in our public Founded Entities.

As of December 31, 2022, we had consolidated cash and cash equivalents of $149.9 million and consolidated cash, cash equivalents and short term investments of $350.1 million. As of December 31, 2022, we had PureTech Level cash, cash equivalents and short-term investments of $339.5 million. PureTech Level cash, cash equivalents and short-term investments is a non-IFRS measure (for a definition of PureTech Level cash, cash equivalents and short-term investments and a reconciliation to the IFRS number, see the section Measuring Performance earlier in this Financial review).

Cash Flows
The following table summarizes our cash flows for each of the periods presented:

	Year ended December 31,		
(in thousands)	**2022**	2021	2020
Net cash used in operating activities	**$(178,792)**	$(158,274)	$(131,827)
Net cash provided by (used in) investing activities	**(107,223)**	197,375	364,478
Net cash provided by (used in) financing activities	**(29,827)**	22,727	38,869
Net increase (decrease) in cash and cash equivalents	**$(315,842)**	$61,827	$271,520

Operating Activities
Net cash used in operating activities was $178.8 million for the year ended December 31, 2022, as compared to $158.3 million for the year ended December 31, 2021, resulting in an increase of $20.5 million in net cash used in operating activities. The increase in outflows is primarily attributable to our higher operating loss mainly due to an increase in research and development activities in the Internal Segment, partially offset by the timing of receipts and payments in the normal course of business.

Net cash used in operating activities was $158.3 million for the year ended December 31, 2021, as compared to $131.8 million for the year ended December 31, 2020. The increase in outflows is primarily attributable to our higher operating loss and higher income taxes paid of $7.0 million, and to a lesser extent the timing of receipts and payments in the normal course of business.

Investing Activities
Net cash used in investing activities was $107.2 million for the year ended December 31, 2022, as compared to inflows of $197.4 million for the year ended December 31, 2021, resulting in a decrease of $304.6 million in net cash resulting from investing activities. The decrease in the net cash resulting from investing activities was primarily attributed to a decrease in proceeds from the sale of investments held at fair value of $99.4 million and to the purchase of short term investments, that net of redemptions amounted to $198.7 million for the year ended December 31, 2022.

Net cash provided by investing activities was $197.4 million for the year ended December 31, 2021, as compared to inflows of $364.5 million for the year ended December 31, 2020, resulting in a decrease of $167.1 million in net cash provided by investing activities. The decrease in the net cash provided by investing activities was primarily attributed to the decrease in proceeds from the sale of investments held at fair value of $132.5 million (proceeds from such sales were $218.1 million for the year ended December 31, 2021 vs. $350.6 million for the year ended December 31, 2020) and the fact that for the year ended December 31, 2020 the Company had proceeds of $30.1 million from maturity of short term investments while for the year ended December 31, 2021, there were no such cash inflows.

Financing Activities
Net cash used in financing activities was $29.8 million for the year ended December 31, 2022, as compared to net cash provided by financing activities of $22.7 million for the year ended December 31, 2021, resulting in a decrease of $52.6 million in the net cash resulting from financing activities. The decrease in the net cash resulting from financing activities was primarily attributable to the fact that in the year ended December 31, 2021 there was an issuance of subsidiary preferred shares of $37.6 million while for the year ended December 31, 2022 there was no such issuance, and due to the treasury share purchases of $26.5 million for the year ended December 31, 2022 while there were no such purchases for the year ended December 31, 2021. This decrease was partially offset by the fact that during year ended December 31, 2021 there were payments to settle equity settled stock based awards of $13.3 million, while for the year ended December 31, 2022 there were no such payments made.

Net cash provided by financing activities was $22.7 million for the year ended December 31, 2021, as compared to $38.9 million for the year ended December 31, 2020, resulting in a decrease of $16.1 million in the net cash provided by financing activities. The decrease in the net cash provided by financing activities was primarily attributable to the decrease in proceeds from issuance of convertible notes in subsidiaries of $22.8 million and the fact that for the year ended December 31, 2020 the Company had proceeds from the issuance of a long term loan of $14.7 million, while for the year ended December 31, 2021, there was no such cash inflow. Such decreases were partially offset by an increase in proceeds from issuance of preferred shares in subsidiaries of $23.9 million.

Funding Requirements

We have incurred operating losses since inception. Based on our current plans, we believe our existing financial assets at December 31, 2022, will be sufficient to fund our operations and capital expenditure requirements into the first quarter of 2026. We expect to incur substantial additional expenditures in the near term to support our ongoing activities. We anticipate to continue to incur net operating losses for the foreseeable future as is typical for pre-revenue biotechnology companies. Our ability to fund our therapeutic development and clinical operations as well as commercialization of our wholly-owned therapeutic candidates, will depend on the amount and timing of cash received from planned financings, monetization of shares of public Founded Entities and potential business development activities. Our future capital requirements will depend on many factors, including:

- the costs, timing and outcomes of clinical trials and regulatory reviews associated with our wholly-owned therapeutic candidates;
- the costs of commercialization activities, including product marketing, sales and distribution;
- the costs of preparing, filing and prosecuting patent applications and maintaining, enforcing and defending intellectual property-related claims;
- the emergence of competing technologies and products and other adverse marketing developments;
- the effect on our therapeutic and product development activities of actions taken by the U.S. Food and Drug Administration ("FDA"), the European Medicines Agency ("EMA") or other regulatory authorities;
- our degree of success in commercializing our wholly-owned therapeutic candidates, if and when approved; and
- the number and types of future therapeutics we develop and commercialize.

A change in the outcome of any of these or other variables with respect to the development of any of our wholly-owned therapeutic candidates could significantly change the costs and timing associated with the development of that therapeutic candidate.

Further, our operating plans may change, and we may need additional funds to meet operational needs and capital requirements for clinical trials and other research and development activities. We currently have no credit facility or other committed sources of capital beyond our existing financial assets. Because of the numerous risks and uncertainties associated with the development and commercialization of our wholly-owned therapeutic candidates, we have only a general estimate of the amounts of increased capital outlays and operating expenditures associated with our current and anticipated therapeutic development programs and these may change in the future.

Financial Position

Summary Financial Position

	As of December 31,		
(in thousands)	**2022**	2021	Change
Investments held at fair value	**$251,892**	$397,179	$(145,286)
Other non-current assets	**64,562**	47,018	17,544
Non-current assets	**316,454**	444,197	(127,743)
Cash and cash equivalents, and short term investments	**350,095**	465,708	(115,613)
Other current assets	**36,097**	36,101	(4)
Current assets	**386,192**	501,809	(115,617)
Total assets	**702,647**	946,006	(243,359)
Lease Liability	**24,155**	29,040	(4,884)
Deferred tax liability	**19,645**	89,765	(70,120)
Other non-current liabilities	**14,372**	16,921	(2,549)
Non-current liabilities	**58,172**	135,725	(77,553)
Trade and other payables	**54,783**	35,760	19,023
Notes payable	**2,345**	4,641	(2,297)
Warrant liability	**47**	6,787	(6,740)
Preferred shares	**27,339**	174,017	(146,678)
Other current liabilities	**12,371**	4,929	7,442
Current liabilities	**96,885**	226,135	(129,249)
Total liabilities	**155,057**	361,859	(206,802)
Net assets	**547,589**	584,147	(36,557)
Total equity	**$547,589**	$584,147	$(36,557)

Investments Held at Fair Value

Investments held at fair value decreased by $145.3 million to $251.9 million as of December 31, 2022. As of December 31, 2022, Investments held at fair value consist primarily of our common share investment in Karuna, Vor and Akili (Akili was in the form of preferred shares until August 2022) and our preferred share investment in Sonde (from May 2022). See Note 5 to our consolidated financial statements included elsewhere in this annual report for details regarding the change in investments held at fair value.

Cash, Cash Equivalents, and Short-Term Investments

Consolidated cash, cash equivalents and short-term investments decreased by $115.6 million to $350.1 million as of December 31, 2022. The decrease reflects spend attributed to our operating loss of $197.8 million, partially offset by proceeds from sale of Karuna and Vor shares of $118.7 million during the year ended December 31, 2022.

Non-Current Liabilities

Non-current liabilities decreased $77.6 million to $58.2 million as of December 31, 2022. The decrease was primarily driven by declines of $4.9 million and $70.1 million in our long-term lease liability and deferred tax liabilities, respectively as of December 31, 2022.

Trade and Other Payables

Trade and other payables increased $19.0 million to $54.8 million as of December 31, 2022. The increase reflected primarily the timing of payments as of December 31, 2022.

Notes Payable

Notes payable decreased by $2.3 million to $2.3 million as of December 31, 2022. The decrease reflects the deconsolidation of Sonde in May 2022.

Preferred Shares and warrant liabilities

Preferred share liability in subsidiaries in the Controlled founded entity segment decreased by $146.7 million to $27.3 million and warrant liability (also in Controlled founded entity segment) decreased by $6.7 million to a negligible amount as of December 31, 2022. The decrease in the preferred share liability reflects a decrease in fair value of the preferred share liability of $130.8 million and to a much lesser extent a decrease of $15.9 million due to the deconsolidation of Sonde during the year ended December 31, 2022. The decrease in the warrant liability reflects a decrease in the fair value of such warrant liability of $6.7 million.

Quantitative and Qualitative Disclosures about Financial Risks

Interest Rate Sensitivity

As of December 31, 2022, we had consolidated cash and cash equivalents of $149.9 million and short term investments of $200.2 million, while we had PureTech Level cash, cash equivalents and short-term investments of $339.5 million. PureTech Level cash, cash equivalents and short-term investments is a non-IFRS measure (for a definition of PureTech Level cash, cash equivalents and short-term investments and a reconciliation to the IFRS number, see the section Measuring Performance earlier in this Financial review). Our exposure to interest rate sensitivity is impacted by changes in the underlying U.K. and U.S. bank interest rates. We have not entered into investments for trading or speculative purposes. Due to the conservative nature of our investment portfolio, which is predicated on capital preservation and investments in short duration, high-quality U.S. Treasury Bills and related money market accounts we do not believe change in interest rates would have a material effect on the fair market value of our portfolio, and therefore we do not expect our operating results or cash flows to be significantly affected by changes in market interest rates.

Foreign Currency Exchange Risk

We maintain our consolidated financial statements in our functional currency, which is the U.S. dollar. Monetary assets and liabilities denominated in currencies other than the functional currency are translated into the functional currency at rates of exchange prevailing at the balance sheet dates. Non-monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the exchange rates prevailing at the date of the transaction. Exchange gains or losses arising from foreign currency transactions are included in the determination of net income (loss) for the respective periods. Such foreign currency gains or losses were not material for all reported periods.

Controlled Founded Entity Investments

We maintain investments in certain Controlled Founded Entities. Our investments in Controlled Founded Entities are eliminated as intercompany transactions upon financial consolidation. We are however exposed to a preferred share liability owing to the terms of existing preferred shares and the ownership of Controlled Founded Entities preferred shares by third parties. The liability of preferred shares is maintained at fair value through the profit and loss. Our strong cash position, budgeting and forecasting processes, as well as decision making and risk mitigation framework enable us to robustly monitor and support the business activities of the Controlled Founded Entities to ensure no exposure to credit losses and ultimately dissolution or liquidation. Accordingly, we view exposure to third party preferred share liability as low. Please refer to Note 16 to our consolidated financial statements for further information regarding our exposure to Controlled Founded Entity Investments.

Non-Controlled Founded Entity Investments

We maintain certain investments in Non-Controlled Founded Entities which are deemed either as investments and accounted for as investments held at fair value or associates and accounted for under the equity method (please refer to Note 1 to our consolidated financial statements). Our exposure to investments held at fair value was $251.9 million as of December 31, 2022, and we may or may not be able to realize the value in the future. Accordingly, we view the risk as high. Our exposure to investments in associates in limited to the carrying amount of the investment. We are not exposed to further contractual obligations or contingent liabilities beyond the value of initial investment. As of December 31, 2022, Gelesis and Sonde were the only associates. The carrying amount of the investments in Gelesis and Sonde accounted for under the equity method was $9.1 million. Accordingly, we do not view this risk as high. Please refer to Notes 5, 6 and 16 to our consolidated financial statements for further information regarding our exposure to Non-Controlled Founded Entity Investments.

Equity Price Risk

As of December 31, 2022, we held 1,054,464 common shares of Karuna, 2,671,800 common shares of Vor, and 12,527,477 common shares of Akili. The fair value of our investments in the common shares of Karuna was $207.2 million, in the common shares of Vor $17.8 million, and in the common shares of Akili $14.1 million.

The investments in Karuna Vor and Akili are exposed to fluctuations in the market price of these common shares. The effect of a 10.0 percent adverse change in the market price of Karuna common shares, Vor common shares and Akili common shares as of December 31, 2022, would have been a loss of approximately $20.7 million, $1.8 million, and $1.4 million, respectively, that would have been recognized as a component of Other income (expense) in our Consolidated Statements of Comprehensive Income/(Loss).

Liquidity Risk

We do not believe we will encounter difficulty in meeting the obligations associated with our financial liabilities that are settled by delivering cash or another financial asset. While we believe our cash and cash equivalents and short-term investments do not contain excessive risk, we cannot provide absolute assurance that in the future our investments will not be subject to adverse changes or decline in value based on market conditions.

Credit Risk

We maintain an investment portfolio in accordance with our investment policy. The primary objectives of our investment policy are to preserve principal, maintain proper liquidity and to meet operating needs. Although our investments are subject to credit risk, our investment policy specifies credit quality standards for our investments and limits the amount of credit exposure from any single issue, issuer or type of investment. We do not own derivative financial instruments. Accordingly, we do not believe that there is any material market risk exposure with respect to derivative or other financial instruments.

Credit risk is also the risk of financial loss if a customer or counterparty to a financial instrument fails to meet its contractual obligations. We are potentially subject to concentrations of credit risk in accounts receivable. Concentrations of credit risk with respect to receivables is owed to the limited number of companies comprising our receivable base. However, our exposure to credit losses is currently low due to the credit quality of our receivables, which are primarily from the US government, large corporations and large funds with respect to grants.

Foreign Private Issuer Status

Owing to our U.S. listing, we report under the Securities Exchange Act of 1934, as amended, or the Exchange Act, as a non-U.S. company with foreign private issuer status. As long as we qualify as a foreign private issuer under the Exchange Act, we will be exempt from certain provisions of the Exchange Act that are applicable to U.S. domestic public companies, including:

- the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act;
- sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time;
- the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q containing unaudited financial and other specified information, or current reports on Form 8-K, upon the occurrence of specified significant events; and
- Regulation FD, which regulates selective disclosures of material information by issuers.

Chair's overview

"We believe that good corporate governance is essential for building a successful and sustainable business."

Dear Shareholder

I am pleased to introduce our Corporate Governance Report. This section sets out our governance framework and the work of the Board and its committees.

As a Board, we are responsible for ensuring there is an effective governance framework in place. This includes setting the Company's strategic objectives, ensuring the right leadership and resources are in place to achieve these objectives, monitoring performance, ensuring that sufficient internal controls and protections are in place and reporting to shareholders. An effective governance framework is also designed to ensure accountability, fairness and transparency in the Company's relationships with all of its stakeholders, whether shareholders, employees, partners, the government or the wider patient community. We believe that good corporate governance is essential for building a successful and sustainable business.

The Board is committed to the highest standards of corporate governance and undertakes to maintain a sound framework for our control and management. In this report, we provide details of that framework.

The key constituents necessary to deliver a robust structure are in place and, accordingly, this report includes a description of how the Company has applied the principles and provisions of the Governance Code and how it intends to apply those principles in the future.

As announced by the Company on November 10, 2022, I have been appointed as President, Chief Executive Officer and a member of the Board of Biogen, Inc. As a result of this appointment and due to the time commitment associated with this new role, I have determined that I will not stand for re-election at the Company's 2023 Annual General Meeting. I have been working with the Board and the Nomination Committee with assistance from the rest of the Board and the Company's management to identify a suitable successor. This process is still ongoing. In the interim, Dr. Raju Kucherlapati has kindly agreed to act in the position of Interim Chair in addition to his role as the Senior Independent Director to ensure continuity and the maintenance of strong governance practices.

Further, as has been previously disclosed by the Company, Dame Marjorie Scardino retired as of the close of business on December 31, 2022. The Nomination Committee with assistance from the rest of the Board and the Company's management has also been looking towards potentially adding an additional non-executive director in order to strengthen the Board's skillsets and reinforce the strong governance that has been a hallmark of the Company's Board and broader operations.

While there is not a firm timeline for the identification of a new Chair and potentially an additional non-executive director, the Nomination Committee and the Company intend to conduct a thorough and expeditious process to identify the best candidates. Progress updates will be provided in due course.

The Board looks forward to being able to discuss these matters with our shareholders in connection with our AGM or indeed at any other time during the year.

Christopher Viehbacher
Chair

April 27, 2023

Board of Directors

(alphabetically)*

PureTech Health is led by a seasoned and accomplished Board of Directors and management team with extensive experience in maximising shareholder value, discovering scientific breakthroughs, and delivering therapeutics to market.

Sharon Barber-Lui
Independent Non-Executive Director

Sharon Barber-Lui has served as a member of our Board since March 2022 and became the Chair of the Audit Committee on April 26, 2022. Ms. Barber-Lui has been the Senior Vice President of Finance at EQRx since January 2022. Prior to joining EQRx, Ms. Barber-Lui worked at Merck for over twenty years in roles of advancing responsibility, including most recently as the Head of Portfolio Market Strategy, Operations and Business Analytics from 2019 through 2021 and Chief Financial Officer from 2014 through 2018 for Merck's U.S. oncology business. Prior to that Ms. Barber-Lui held a number of other roles with Merck including Treasurer of U.S. Region, Head of U.S. Treasury Operations, and Head of Legal Entity Integration and Global Treasury Services, among others. Ms. Barber-Lui began her career as an accountant for KPMG LLP, and she received her bachelor's degree as well as her M.B.A. from Lehigh University. Ms. Barber-Lui is a member of the American Institute of Certified Public Accountants. She is also the recipient of Merck & Co. Inc.'s Top Talent Designation, Women's Leadership Recognition and Oncology Women's Leader Recognition.

Raju Kucherlapati, Ph.D.
Senior Independent Director, R&D Committee Member

Raju Kucherlapati, Ph.D., has served as a member of our Board since 2014 and assumed the role of PureTech's Senior Independent Director as well as the chair of its Nomination Committee as of December 31, 2022. It is intended that Dr. Kucherlapati will act as Interim Chair following the end of the 2023 Annual General Meeting. He has been the Paul C. Cabot professor of Genetics and a professor of medicine at Harvard Medical School since 2001. Dr. Kucherlapati currently serves on the board of directors of Gelesis, Inc. and KEW Inc. He was a founder and former board member of Abgenix (acquired by Amgen for $2.2 billion), Cell Genesys and Millennium Pharmaceuticals (acquired by Takeda for $8.8 billion). He was the first scientific director of the Harvard-Partners Center for Genetics and Genomics. He is a fellow of the American Association for the Advancement of Science and a member of the National Academy of Medicine. Dr. Kucherlapati received his Ph.D. from the University of Illinois. He trained at Yale and has held faculty positions at Princeton University, University of Illinois College of Medicine and the Albert Einstein College of Medicine. He served on the editorial board of the New England Journal of Medicine and was Editor in Chief of the journal Genomics. He was a member of the presidential commission for the study of bioethical issues during the Obama administration. His laboratory at Harvard Medical School is involved in cloning and characterization of human disease genes with a focus on human syndromes with a significant cardiovascular involvement, use of genetic/genomic approaches to understand the biology of cancer and the generation and characterization of genetically modified mouse models for cancer and other human disorders. His laboratory was a part of the Human Genome Program that was responsible for mapping and sequencing the human genome. Dr. Kucherlapati developed methods for modifying mammalian genes that lead to gene targeting in mice. He has developed many mouse models for human disease, including a large set of models for human colorectal cancer. His laboratory was a part of The Cancer Genome Atlas (TCGA) program that uses genetic/genomic approaches to understand the biology of cancer. He is a promoter of personalized/precision medicine.

John LaMattina, Ph.D.
Independent Non-Executive Director, R&D Committee Member

John LaMattina, Ph.D., has served as a member of our Board since 2009. Dr. LaMattina previously worked at Pfizer in different roles from 1977 to 2007, including vice president of U.S. Discovery Operations in 1993, senior vice president of worldwide discovery operations in 1998, senior vice president of worldwide development in 1999 and president of global research and development from 2003 to 2007. Dr. LaMattina serves on the board of directors of Ligand Pharmaceuticals, Immunome Inc. and Vedanta Biosciences, Inc. Dr. LaMattina previously served on the board of Zafgen, Inc. until April 2020. He also serves on the Scientific Advisory Board of Frequency Therapeutics and is a trustee associate of Boston College. During Dr. LaMattina's leadership tenure, Pfizer discovered and/or developed a number of important new medicines including Tarceva, Chantix, Zoloft, Selzentry and Lyrica, along with a number of other medicines currently in late stage development for cancer, rheumatoid arthritis and pain. He is the author of numerous scientific publications and U.S. patents. Dr. LaMattina received the 1998 Boston College Alumni Award of Excellence in Science and the 2004 American Diabetes Association Award for Leadership and Commitment in the Fight Against Diabetes. He was awarded an Honorary Doctor of Science degree from the University of New Hampshire in 2007. In 2010, he was the recipient of the American Chemical Society's Earle B. Barnes Award for Leadership in Chemical Research Management. He is the author of "Devalued and Distrusted—Can the Pharmaceutical Industry Restore its Broken Image," "Drug Truths: Dispelling the Myths About Pharma R&D," "Pharma and Profits: Balancing Innovation, Medicine, and Drug Prices" and an author of the Drug Truths blog at Forbes.com. Dr. LaMattina received a B.S. in Chemistry from Boston College and received a Ph.D. in Organic Chemistry from the University of New Hampshire. He then moved on to Princeton University as a National Institutes of Health postdoctoral fellow in the laboratory of professor E. C. Taylor.

* Biographies for executive directors, Daphne Zohar and Bharatt Chowrira, can be found on pages 69 and 70.

Robert Langer, Sc.D.
Co-Founder and Non-Executive Director, R&D Committee Member

Robert S. Langer, Sc.D., is a co-founder, member of PureTech's R&D Committee and has served as a member of the board of directors since our founding. Dr. Langer has served as the David H. Koch Institute professor at MIT since 2005. He served as a member of the FDA's science board from 1995 to 2002 and as its chairman from 1999 to 2002. Dr. Langer serves on the board of directors of Seer Bio, Abpro Bio, Frequency Therapeutics, Entrega, Inc. and Moderna, Inc. Dr. Langer has received over 220 major awards, including the 2006 U.S. National Medal of Science, the Charles Stark Draper Prize in 2002 and the 2012 Priestley Medal. He is also the first engineer to ever receive the Gairdner Foundation International Award. Dr. Langer has received the Dickson Prize for Science, Heinz Award, Harvey Prize, John Fritz Award, General Motors Kettering Prize for Cancer Research, Dan David Prize in Materials Science, Breakthough Prize in Life Sciences, National Medal of Science, National Medal of Technology and Innovation, Kyoto Prize, Wolf Prize, Albany Medical Center Prize in Medicine and Biomedical Research and the Lemelson-MIT prize. In 2006, he was inducted into the National Inventors Hall of Fame. In January 2015, Dr. Langer was awarded the 2015 Queen Elizabeth Prize for Engineering. Dr. Langer received his bachelor's degree in Chemical Engineering from Cornell University and his Sc.D. in Chemical Engineering from MIT.

Kiran Mazumdar-Shaw
Independent Non-Executive Director

Kiran Mazumdar-Shaw has served as a member of our Board since September 2020. Ms. Mazumdar-Shaw has been the executive chairperson of Biocon Limited, which she founded in 1978, since April 2020, and she served as managing director of Biocon Limited from 1995 to 2020. Ms. Mazumdar-Shaw holds key positions in various industry, educational, government and professional bodies globally. She has been elected as a full-term member of the board of trustees of Massachusetts Institute of Technology. She has been elected as a member of the prestigious U.S.-based National Academy of Engineering. She also serves as the lead independent member of the board of Infosys Ltd, a director on the board of United Breweries Limited, and non-executive director on the board of Narayana Health. Ms. Mazumdar-Shaw has received two of India's highest civilian honors, the Padma Shri in 1989 and the Padma Bhushan in 2005. She was also honored with the Order of Australia, Australia's highest civilian honor in January 2020. In 2016, she was conferred with the highest French distinction – Knight of the Legion of Honour – and in 2014 received the Othmer Gold Medal in 2014 from the U.S.-based Chemical Heritage Foundation for her pioneering efforts in biotechnology. Ms. Mazumdar-Shaw has been ranked as one of the world's top 20 inspirational leaders in the field of biopharmaceuticals by The Medicine Maker Power List 2020, and she was the winner of EY World Entrepreneur of the Year™ 2020 Award. She was the first woman business leader from India to sign the Giving Pledge, an initiative of the Gates Foundation, committing to give the majority of her wealth to philanthropic causes. She received a bachelor's degree in science, Zoology Hons., from Bangalore University and a master's degree in malting and brewing from Ballarat College, Melbourne University. She has been awarded several honorary degrees from other universities globally.

Dame Marjorie Scardino
Senior Independent Director

Dame Marjorie Scardino served as a member of our Board from 2015 until her retirement from our Board as of the close of business on December 31, 2022. She served for 28 years as the chief executive officer of Pearson, a large education company that included The Economist, The Financial Times and Penguin Books. She was on the board of the MacArthur Foundation for 12 years, five as chairman, and left in 2017. She was a member of the board of Twitter from 2013 to 2018 and International Airlines Group from 2014 to 2019. Dame Scardino has received a number of honorary degrees, and in 2003 was dubbed a dame of the British Empire. She is also a member of the Royal Society of the Arts in the UK and the American Association of Arts and Sciences.

Christopher Viehbacher
Chair

Chris Viehbacher has served as a member of our Board since 2015 and as chairman since September 2019. Mr. Viehbacher was appointed President, Chief Executive Officer and a member of the Board of Biogen, Inc. in November 2022. As a result of his appointment, Mr. Viehbacher will not stand for re-election at the Company's 2023 Annual General Meeting. Prior to his appointment with Biogen, Inc., he had been the managing partner of Gurnet Point Capital from October 2014 to November 2022. Immediately prior to joining Gurnet Point Capital, Mr. Viehbacher served as the chief executive officer and member of the board of directors of Sanofi from December 2008 to October 2014. From 1993 to 2008, Mr. Viehbacher worked at GlaxoSmithKline in different roles, including ultimately President of its North American pharmaceutical division. Mr. Viehbacher began his career with PricewaterhouseCoopers LLP and qualified as a chartered accountant. Mr. Viehbacher currently serves on the board of directors of Biogen, Inc., BEFORE Brands and Crossover Health. Mr. Viehbacher previously served on the board of directors of Alladapt, Boston Pharmaceuticals, Zikani, Vedanta Biosciences, Inc., Gurnet Point Capital LLC, Axcella Health Inc. and Corium International, Inc. Mr. Viehbacher also serves on the Board of Trustees of Northeastern University and the Board of Fellows of Stanford Medical School. Mr. Viehbacher has co-chaired the Chief Executive Officer Roundtable on Neglected Diseases with Bill Gates and formerly chaired the chief executive officer Roundtable on Cancer. He was the chairman of the board of the Pharmaceutical Research and Manufacturers of America as well as president of the European Federation of Pharmaceutical Industries and Associations. At the World Economic Forum at Davos, Mr. Viehbacher was a chair of the Health Governors and co-chaired an initiative to create a Global Charter for Healthy Living. He was also a member of the International Business Council. Mr. Viehbacher has received the Pasteur Foundation Award for outstanding commitment to safeguarding and improving health worldwide. He has also received France's highest civilian honor, the Légion d'honneur. Mr. Viehbacher received his bachelor's degree in Commerce from Queen's University in Ontario, Canada.

Dennis Ausiello, M.D.**
Board Advisor, R&D Committee Member

Dennis Ausiello, M.D., is a board advisor and member of the PureTech R&D Committee. He is the Jackson Distinguished Professor of Clinical Medicine and was previously director, emeritus of the M.D./Ph.D. Program at Harvard Medical School. Dr. Ausiello is chairman of medicine, emeritus and director of the Center for Assessment Technology and Continuous Health (CATCH) at Massachusetts General Hospital (MGH). This center is a partnership among MGH, MIT and Harvard University with a mission to develop real-time assessment of human traits in wellness and disease. In partnership with industry, it is creating tools for measurements of traditional and novel phenotypes. Understanding the need for partnerships between the academy and industry, Dr. Ausiello served on the board of directors of Pfizer Pharmaceuticals, where he was their former lead director. He currently serves as a member of the board of directors of Seres Health and Alnylam. Dr. Ausiello is also a member of the board of directors of several non-public biotech companies and is a consultant to Verily (formerly Google Life Sciences) and Pfizer Pharmaceuticals. Dr. Ausiello is a nationally recognized leader in academic medicine who was elected to the National Academy of Medicine in 1999 and the American Academy of Arts and Sciences in 2003. He has published numerous articles, book chapters and textbooks and has served as an editor of Cecil's Textbook of Medicine. Dr. Ausiello received his BA from Harvard College and an M.D. from the University of Pennsylvania.

H. Robert Horvitz, Ph.D.**
Board Advisor, R&D Committee Chair

H. Robert Horvitz, Ph.D., is a board observer and Chair of the R&D Committee at PureTech. He received the Nobel Prize in Physiology or Medicine and is the David H Koch Professor of Biology at Massachusetts Institute of Technology, an investigator of the Howard Hughes Medical Institute, neurobiologist (Neurology) at Massachusetts General Hospital, a member of the MIT McGovern Institute for Brain Research and the MIT Koch Institute for Integrative Cancer Research. He is cofounder of multiple life science companies, including Epizyme (EPZM), Mitobridge (acquired by Astellas) and Idun Pharmaceuticals (acquired by Pfizer) and was a member of the Scientific Advisory Board of the Novartis Institutes for BioMedical Research.

Dr. Horvitz was a member of the board of trustees of the Massachusetts General Hospital. He also previously served as Chairman of the Board of Trustees of the Society for Science and the Public and as President of the Genetics Society of America. Dr. Horvitz is a member of the U.S. National Academy of Sciences, the U.S. National Academy of Medicine and the American Philosophical Society and is a foreign member of the Royal Society of London. He is a fellow of the American Academy of Arts and Sciences and of the American Academy of Microbiology.

Dr. Horvitz received the U.S. National Academies of Science Award in Molecular Biology; the Charles A. Dana Award for Pioneering Achievements in Health; the Ciba-Drew Award for Biomedical Science; the General Motors Cancer Research Foundation Alfred P. Sloan, Jr. Prize; the Gairdner Foundation International Award; the March of Dimes Prize in Developmental Biology; the Genetics Society of America Medal; the Bristol-Myers Squibb Award for Distinguished Achievement in Neuroscience; the Wiley Prize in the Biomedical Sciences; the Peter Gruber Foundation Genetics Prize; the American Cancer Society Medal of Honor; the Alfred G. Knudson Award of the National Cancer Institute; and the UK Genetics Society Mendel Medal. He has received honorary doctoral degrees from the University of Rome, Cambridge University, Pennsylvania State University and the University of Miami.

Bennett Shapiro, M.D.**
Board Advisor, R&D Committee Member

Bennett Shapiro, M.D., is a PureTech co-founder, and was a board advisor and a member of PureTech's R&D Committee until he retired from those roles in August 2022. He also served as member of the Board from the Company's founding through June 2020. Dr. Shapiro was previously Executive Vice President at Merck Research Laboratories of Merck & Co. where he initially led Worldwide Basic Research and was responsible for all the basic and preclinical research activities at Merck. He later led Worldwide Licensing and External Research and was responsible for Merck's relationships with the academic and industrial biomedical research community. His leadership resulted in the discovery, development and registration of approximately 25 drugs and vaccines. Previously, he was professor and chairman of the Department of Biochemistry at the University of Washington and is the author of over 120 papers on the molecular regulation of cellular behavior. Following an internship in Medicine at the University of Pennsylvania Hospital, he was a Research Associate at the NIH, then a Visiting Scientist at the Institut Pasteur in Paris and returned to the NIH as Chief-Section on Cellular Differentiation in the Laboratory of Biochemistry prior to joining the University of Washington. Dr. Shapiro has been a Guggenheim Fellow, a Fellow of the Japan Society for the Promotion of Science and a Visiting Professor at the University of Nice. He currently serves as a member of the board of directors of Vedanta Biosciences and VBL Therapeutics. Dr. Shapiro previously served as a director of Celera Corporation, the Drugs for Neglected Diseases initiative and the Mind and Life Institute. Dr. Shapiro received a B.S. in Chemistry from Dickinson College and his M.D. from Jefferson Medical College.

** Dr. Horvitz, Dr. Ausiello and Dr. Shapiro are not members of the PureTech Board. As a Board Observer, Dr. Horvitz attends the majority of Board meetings. As Board Advisors, Dr. Ausiello and Dr. Shapiro attend select Board meetings. All three are also members of PureTech's R&D Committee, of which Dr. Horvitz is the Chair.

Management team

(alphabetically)

Joseph Bolen, Ph.D.
R&D Committee Member

Joseph Bolen, Ph.D., first joined PureTech in October 2015 and served as PureTech's chief scientific officer from October 2016 through February 2023 and transitioned to a role on PureTech's R & D committee in February 2023. Prior to joining PureTech, Dr. Bolen oversaw all aspects of research and development, or R&D, for Moderna, Inc. as president and chief scientific officer from July 2013 to October 2015. Previously, he was chief scientific officer and global head of oncology research at Millennium: The Takeda Oncology Company. Prior to joining Millennium in 1999, Dr. Bolen held senior positions at Hoechst Marion Roussel, Schering-Plough and Bristol-Myers Squibb. Dr. Bolen began his career at the National Institutes of Health, where he contributed to the discovery of a class of proteins known as tyrosine kinase oncogenes as key regulators of the immune system. Dr. Bolen received a B.S. in Microbiology & Chemistry and a Ph.D. in Immunology from the University of Nebraska and conducted his postdoctoral training in Molecular Virology at the Kansas State University Cancer Center.

Bharatt Chowrira, Ph.D., J.D.
President and Chief Business, Finance and Operating Officer, Member of the Board of Directors

Bharatt Chowrira, Ph.D., J.D., has been our president and chief business, finance and operating officer since September 2022, was our president and chief business, legal and operating officer from January 2022 through September 2022, and was our president and chief of business and strategy from March 2017 through December 2021. Dr. Chowrira has also served as a member of PureTech's Board since February 2021. Prior to joining PureTech, Dr. Chowrira was the president of Synlogic, Inc., a biopharmaceutical company focused on developing synthetic microbiome-based therapeutics, from September 2015 to February 2017, where he oversaw and managed corporate and business development, alliance management, financial, human resources, intellectual property and legal operations. Prior to that, Dr. Chowrira was the chief operating officer of Auspex Pharmaceuticals, Inc. from October 2013 to July 2015, which was acquired by Teva Pharmaceuticals Ltd. in the spring of 2015. Previously, he was president and chief executive officer of Addex Therapeutics Ltd., a biotechnology company publicly-traded on the SIX Swiss Exchange, from August 2011 to July 2013. Prior to that Dr. Chowrira held various leadership and management positions at Nektar Therapeutics (chief operating officer), Merck & Co, or Merck (vice president), Sirna Therapeutics (general counsel; acquired by Merck) and Ribozyme Pharmaceuticals (chief patent counsel). Dr. Chowrira previously served on the board of directors of Vedanta Biosciences, Inc. from September 2018 to February 2023, Akili Interactive Labs, Inc. from November 2017 to September 2019 and June 2021 to October 2022, Vor Biopharma from August 2018 to June 2020, and Karuna Therapeutics, Inc. from March 2017 to December 2019. Dr. Chowrira received a J.D. from the University of Denver's Sturm College of Law, a Ph.D. in Molecular Biology from the University of Vermont College of Medicine, an M.S. in Molecular Biology from Illinois State University and a B.S. in Microbiology from the UAS, Bangalore, India.

Eric Elenko, Ph.D.
Chief Innovation and Strategy Officer

Eric Elenko, Ph.D., has served as our chief innovation officer since June 2015 and held various other positions at PureTech prior thereto. While at PureTech, Dr. Elenko has led the development of a number of programs, including Akili Interactive Labs, Inc., Gelesis, Inc., Karuna Therapeutics, Inc. and Sonde Health, Inc. Dr. Elenko serves on the board of directors of Sonde Health, Inc. Prior to joining PureTech, Dr. Elenko was a consultant with McKinsey and Company from February 2002 to September 2005, where he advised senior executives of both Fortune 500 and specialty pharmaceutical companies on a range of issues such as product licensing, mergers and acquisitions, research and development strategy and marketing. Dr. Elenko received a B.A. in Biology from Swarthmore College and his Ph.D. in Biomedical Sciences from University of California, San Diego.

Julie Krop, M.D.
Chief Medical Officer

Julie Krop, MD, is the chief medical officer at PureTech, where she is responsible for all clinical development, regulatory, CMC, and medical affairs for PureTech's clinical-stage Wholly Owned Pipeline. Prior to PureTech, Dr. Krop served as Chief Medical Officer at Freeline Therapeutics, a clinical-stage gene therapy company. She also previously served as Chief Medical Officer of AMAG Pharmaceuticals (acquired by Covis group for $647 million), where she oversaw clinical development, regulatory affairs, clinical operations, medical affairs, program management and pharmacovigilance. During her time at AMAG, Dr. Krop was responsible for the oversight of three FDA approvals. Earlier in her career, she held leadership positions at Vertex Pharmaceuticals, Stryker Regenerative Medicine, Peptimmune, Millennium Pharmaceuticals and Pfizer and also served on the board of directors of Aquestive Bio, Inc. Dr. Krop received her M.D. from Brown University School of Medicine and completed an internal medicine residency at Georgetown University Hospital. Additionally, she completed fellowships in epidemiology, clinical trial design and endocrinology as a Robert Wood Johnson Foundation Clinical Scholar at the Johns Hopkins School of Medicine.

Daphne Zohar
Founder and Chief Executive Officer, Member of the Board of Directors

Daphne Zohar is the founder of PureTech and has served as our chief executive officer and a member of our board of directors since our formation and UK main market listing in 2015 and served as the founding chief executive officer of a number of our Founded Entities. A successful entrepreneur, Ms. Zohar created PureTech, assembling a leading team and scientific network to help implement her vision for the company, and was a key participant in fundraising, business development and establishing the underlying programs and platforms that have resulted in the broad and deep pipeline being advanced via the Company's Wholly Owned Pipeline and Founded Entities. PureTech's R&D engine has generated 27 therapeutics and therapeutic candidates, including two (Plenity® and EndeavorRx®) that have received both U.S. Food and Drug Administration clearance and European marketing authorization and a third (KarXT) that we expect will soon be filed for FDA approval. Ms. Zohar has been recognized as a top leader and innovator in biotechnology by a number of sources, including EY, BioWorld, MIT's Technology Review, the Boston Globe, and Scientific American. Ms. Zohar serves on the BIO (Biotechnology Innovation Organization) Board. Previously, Ms. Zohar has served on a number of private company boards including Karuna Therapeutics, Inc. and served on the board of resTORbio, Inc. (now Adicet Bio, Inc.) from December 2017 to November 2018. Ms. Zohar received a B.S. from Northeastern University.

The Board

Roles and responsibilities of the Board

The Board is responsible to shareholders for our overall management as a whole. The main roles of the Board are:

- creating value for shareholders;
- providing business and scientific leadership;
- approving our strategic objectives;
- ensuring that the necessary financial and human resources are in place to meet strategic objectives;
- overseeing our system of risk management; and
- setting the values and standards for both our business conduct and governance matters.

The Directors are also responsible for ensuring that obligations to shareholders and other stakeholders are understood and met and that communication with shareholders is maintained. The responsibility of the Directors is collective, taking into account their respective roles as Executive Directors and Non-Executive Directors. All Directors are equally accountable to the Company's shareholders for the proper stewardship of its affairs and our long-term success.

The Board reviews strategic issues on a regular basis and exercises control over our performance by agreeing on budgetary and operational targets and monitoring performance against those targets. The Board has overall responsibility for our system of internal controls and risk management. Any decisions made by the Board on policies and strategy to be adopted by us or changes to current policies and strategy are made following presentations by the Executive Directors and other members of management, and only after a detailed process of review and challenge by the Board. Once made, the Executive Directors and other members of management are fully empowered to implement those decisions.

Except for a formal schedule of matters which are reserved for decision and approval by the Board, the Board has delegated our day-to-day management to the Chief Executive Officer who is supported by other members of the senior management team. The schedule of matters reserved for Board decision and approval are those significant to us as a whole due to their strategic, financial or reputational implications.

The Company's schedule of matters reserved for the Board includes the following matters:

- approval and monitoring of our strategic aims and objectives;
- approval of the annual operating and capital expenditure budget;
- changes to our capital structure, the issue of any of our securities and material borrowings;
- approval of the annual report and half-year results statement, accounting policies and practices or any matter having a material impact on our future financial performance;
- ensuring a sound system of internal control and risk management;
- approving Board appointments and removals, and approving policies relating to directors' remuneration;
- strategic acquisitions;
- major disposals of our assets or subsidiaries;
- approval of all circulars, prospectuses and other documents issued to shareholders governed by the Financial Conduct Authority's (FCA) Listing Rules, Disclosure Guidance and Transparency Rules or the City Code on Takeovers and Mergers;
- approval of terms of reference and membership of Board committees;
- considering and, where appropriate, approving directors' conflicts of interest; and
- approval, subject to shareholder approval, of the appointment and remuneration of the auditors.

The schedule of matters reserved to the Board is available on request from the Company Secretary or within the Investors section of our website at www.puretechhealth.com.

The Board delegates specific responsibilities to certain committees that assist the Board in carrying out its functions and ensure independent oversight of internal control and risk management. The three principal Board committees (Audit, Remuneration and Nomination) play an essential role in supporting the Board in fulfilling its responsibilities and ensuring that we maintain the highest standards of corporate governance. Each committee has its own terms of reference which set out the specific matters for which delegated authority has been given by the Board.

The terms of reference for each of the committees are fully compliant with the provisions of the Governance Code. All of these are available on request from the Company Secretary or within the Investors section of our website at www.puretechhealth.com.

Board size and composition

As of December 31, 2022, there were nine Directors on the Board: the Non-Executive Chair, two Executive Directors and six Non-Executive Directors. The biographies of these Directors are provided on pages 66 to 70. On March 24, 2022, Ms. Sharon Barber-Lui joined the Board as a non-Executive Director. Immediately following the publication of PureTech's Annual Report and Accounts for the year ended December 31, 2021 on April 26, 2022, Ms. Barber-Lui became the Chair of the Audit Committee, and Mr. Viehbacher stepped down as the Chair of the Audit Committee but remained a member thereof. Dame Marjorie Scardino, Senior Independent Director, chair of the Nomination Committee and member of the Audit Committee, retired as of the close of business on December 31, 2022. Raju Kucherlapati, Ph.D., assumed the role of PureTech's Senior Independent Director as well as the chair of its Nomination Committee, effective as of Dame Scardino's retirement. Christopher Viehbacher, Chair of PureTech's Board, was recently appointed President, Chief Executive Officer and a member of the Board of Biogen, Inc. Given the time commitment required by this new role, Mr. Viehbacher will not stand for re-election at PureTech's 2023 Annual General Meeting. There were no other changes to the composition of the Board during 2022.

Following Mr. Viehbacher's departure on conclusion of the 2023 AGM, the Company will have seven directors, including two Executive Directors and five Non-Executive Directors. While the Company is conducting a search for a new Chair of the Board and considering adding an additional member to replace Dame Scardino, it does not anticipate that such individuals will be in place at the time of the AGM. As a result, the Board intends to appoint Dr. Raju Kucherlapati as interim Chair

until a permanent Chair can be selected and appointed. Dr. Kucherlapati will also continue in his current role of Senior Independent director.

The Company's policy relating to the terms of appointment and the remuneration of both Executive and Non-Executive Directors is detailed in the Directors' Remuneration Report on pages 86 to 102.

The size and composition of the Board is regularly reviewed by the Nomination Committee to ensure there is an appropriate and diverse mix of skills and experience on the Board.

The Board may appoint any person to serve as a Director, either to fill a vacancy or as an addition to the existing Board. Any Director so appointed by the Board shall hold office only until the following AGM and then shall be eligible for election by the shareholders. In accordance with the Governance Code, all of the Directors except for Christopher Viehbacher will be offering themselves for election at the AGM to be held on June 13, 2023, full details of which are set out in the notice of meeting accompanying this Annual Report.

Non-Executive Directors

The Company's Non-Executive Directors are Mr. Christopher Viehbacher (Chair), Ms. Sharon Barber-Lui, Dr. Raju Kucherlapati, Dr. John LaMattina, Dr. Robert Langer, and Ms. Kiran Mazumdar-Shaw. As noted elsewhere, Mr. Viehbacher will not stand for re-election at the 2023 AGM.

The Non-Executive Directors provide us with a wide range of skills and experience. Each Non-Executive Director has significant senior level experience as well as an extensive network in each of their own fields, an innovative mindset and independent judgement on issues of strategy, performance and risk, and is well placed to constructively challenge and scrutinize the performance of management. In addition, certain of our Non-Executive Directors also serve as members of one or more boards of directors of our Founded Entities and are key drivers for our Wholly Owned Pipeline.

Senior Independent Director

The Company's Senior Independent Director is Dr. Raju Kucherlapati. Dame Marjorie Scardino was Senior Independent Director through her retirement as of the close of business on December 31, 2022. A key responsibility of the Senior Independent Director is to be available to shareholders in the event that they may feel it inappropriate to relay views through the Chair or Chief Executive Officer. In addition, the Senior Independent Director serves as an intermediary between the rest of the Board and the Chair where necessary. Further, the Senior Independent Director will lead the Board in its deliberations on any matters on which the Chair is conflicted.

The roles of Chair and Chief Executive Officer

The Company's Chair is Mr. Christopher Viehbacher, though he will not stand for re-election at the 2023 AGM. Mr. Viehbacher was appointed Chair in September 2019. The Nomination Committee is currently conducting a search to identify a new permanent Chair, but such person is not expected to be in place at the time of the 2023 AGM. Until such permanent replacement is appointed as Chair by the Board, Dr. Raju Kucherlapati will serve as interim Chair to fulfill the leadership requirements and governance obligations of the role. There is and will remain a clear division of responsibilities between the Chair and the Chief Executive Officer.

The Chair is responsible for the leadership and conduct of the Board and for ensuring effective communication with shareholders.

The Chair facilitates the full and effective contribution of Non-Executive Directors at Board and Committee meetings, ensures that they are kept well informed and ensures a constructive relationship between the Executive Directors and Non-Executive Directors. The Chair also ensures that the Board committees carry out their duties, including reporting back to the Board either orally or in writing following their meetings at the next Board meeting.

The role of the Chief Executive Officer, Ms. Daphne Zohar, is to lead the execution of the Company's strategy and the executive management of PureTech. She is responsible, among other things, for the development and implementation of strategy and processes which enable us to meet the requirements of shareholders, for delivering the operating plans and budgets for our businesses, for monitoring business performance against key performance indicators (KPIs) and reporting on these to the Board and for providing the appropriate environment to recruit, engage, retain and develop the high-quality personnel needed to deliver our strategy.

Independence

The Governance Code requires that at least 50 percent of the Board of a UK premium listed company, excluding the Chair, consists of Non-Executive Directors determined by the Board to be independent in character and judgement and free from relationships or circumstances which may affect, or could appear to affect, the Directors' judgement. The Board regards Ms. Barber-Lui, Dr. Kucherlapati, Dr. LaMattina and Ms. Mazumdar-Shaw as Independent Non-Executive Directors for the purposes of the Governance Code. In reaching this determination, the Board duly considered (i) their directorships and links with other Directors through their involvement in other subsidiary companies; (ii) their equity interests in PureTech and/or the Founded Entities, including equity grants of restricted stock units made to Non-Executive Directors by the Company under its Performance Share Plan; and (iii) in respect of Dr. LaMattina, the length of his tenure as a Director of the Company. The Board is satisfied that the judgement, experience and challenging approach adopted by each of these Directors should ensure that they each make a significant contribution to the work of the Board and its committees. Therefore, the Board has determined that Ms. Barber-Lui, Dr. Kucherlapati, Dr. LaMattina, and Ms. Mazumdar-Shaw are of independent character and judgement, notwithstanding the circumstances described at (i), (ii) and (iii) above. In addition, with respect to Dr. Kucherlapati, the Board has considered his role as interim Chair following the 2023 AGM and determined that such additional responsibilities shall not impact his independence in light of the interim nature of the role and the search underway for a permanent Chair appointee.

The Nomination Committee with assistance from the rest of the Board and the Company's management has also been looking towards potentially

adding an additional independent non-executive director in order to strengthen the Board's skillsets and reinforce the strong governance that has been a hallmark of the Company's Board and broader operations. The Nomination Committee and the Company intend to conduct a thorough and expeditious process to identify the best candidates. Progress updates will be provided in due course.

Board support, indemnity and insurance

The Company Secretary, Dr. Bharatt Chowrira, is responsible to the Board for ensuring Board procedures are followed, applicable rules and regulations are complied with and that the Board is advised on governance and relevant regulatory matters. All Directors have access to the impartial advice and services of the Company Secretary.

There is also an agreed procedure for Directors to take independent professional advice at the Company's expense. In accordance with the Company's Articles of Association and a contractual Deed of Indemnity, the Directors have been granted an indemnity issued by the Company to the extent permitted by law in respect of liabilities incurred to third parties as a result of their office. The indemnity would not provide any coverage where a Director is proved to have acted fraudulently or with wilful misconduct. The Company has also arranged appropriate insurance cover in respect of legal action against its Directors and officers.

Board meetings and decisions

The Board meets regularly during the year, as well as on an ad hoc basis as required by business need. The Board had 7 scheduled meetings in 2022, and details on attendance are set forth in the table below:

Director	Number of Board Meetings Attended
Christopher Viehbacher	7/7
Sharon Barber-Lui	7/7
Raju Kucherlapati	7/7
John LaMattina	7/7
Robert Langer	7/7
Kiran Mazumdar-Shaw	6/7
Dame Marjorie Scardino	7/7
Bharatt Chowrira	7/7
Daphne Zohar	7/7

While each director (with the exception of Ms. Mazumdar-Shaw with respect to one meeting) was able to attend every meeting in 2022, in the event of any unavoidable absence, the impacted Director would review with management the topics and materials to be discussed at the meeting, and provide appropriate feedback to be conveyed at such meeting, as was the case with Ms. Mazumdar-Shaw with respect to the one meeting she was unable to attend.

The Board also acted by unanimous written consent eight times in 2022. On occasion it was more expedient for the board to approve matters, especially administrative matters, by unanimous written consent rather than to convene a board meeting for the purpose. However, Directors were provided opportunity to discuss any concerns they had with the written resolution before its issue for signature.

At each quarterly meeting of the Board, there was a closed session held in which only the Chair and the other Non-Executive Directors participated. In certain meetings held to discuss a specific topic or topics, a closed session was not held due to limited time allocated for such meeting or the nature of the topic being considered.

The schedule of Board and Committee meetings each year is, so far as is possible, determined before the commencement of that year and all Directors or, if applicable, all Committee members, are expected to attend each meeting.

Supplementary meetings of the Board and/or the Committees are held as and when necessary. Each member of the Board receives in advance of each scheduled meeting detailed Board packages, which include an agenda based upon matters to be addressed and appropriate presentation and background materials. If a Director is unable to attend a meeting due to exceptional circumstances, he or she will nonetheless receive the meeting materials and discuss the materials with the Chief Executive Officer.

The Chair, Chief Executive Officer and senior management team work together to ensure that the Directors receive relevant information to enable them to discharge their duties and that such information is accurate, timely and clear. This information includes quarterly management accounts containing analysis of performance against budget as well as a summary of the operational performance of each of our businesses against its goals. Additional information is provided as appropriate for the topics being addressed at the meeting. At each meeting, the Board receives presentations from the Chief Executive Officer and, by invitation, other members of senior management as required. This ensures that all Directors are in a position to effectively monitor our overall performance, and to contribute to the development and implementation of its strategy.

The majority of Board meetings are held at our offices in Boston, Massachusetts, U.S., which gives members of the Company's senior management team, as well as the senior management of the Founded Entities, the opportunity to formally present to the Board on new technology development and business strategies. However, since the onset of the COVID-19 pandemic and throughout 2022, for the safety of the Board and the Company's employees, the vast majority of board meetings have been held by videoconference.

Certain Directors also serve on the boards of directors of our Founded Entities. These Founded Entity boards of directors meet regularly during the year, as well as on an ad hoc basis as required by business need. This service enables the Directors to have deep understanding of the businesses and contribute significantly to the strategy and oversight of these businesses.

Directors' conflicts of interest

Each Director has a statutory duty under the Companies Act 2006 (the CA 2006) to avoid a situation in which he or she has or can have a direct or indirect interest that conflicts or may potentially conflict with the interests of the Company. This duty is in addition to the continuing duty that a Director owes to the Company to disclose to the Board any transaction or arrangement under consideration by the Company in which he or she is interested. The Company's Articles of Association permit the Board to authorize conflicts or potential conflicts of interest. The Board has established procedures for managing and, where appropriate, authorizing any such conflicts or potential conflicts of interest. In deciding whether to authorize any conflict, the Directors must have regard to their general duties under the CA

2006 and their overriding obligation to act in a way they consider, in good faith, will be most likely to promote the Company's success. In addition, the Directors are able to impose limits or conditions when giving authorization to a conflict or potential conflict of interest if they think this is appropriate. The authorization of any conflict matter, and the terms of any authorization, may be reviewed by the Board at any time. The Board believes that the procedures established to deal with conflicts of interest are operating effectively.

Induction, awareness and development

In preparation for the Company's initial public offering (IPO), all Directors received an induction briefing from the Company's legal advisors on their duties and responsibilities as Directors of a publicly quoted company. The Directors also received presentations from the Company's corporate brokers prior to the IPO. In addition, in order to ensure that the Directors continue to further their understanding of the challenges facing our Founded Entities and Wholly Owned Pipeline, the Board periodically receives the presentations and reports covering the business and operations of each of our Founded Entities as well as its Wholly Owned Pipeline.

We have put in place a comprehensive induction plan for any new Directors. This program will be tailored to the needs of each individual Director and agreed with him or her so that he or she can gain a better understanding of us and our businesses. In addition, the Company facilitates sessions as appropriate with our advisors, as well as appropriate governance specialists, to ensure that any new Directors are fully aware of, and understand, their responsibilities and obligations of a publicly quoted company and of the governance framework within which they must operate.

Board effectiveness and performance evaluation

The Board periodically reviews its effectiveness and performance. The Board seeks the assistance of an independent third-party provider at least once every three years in its evaluation in compliance with the Governance Code, and will otherwise carry out an internally facilitated Board evaluation led by the Senior Independent Director, assisted by the Company Secretary, covering the effectiveness of the Board as a whole, its individual Directors and its Committees.

In addition to the above, the Non-Executive Directors, led by the Senior Independent Director, will periodically appraise the Chair's performance, following which the Senior Independent Director will provide any feedback to the Chair. The performance of each of the Directors on the Board and the performance of the committees of the Board will be reviewed by the Chair as deemed necessary. The performance of Executive Directors will be reviewed by the Board on an ongoing basis, as deemed necessary, in the absence of the Executive Director under review.

Committees of the Board

The Board has three principal committees: the Nomination Committee, the Audit Committee and the Remuneration Committee. The composition of the three principal committees of the Board and the attendance of the members throughout the year is set out in the respective committee reports contained in this Annual Report. The terms of reference of each committee are available on request from the Company Secretary and within the Investors section of our website at www.puretechhealth.com.

Internal Control

The Board fully recognizes the importance of the guidance contained in the Guidance on Risk Management, Internal Control and Related Financial and Business Reporting. Our internal controls were in place during the whole of 2022 and we are satisfied that we have adequate controls and that our internal control over financial reporting was effective for the year ended December 31, 2022. In the prior financial period ended December 31, 2021, we identified a material weakness related to the risk assessment process over the design and implementation of management review controls over the valuation of financial instruments, the completeness and accuracy of related sensitivity disclosures, the valuation of share based payment liabilities and completeness and accuracy of the tax provision. In response to this material weakness, the Company took certain steps in its remediation plan, including (i) improving the processes and internal controls related to the valuation of financial instruments and share based payment liabilities, the related sensitivity disclosures, and the tax provision, (ii) disaggregating the management review controls to address the specific risks associated with these items, and (iii) implementing more robust procedures over the documentation of the performance of these management review controls. As a result, as of December 31, 2022, we have concluded that this material weakness has been remediated and the controls are operating effectively.

The Board is responsible for establishing and monitoring internal control systems and for reviewing the effectiveness of these systems. The Board views the effective operation of a rigorous system of internal control as critical to our success; however, it recognizes that such systems are designed to manage rather than eliminate risk of failure and can provide only reasonable and not absolute assurance against material misstatement or loss. The key elements of our internal control system, all of which have been in place during the financial year and up to the date these financial statements were approved, are as follows:

Control environment and procedures

We have a clear organizational structure with defined responsibilities and accountabilities. It adopts the highest values surrounding quality, integrity and ethics, and these values are communicated clearly throughout the whole organization. Detailed written policies and procedures have been established covering key operating and compliance risk areas. These policies and procedures are reviewed and the effectiveness of the systems of internal control is assessed periodically by the Board.

Identification and evaluation of risks

The Board actively identifies and evaluates the risks inherent in the business and ensures that appropriate controls and procedures are in place to manage these risks. The Board obtains an update regarding our Wholly Owned Pipeline and all Founded Entities on a regular basis and reviews our performance and the performance of our Wholly Owned Pipeline and Founded Entities on a quarterly basis. However, the performance of business units may be reviewed more frequently if deemed appropriate.

The key risks and uncertainties we face, as well as the relevant mitigations, are set out on pages 44 to 47 and in the Additional Information section from pages 175 to 211.

Information and financial reporting systems

We evaluate and manage significant risks associated with the process for preparing consolidated accounts by having in place systems and internal controls that ensure adequate accounting records are maintained and transactions are recorded accurately and fairly to permit the preparation of financial statements in accordance with IFRS. The Board approves the annual operating budgets and regularly receives details of actual performance measured against the budget.

Principal risks and uncertainties

Our operations and the implementation of our objectives and strategy are subject to a number of key risks and uncertainties. Risks are formally reviewed by the Board at least annually and appropriate procedures are put in place to monitor and, to the extent possible, mitigate these risks.

A summary of the key risks affecting us and the steps taken to manage these risks are set out on pages 44 to 47 and in the Additional Information section from pages 175 to 211.

Political expenditure

It is the Board's policy not to incur political expenditure or otherwise make cash contributions to political parties and it has no intention of changing that policy.

2023 Annual General Meeting

The Notice of the AGM, which will be held at 11:00 am EDT (4:00 pm BST) on June 13, 2023 at the Company's headquarters at 6 Tide Street, in Boston, Massachusetts, U.S., is enclosed with this report. Details of the resolutions and the explanatory notes thereto are included with the Notice. To ensure compliance with the Governance Code, the Board proposes separate resolutions for each issue and proxy forms allow shareholders who are unable to attend the AGM to vote for or against or to withhold their vote on each resolution. In addition, to encourage shareholders to participate in the AGM process, the Company proposes to offer electronic proxy voting through the Registrar's website and through the CREST service. The results of all proxy voting will be published on our website after the AGM.

Our website at www.puretechhealth.com is the primary source of information on us. The website includes an overview of our activities, details of our businesses, and details of all of our recent announcements.

Relations with Stakeholders – Section 172 Statement

The Board recognizes its duties under Section 172 of the Companies Act 2006 and continuously has regard to how the Company's activities and decisions will impact investors, employees, those with whom it has a business relationship, the community and environment and its reputation for high standards of business conduct. In weighing all of the relevant factors, the Board, acting in good faith and fairly between members, makes decisions and takes actions that it considers will best lead to the long- term success of the Company. In accordance with Section 172, it is the responsibility of the Board as a whole to ensure that a satisfactory dialogue takes place and that the Board considers the potential impact on the Company's key stakeholders when making decisions.

The Board is committed to understanding and engaging with shareholders and other key stakeholder groups of the Company in order to maximize value and promote long-term Company success in line with our strategic objectives, as well as to promote and ensure fairness between our stakeholders. The Board believes that appropriate steps and considerations have been taken during the year so that each Director has an understanding of the various key stakeholders of the Company. The Board recognizes its responsibility to contemplate all such stakeholder needs and concerns as part of its discussions, decision-making, and in the course of taking actions and will continue to make stakeholder engagement a top priority in the coming years.

During the year, the Board assessed its current activities between the Board and its stakeholders, which demonstrated that the Board actively engages with its stakeholders and takes their various objectives into consideration when making decisions.

Stakeholder	How we engage	Key matters identified	Further information
Investors	• Our shareholders are the owners and investors in our business. We make significant efforts to engage with our shareholders and understand their objectives. We engage with our shareholders through a number of mechanisms to ensure that shareholder views are brought into the boardroom and considered in our decision-making. • The Board's primary shareholder contact is through the Chief Executive Officer. The Chair, the Senior Independent Director and other Directors, as appropriate, make themselves available for contact with major shareholders and other stakeholders in order to understand their issues and concerns. • Stakeholder engagement will often take place by the Executive Directors and senior management through investor meetings and investor roadshows, including participation at healthcare conferences and participating in fireside chats at those events, with the Board receiving regular updates by way of analysis reports on stakeholder views. • Meetings were held throughout the year with institutional shareholders. Key shareholder publications including the annual report, the full year and half year results announcements and press releases and the information for investors are available on the Company's website: www.puretechhealth.com.	• Our Board keeps its Strategy and Business Model under regular review. During the past year, the Board has engaged to carefully consider its strategy for future growth and development, in particular devoting attention to the future prospects of its business model and its listing venues and the risks and opportunities this would give to the Company's stakeholders. • The company carefully manages its expenditure and anticipates future capital needs through careful capital management and capital allocation to its Wholly Owned Programs and clinical trials as well as opportunities to secure financing from third parties, for example the SPAC transactions closed for Gelesis and Akili in January and August 2022. Our Board also carefully considers opportunities for disposal of shares held in its Founded Entities such as the disposals of shares in Karuna raising $115m in August and September 2022. • During 2022, the Board welcomed Sharon Barber-Lui to the Board as a Non-Executive Director and saw the retirement of Dame Marjorie Scardino as a Non-Executive Director. The Board seeks to ensure appropriate board structure suitable for a Company of PureTech's size. • The Board recognizes the importance of Diversity, Equity and Inclusion and is delighted to be one of the few FTSE250 companies with a female CEO.	• Governance Section of ARA (Pages 44 to 102) • ESG Report (Pages 15 to 43) • Karuna disposals (Page 48) • Remuneration Report (Pages 86 to 102) • Components of our Value (Page 6)

Stakeholder	How we engage	Key matters identified	Further information
Our People	• Our employees are crucial to the success of our business and many key decisions made by our Board have an impact on them. It is important to understand the employee perspective and ensure that we maintain an engaged workforce, as we believe that this will lead to better business results. We engage with our employees in various ways to ensure that their voice is heard in the management of our business including: – The conduct of regular Town Hall Meetings, email briefings to employees on key events as well as communication through the company intranet site and an engagement survey – The implementation of regular appraisals and personal development programs	• The Board recognizes the importance of an incentivized and engaged workforce, especially in the competitive greater Boston area. The Board engages to ensure the remuneration and benefit packages are competitive. • The Board aims to attract and retain employees through an established personal management and development program, with a view to development of the individual in an inclusive environment where employees from diverse backgrounds can thrive. • We are proud to be a company dedicated to giving life to new classes of medicine to improve the lives of patients with devastating diseases and believe we have established a business where our employees are proud to work.	• ESG Report (Pages 15 to 43) • Remuneration Report (Pages 86 to 102) • Strategic Report (Pages 3 to 14)
Community & Environment	• We are committed to supporting the communities in which we operate and the wider public. To that end, we have developed various mechanisms for engagement including: – Internships/partnerships with local universities and programs – Charitable giving – Building Certifications – Therapeutic Focus	• We are committed to improving our practices to ensure our business operates on a sustainable basis. In particular, we have created an ESG committee chaired by one of our Non-Executive Directors to guide our sustainability initiatives. Our business is a low carbon emissions, and we are committed to delivering long-term environmental sustainability. • We partner with local universities and programs to offer paid internship and externship programs, generally within technical fields in our development organization. • The company engages with local community and supports charitable causes. In particular, in 2022 and through the January 2023 post-period, PureTech made charitable contributions to Fred Hutchinson Cancer Research Center, International Rescue Committee, The Pulmonary Fibrosis Foundation (PFF) and The Greater Boston Food Bank.	• ESG Report (Pages 15 to 43)
Suppliers/ Business Partners	• Our business model creates value through partnerships and relationships with various key collaborators, and we continually evaluate how to strengthen relationships and arrangements with these institutions and individuals. Our engagement in 2022 included: – Quality updates and quality audits – Meetings with key surgeons to understand/identify potential indications and applications for therapeutics – Partnerships – Imbrium, BeiGene and Eli Lilly	• We aim to build clear and reliable supply arrangements with our contract manufacturers for clinical product supply, in particular with an emphasis on quality, especially in relation to a clinical environment. • We seek partnerships with other life sciences organizations to secure non-dilutive funding, access to development opportunities and access to materials for our clinical trials.	• Components of Our Value (Page 6) • LYT-200 (Page 11) • LYT-503/IMB-150 (Page 4)

Directors' Report for the year ended December 31, 2022

The Directors present their report and the audited consolidated financial statements for the financial year ended December 31, 2022.

Certain disclosure requirements for inclusion in this report have been incorporated by way of cross reference to the Strategic Report, the Directors' Remuneration Report and the ESG Report which should be read in conjunction with this report.

The Company was incorporated on May 8, 2015 as a public company limited by shares in the UK and has a registered office situated at 8th Floor, 20 Farringdon Street, London, EC4A 4AB, United Kingdom. The Company was admitted to the premium listing segment of the Official List of the UK Listing Authority and to trading on the main market of the London Stock Exchange on June 24, 2015. The Company's American Depository Shares, each representing 10 ordinary shares, began trading on the Nasdaq Global Market on November 16, 2020.

Directors

The membership of the Board can be found below, and biographical details of the directors can be found on pages 66 to 70 and are deemed to be incorporated into this report.

Descriptions of the terms of the directors' service contracts are set forth on page 94 and page 100 of this report.

All directors shall retire from office and, except for Christopher Viehbacher, will offer themselves for reappointment by the members at the Company's upcoming AGM.

Details of the interests of directors in the share capital of the Company as of December 31, 2022 are set out in the Annual Report on Remuneration on page 99 and Note 24 to the financial statements, located on page 164. There have been no changes in such interests from December 31, 2022 to March 31, 2023, except as specifically set forth in those sections.

Results and dividends

We generated a loss for the year ended December 31, 2022 of $37.1 million (2021: Loss of $62.7 million).

The Directors do not recommend the payment of a dividend for the year ended December 31, 2022 (2021: nil).

Share capital

As of December 31, 2022, the ordinary issued share capital of the Company stood at 278,566,306 shares of £0.01 each, including shares issuable upon conversion of outstanding ADSs, with 10,595,347 shares held in treasury by the Company under its ongoing Share Repurchase Program. Details on share capital are set out in Note 14 to the financial statements, page 148.

The Company's issued ordinary share capital comprises a single class of ordinary shares. Details on movements in issued share capital can be found in Note 14 to the financial statements, page 148.

Rights of ordinary shares

All of the Company's issued ordinary shares are fully paid up and rank pari passu in all respects and there are no special rights with regard to control of the Company. There are no restrictions on the transfer of ordinary shares or on the exercise of voting rights attached to them, which are governed by the Articles of Association and relevant UK legislation. The Directors are not aware of any agreements between holders of the Company's shares that may result in restrictions on the transfer of securities or in voting rights.

Substantial shareholders

As of March 31, 2023, the Company had been advised that the shareholders listed on page 79 hold interests of 3 percent or more in its ordinary share capital (other than interests of the Directors which are detailed on page 99 of the Directors' Remuneration Report). Other than as shown, so far as the Company (and its Directors) are aware, no other person holds or is beneficially interested in a disclosable interest in the Company.

Powers of the Directors

Subject to the Company's Articles of Association, UK legislation and any directions given by special resolution, the business of the Company is managed by the Board of Directors. Details of the matters reserved for the Board can be found in the Corporate Governance Report on page 71.

Articles of Association

The Articles of Association of the Company can only be amended by special resolution at a general meeting of the shareholders. No amendments are proposed at The 2023 AGM.

Governance

The following have served as Directors of the Company during the 2022 financial year.

Name	Role	Age (as of December 31, 2022)
Mr. Christopher Viehbacher	Non-Executive Chair	62
Ms. Daphne Zohar	Chief Executive Officer	52
Dame Marjorie Scardino	Senior Independent Director	75
Dr. Robert Langer	Non-Executive Director	74
Dr. Raju Kucherlapati	Independent Non-Executive Director	79
Dr. John LaMattina	Independent Non-Executive Director	72
Ms. Kiran Mazumdar-Shaw	Independent Non-Executive Director	69
Dr. Bharatt Chowrira	President; Chief Business, Finance and Operating Officer; Company Secretary	57
Ms. Sharon Barber-Lui	Independent Non-Executive Director (appointed March 24, 2022)	49

Directors' liabilities (Directors' indemnities)

As at the date of this report, the Company has granted qualifying third party indemnities to each of its Directors against any liability that attaches to them in defending proceedings brought against them, to the extent permitted by the Companies Act. In addition, Directors and officers of the Company and its Founded Entities have been and continue to be covered by Directors' and officers' liability insurance.

See further description of indemnity and insurance on page 73.

Political donations

No political contributions/donations for political purposes were made by the Company or any of our affiliate companies to any political party, politician, elected official or candidate for public office during the financial year ended December 31, 2022 (2021: nil).

Significant agreements

There are no agreements between the Company or any of our affiliate companies and any of its employees or any Director which provide for compensation to be paid to an employee or a Director for loss of office as a consequence of a takeover of the Company.

Compliance with the UK Corporate Governance Code

The Directors are committed to a high standard of corporate governance and compliance with the best practice of the UK Corporate Governance Code (Governance Code) published in July 2018. The Governance Code is available at the Financial Reporting Council website at www.frc.org.uk.

The Directors consider that the Company has, throughout the year ended December 31, 2022, applied the main principles and complied with the provisions set out in the Governance Code with the following exception: contrary to provision 24 of the Governance Code, the Chair, Mr. Christopher Viehbacher, was also Chair of the Audit Committee through April 26, 2022 and a member of the Audit Committee for all of 2022. The Board believes that Mr. Viehbacher's professional background and experience, together with his past participation on such committee for the past five years, made him a valuable member of the Audit Committee and that his membership was in the best interests of the Company's shareholders. Mr. Viehbacher was appointed Chair in September 2019. Immediately following the publication of its Annual Report and Accounts for the year ended December 31, 2021 on April 26, 2022, Ms. Sharon Barber-Lui became the Chair of the Audit Committee, and Mr. Viehbacher stepped down as the Chair of the Audit Committee but remained a member thereof.

Further explanation as to how the provisions set out in the Governance Code have been applied by the Company is provided in this Report, the Report of the Nomination Committee and the Report of the Audit Committee.

Financial instruments

The financial risk management and internal control processes and policies, and exposure to the risks associated with financial instruments can be found in Note 16 to the financial statements and the Corporate Governance section of the Annual Report on page 83.

Sustainable development and environmental matters

Details of the Company's policies and performance, as well as disclosures concerning GHG emissions, are provided in the ESG Report on pages 15 to 43.

Shareholder	%
Invesco Asset Management Limited	23.32
Lansdowne Partners International Limited	8.81
Baillie Gifford & Co	8.09
M&G Investment Management, LTD	4.22
Vanguard Group	4.04
Patient Capital Management	3.52
Recordati SPA Pharmaceutical Company	3.43

Related party transactions

Details of related party transactions can be found in Note 24 of the financial statements on pages 163 to 164.

Share buyback

At the 2021 AGM and the 2022 AGM, shareholders gave the Company authority to purchase shares from the market up to an amount equal to 10% of the Company's issued share capital at that time. The authority granted from the 2021 AGM expired as of the end of the 2022 AGM, and the authority from the 2022 AGM expires as of the earlier of the end of the 2023 AGM or close of business on 15 September 2023. During 2022, 10,595,347 ordinary shares were purchased by the company and held as treasury shares. Such treasury shares do not receive dividend rights and may not exercise voting rights.

Future business developments

Information on the Company and its Wholly Owned Pipeline and Founded Entities' future developments can be found in the Strategic Report on pages 7 to 14.

Risk and internal controls

The principal risks we face are set out on pages 44 to 47 and in the Additional Information section from pages 175 to 211. The Audit Committee's assessment of internal controls is laid out on page 84.

Subsequent Events

Information related to events occurring after December 31, 2022 can be found in footnote 26 to the consolidated financial statements.

Research and Development

Information on our research and development activities can be found in the Strategic Report on pages 7 to 14.

Going concern

As of December 31, 2022, the directors had a reasonable expectation that we had adequate resources to continue in operational existence into the first quarter of 2026.

* Represents an entity that is not a major subsidiary undertaking of the Company.

Annual General Meeting

The Notice of the AGM, which will be held at 11:00 am EDT (4:00 pm BST) on June 13, 2023 at the Company's headquarters at 6 Tide Street, in Boston, Massachusetts, U.S. is enclosed with this report. Details of the resolutions and the explanatory notes thereto are included with the Notice. To ensure compliance with the Governance Code, the Board proposes separate resolutions for each issue and proxy forms allow shareholders who are unable to attend the AGM to vote for or against or to withhold their vote on each resolution. In addition, to encourage shareholders to participate in the AGM process, the Company proposes to offer electronic proxy voting through the Registrar's website and through the CREST service. The results of all proxy voting will be published on our website after the AGM.

The Notice of the Meeting, together with an explanation of the items of business, will be contained in a circular to shareholders to be dated April 28, 2023.

Pension schemes

Information on the Company's 401K Plan can be found in the Annual Report on Remuneration on page 90.

Disclosure of information under Listing Rule 9.8.4R

For the purposes of LR 9.8.4R, the information required to be disclosed can be found in the sections of the Annual Report and Financial Statements listed in the table below.

Listing Rule Requirement	Location in Annual Report
A statement of the amount of interest capitalized during the period under review and details of any related tax relief.	N/A
Information required in relation to the publication of unaudited financial information.	N/A
Details of any long-term incentive schemes.	Directors' Remuneration Report, page 90
Details of any arrangements under which a Director has waived emoluments, or agreed to waive any future emoluments, from the Company.	N/A
Details of any non-pre-emptive issues of equity for cash.	N/A
Details of any non-pre-emptive issues of equity for cash by any unlisted major subsidiary undertaking.	Directors' Report, page 78
Details of parent participation in a placing by a listed subsidiary.	N/A
Details of any contract of significance in which a Director is or was materially interested.	N/A
Details of any contract of significance between the Company (or one of its subsidiaries) and a controlling shareholder.	N/A
Details of any provision of services by a controlling shareholder.	N/A
Details of waiver of dividends or future dividends by a shareholder.	N/A
Where a shareholder has agreed to waive dividends, details of such waiver, together with those relating to dividends which are payable during the period under review.	N/A
Board statements in respect of relationship agreement with the controlling shareholder.	N/A

Whistleblowing, anti-bribery and corruption

We seek at all times to conduct our business with the highest standards of integrity and honesty. We also have an anti-bribery and corruption policy which prohibits our employees from engaging in bribery or any other form of corruption. In addition, we have a whistleblowing policy under which staff are encouraged to report to the Chief Executive Officer or the President, any alleged wrongdoing, breach of a legal obligation or improper conduct by or on the part of us or any of our officers, Directors, employees, consultants or advisors.

Appointment of auditor

KPMG has been our auditor since 2015 and during the year the Audit Committee recommended to the Board that the audit tender process be accelerated with a view to appointing new auditors. The Audit Committee oversaw a formal and comprehensive tender process for the appointment of the external auditor. The tender offer process enabled the Audit Committee to recommend to the Board the appointment of PricewaterhouseCoopers LLP ("PwC") as the preferred new auditor. Based on this recommendation, the Board is proposing that PwC be appointed as external auditor of Company, subject to shareholder approval at the Company's forthcoming AGM on June 13, 2023. The Audit Committee will oversee handover and induction arrangements to ensure a smooth transition.

Disclosure of information to auditor

The Directors who held office at the date of approval of this Directors' report confirm that:

- so far as the Director is aware, there is no relevant audit information of which the Company's Auditor is unaware; and
- the Director has taken all steps that he/she ought to have taken as a Director in order to make himself/herself aware of any relevant audit information and to establish that the Company's Auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of Section 418 of the CA 2006.

Statement of Directors' responsibilities in respect of the Annual Report and the financial statements

The Directors are responsible for preparing the Annual Report and the Group and parent Company financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare Group and parent Company financial statements for each financial year. Under that law they are required to prepare the Group financial statements in accordance with UK-adopted international accounting standards and applicable law and have elected to prepare the parent Company financial statements on the same basis. In addition, the Group financial statements are required under the UK Disclosure Guidance and Transparency Rules to be prepared in accordance with the UK-adopted international accounting standards.

Under Company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and parent Company and of the Group's profit or loss for that period. In preparing each of the Group and parent Company financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable, relevant and reliable;
- state whether they have been prepared in accordance with the UK-adopted international accounting standards;
- assess the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the parent Company and enable them to ensure that its financial statements comply with the Companies Act 2006. They are responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

Under applicable law and regulations, the Directors are also responsible for preparing a Strategic Report, Directors' Report, Directors' Remuneration Report and Corporate Governance Statement that complies with that law and those regulations.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Responsibility statement of the Directors in respect of the annual financial report

We confirm that to the best of our knowledge:

- the financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole; and
- the strategic report includes a fair review of the development and performance of the business and the position of the issuer and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

We consider the annual report and accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy.

By Order of the Board

Daphne Zohar
Founder, Chief Executive Officer and Director

April 27, 2023

Report of the Nomination Committee

Raju Kucherlapati, Ph.D.
Chair, Nomination Committee

Committee responsibilities

The Nomination Committee assists the Board in discharging its responsibilities relating to the composition and make-up of the Board and any Committees of the Board. It is also responsible for periodically reviewing the Board's structure and identifying potential candidates to be appointed as Directors or Committee members as the need may arise. The Nomination Committee is responsible for evaluating the balance of skills, knowledge and experience and the size, structure and composition of the Board and Committees of the Board, retirements and appointments of additional and replacement Directors and Committee members, and makes appropriate recommendations to the Board on such matters. A full copy of the Committee's Terms of Reference is available on request from the Company Secretary and within the Investor's section on Company's website at www.puretechhealth.com.

Committee membership

The Nomination Committee consisted of Dame Marjorie Scardino, who served as the committee's Chair, Dr. Robert Langer, and Ms. Kiran Mazumdar-Shaw during 2022. Dame Scardino retired from the Board as of the close of business of December 31, 2022, at which time Dr. Raju Kucherlapati was appointed to serve on and chair the committee. The biographies of the Nomination Committee members can be found on pages 66 to 67.

The Governance Code requires that a majority of the members of a nomination committee should be independent Non-Executive Directors. In making their determination for the year 2022, the Board regarded Dame Marjorie Scardino, Dr. Langer and Ms. Mazumdar-Shaw as meeting the independence criteria set out in the Governance Code as it is applied to their service on the Nomination Committee. In reaching this determination, the Board duly considered (i) their directorships and links with other Directors through their involvement in other Founded Entities; (ii) their equity interests in PureTech Health and/or the Founded Entities; and (iii) the circumstance that Dr. Langer is a founding Director of the Company. The Board also duly considered the extent to which these matters may impact their service on the Nomination Committee. After such consideration, the Board has determined Dame Marjorie Scardino, Dr. Langer and Ms. Mazumdar-Shaw to be independent in character and judgement and free from relationships or circumstances which might affect, or appear to affect, the Directors' judgement in their service on the Nomination Committee. The Board further regards Dr. Kucherlapati as independent on the basis of the Governance Code criteria despite his serving as interim Chair of the Board following the Company's 2023 AGM in light of the criteria listed above and the fact that Dr. Kucherlapati's appointment as Chair of the Board is expressly temporary in nature.

The Nomination Committee meets as required to initiate the selection process of, and make recommendations to, the Board with regard to the appointment of new Directors. During 2022, the Nomination Committee met one time to review the structure, size and composition of the Board in light of the requirements of the Governance Code. Ms. Mazumdar-Shaw and Dr. Langer participated in the meeting. Dr. Kucherlapati, the Chief Executive Officer and the President were invited to and attended the meeting.

In light of retirement of Dame Scardino and the upcoming departure of Mr. Viehbacher, the committee has undertaken a search to identify a new Board Chair as well as a replacement for Dame Scardino. The search is intended to be both expeditious and thorough, and it is aimed at replacing these outgoing Directors with individuals of the same stature while focusing on the key skill sets needed to complement the current Board and guide the Company in its continued evolution. The Company will provide updates in due course but does not currently expect that such new Directors will be in place at the time of the 2023 AGM.

Diversity policy

Diversity within the Company's Board is essential in maximizing its effectiveness, as it enriches debates, business planning and problem-solving. The Company approaches diversity in its widest sense so as to recruit the best talent available, based on merit and assessed against objective criteria of skills, knowledge, independence and experience as well as other criteria such as gender, age and ethnicity. The Company will adhere to a strategy of recruiting individuals who meet these criteria as it searches for additional independent Non-Executive Directors to the Board, as discussed below. The Committee's primary objective is to ensure that the Company maintains the strongest possible leadership.

Information regarding the Company's diversity efforts can be found in the ESG Report on pages 15 to 43.

Board and Committee evaluation

Information regarding the evaluation of the Board and its Committees can be found on page 74.

Report of the Audit Committee

Ms. Sharon Barber-Lui
Chair, Audit Committee

Committee responsibilities

The Audit Committee monitors the integrity of our financial statements and reviews all proposed annual and half-yearly results announcements to be made by us with consideration being given to any significant financial reporting judgements contained in them. The Committee also advises the Board on whether it believes the annual report and accounts, taken as a whole, are fair, balanced and understandable and provide the information necessary for shareholders to assess the Company's position and performance, business model and strategy. The Committee also considers internal controls, compliance with legal requirements, the FCA's Listing Rules, Disclosure Guidance and Transparency Rules, and reviews any recommendations from the Group's Auditor regarding improvements to internal controls and the adequacy of resources within our finance function. A full copy of the Committee's Terms of Reference is available on request from the Company Secretary and within the Investor's section on the Company's website at www.puretechhealth.com.

Committee membership

The Committee consisted of three independent Non-Executive Directors, Mr. Christopher Viehbacher, Dr. Raju Kucherlapati and Dame Marjorie Scardino, until Ms. Sharon Barber-Lui joined the Committee upon her appointment to the Board on March 24, 2022. Mr. Viehbacher served as Chair of the Committee through April 26, 2022, at which point Ms. Barber-Lui became Chair of the committee. Mr. Viehbacher has experience as a Chartered Accountant and has held numerous senior executive positions in his career. The Board has deemed this to be recent and relevant financial experience, qualifying him to be Chair of the Committee. Ms. Barber-Lui has accounting experience, is currently the Senior Vice President of Finance at EQRx, Inc., a publicly-traded U.S. company (Nasdaq: EQRX), and has held a number of senior finance and executive leadership positions in her career. The Board has deemed this to be recent and relevant financial experience qualifying her to be Chair of the Committee. The biographies of the Committee members can be found on pages 66 to 67. The Committee met three times during the year, with Mr. Viehbacher, Dr. Kucherlapati and Ms. Barber-Lui each attending all three meetings and Dame Scardino attending one of the three meetings. Dame Scardino was no longer a member of the Committee following her retirement as a Director on December 31, 2022. Dr. John LaMattina will join the Audit Committee at such time when Mr. Viehbacher is no longer a member of the Audit Committee, unless another Non-Executive Director is appointed. The Chief Financial Officer or President were invited to and attended all of the meetings, and the external Auditor was invited to and attended two of the three meetings. The Chief Executive Officer also attended certain of the meetings. When appropriate, the Committee met with the Auditor without any members of the executive management team being present.

Activities during the year

During the year, the Committee recommended to the Board that the audit tender process be accelerated with a view to appointing new auditors. The Audit Committee oversaw a formal and comprehensive tender process for the appointment of the external auditor. The tender offer process enabled the Audit Committee to recommend to the Board the appointment of PwC as the preferred new auditor. Based on this recommendation, the Board is proposing that PwC be appointed to as external auditor of the Company, subject to shareholder approval at the Company's forthcoming AGM in June 2023. The Audit Committee will oversee handover and induction arrangements to ensure a smooth transition. Information on the tender process can be found further below.

The Committee also undertook the normal recurring items, the most important of which are noted below.

Significant issues considered in relation to the financial statements

The Committee considered, in conjunction with management and the external auditor, the significant areas of estimation, judgement and possible error in preparing the financial statements and disclosures, discussed how these were addressed and approved the conclusions of this work. The principal areas of focus in this regard were:

Valuation of financial instruments; investments in non-traded financial assets and, preferred share financial liabilities

An area of material judgement in our financial statements and, therefore audit risk, relates to the valuation of third party held preferred shares classified as liabilities, which at year end had a carrying value totaling $27 million (2021 – $174 million), as well as investments held at fair value that do not have a quoted active market price which at year end had a carrying value totaling $13 million (2021 – $240 million). We considered the underlying economics of the valuations and sought external expertise in determining the appropriate valuation of the financial liabilities and financial investments. These valuations rely, in large part, on the estimated possible expected returns on the financial instruments and the values of recent transactions. These values also determine the amount of gain (loss) on the financial instruments. The Committee believes that we considered the pertinent terms and underlying economics of each of the financial instruments, as well as the advice of external experts, and as such concluded that the financial Instruments were appropriately recorded.

Recoverability of investments in subsidiaries held by the Parent Company

The significant issue is the recoverability of the investment by the Company, due to its materiality in the context of the total assets of the Parent Company. The carrying value of the Investment of the Parent Company in its subsidiary is supported by our underlying assets and our market capitalization adjusted for the net assets held at the Parent level. The Committee was satisfied with the conclusion reached.

Regulatory compliance

Ensuring compliance for FCA regulated businesses also represents an important control risk from the perspective of the Committee. We engage with outside counsel and other advisors on a regular basis to ensure compliance with legal requirements.

Review of Annual Report and Accounts and Half-yearly Report

The Committee carried out a thorough review of our 2022 Annual Report and Accounts and our 2022 Half-yearly Report resulting in the recommendation of both for approval by the Board. In carrying out its review, the Committee gave particular consideration to whether the Annual Report, taken as a whole, was fair, balanced and understandable, concluding that it was. It did this primarily through consideration of the reporting of our business model and strategy, the competitive landscape in which it operates, the significant risks it faces, the progress made against its strategic objectives and the progress made by, and changes in fair value of, its Founded Entities during the year.

Going concern

At least annually, the Committee considers the going concern principle on which the financial statements are prepared. As a business which seeks to fund the development of its Wholly Owned Pipeline, as well as support its Founded Entities with further capital, the business model is currently inherently cash consuming.

As of December 31, 2022, we had sufficient operational funding to extend operations over a three-year period into the first quarter of 2026.

Therefore, while an inability of the Wholly Owned Pipeline and Founded Entities to raise funds through equity financings with outside investors, strategic arrangements, licensing deals or debt facilities may require us to modify our level of capital deployment into our Wholly Owned Pipeline and Founded Entities or to more actively seek to monetize one or more Founded Entities, it would not threaten our viability overall.

Compliance

The Committee has had a role in supporting our compliance with the Governance Code, which applies to us for the 2022 financial year. The Board has included a statement regarding our longer-term viability on page 48. The Committee worked with management and assessed that there is a robust process in place to support the statement made by the Board.

Similarly, the Committee worked with management to ensure that the current processes underpinning its oversight of internal controls provide appropriate support for the Board's statement on the effectiveness of risk management and internal controls.

Financial Reporting Council correspondence

During 2022, the company received a letter from the Financial Reporting Council (FRC) in relation to its limited scope review of our Annual Report and Accounts for the year ended December 31, 2022 in accordance with Part 2 of the FRC Corporate Reporting Review Operating Procedures. Based on such review, the FRC had no questions or queries that they wished to raise with us at this stage. The letter also noted that certain areas of the disclosure on deferred tax assets were an example of better practice. The nature of the FRC review is that it provides no assurance that the annual report and accounts are correct in all material respects. The FRC's role is not to verify the information but is to consider compliance with reporting requirements.

Risk and internal controls

The principal risks we face are set out on pages 44 to 47 and in the Additional Information section from pages 175 to 211.

The Committee has directed that management engage in a continuous process to review internal controls around financial reporting and safeguarding of assets. Management has engaged external advisors to complete internal control testing on behalf of management for the 2022 financial year and the results were presented to the Committee.

In the financial period ended December 31, 2021, we identified a material weakness related to the risk assessment process over the design and implementation of management review controls over the valuation of financial instruments, the completeness and accuracy of related sensitivity disclosures, the valuation of share-based payment liabilities and completeness and accuracy of the tax provision. In response to this material weakness, the Company took certain steps in its remediation plan, including (i) improving the processes and internal controls related to the valuation of financial instruments and share based payment liabilities, the related sensitivity disclosures, and the tax provision, (ii) disaggregating the management review controls to address the specific risks associated with these items, and (iii) implementing more robust procedures over the documentation of the performance of these management review controls. As a result, as of December 31, 2022, we have concluded that this material weakness has been remediated and the controls are operating effectively.

Based on the above, we have satisfied ourselves that we have adequate controls and that our internal control over financial reporting is effective for the year ended 31 December 2022.

We have a formal whistleblowing policy. The Committee is satisfied that the policy has been designed to encourage staff to report suspected wrongdoing as soon as possible, to provide staff with guidance on how to raise those concerns, and to ensure staff that they should be able to raise genuine concerns without fear of reprisals, even if they turn out to be mistaken.

Internal audit

We do not maintain a separate internal audit function. This is principally due to our size, where close control over operations is exercised by a small number of executives. In assessing the need for an internal audit function, the Committee considered the risk assessment performed by management to identify key areas of assurance and the whole system of internal financial and operational controls. The Company achieves internal assurance by

performing the risk assessment of the key areas of assurance and maintaining related key internal controls, as well as engaging external advisors to perform internal control testing, as described above.

External audit

We have engaged KPMG LLP as our Auditor since 2015. The current audit partner is Robert Seale who has been our audit partner since June 2019.

The effectiveness of the external audit process is dependent on appropriate risk identification. In October 2022, the Committee discussed the Auditor's audit plan for 2022. This included a summary of the proposed audit scope and a summary of what the Auditor considered to be the most significant financial reporting risks facing us together with the Auditor's proposed audit approach to these significant risk areas. The main areas of audit focus for the year were (a) Valuation of financial instruments preferred share financial liabilities and non-traded investments held at fair value and (b) the valuation of investments held by the Parent Company.

Appointment and independence

The Committee advises the Board on the appointment of the external Auditor and on its remuneration both for audit and non-audit work, and discusses the nature, scope and results of the audit with the external Auditor. The Committee keeps under review the cost-effectiveness and the independence and objectivity of the external Auditor. Controls in place to ensure this include monitoring the independence and effectiveness of the audit, a policy on the engagement of the external Auditor to supply non-audit services, and a review of the scope of the audit and fee and performance of the external Auditor.

Audit Tender

KPMG has been our auditors since 2015 and during the year we recommended to the Board that the audit tender process be accelerated with a view to appointing new auditors. As well as KPMG, two other firms were invited to submit tenders. The audit tender process was led by me as Chair of the Audit Committee and a robust process was carried out. A Request for Proposal (RFP) was issued and written proposals were provided by the tendering parties.

We had a common set of criteria for evaluating the proposals including, among other things:

- Audit quality record and Audit Inspection Reports from the FRC and PCAOB.
- The lead partner and their audit team, including team makeup and relevant experience with dual-listed companies and applicable accounting standards and internal control over financial reporting standards.
- Sector experience.
- Proposed audit plan and approach to resolving issues or matters of judgement.
- Transition experience and plans.
- Use of technology.

The potential audit firms participated in meetings with management, which provided an opportunity for the firms to ask questions arising from their review of the data room, as well as enabling management to interact directly with each potential audit team.

The proposals presented by the potential audit firms were subject to detailed evaluation and discussion which enabled us to recommend to the Board the appointment of PwC as the preferred new auditor. Based on this recommendation, the Board is proposing that PwC be appointed as external auditor of the Company, subject to shareholder approval at the Company's forthcoming AGM in June 2023. The Audit Committee will oversee handover and induction arrangements to ensure a smooth transition. It is expected that PwC will present their 2023 audit plan to the Audit Committee following their appointment, with a view to undertaking the 2023 interim review and year end audit.

Non-audit work

The Committee approves all fees paid to the Auditor for non-audit work.

Where appropriate, the Committee sanctions the use of KPMG LLP for non-audit services in accordance with our non-audit services policy. During 2022 KPMG LLP did not provide any non-audit related services. Therefore, the ratio of non-audit work to audit work was nil, which the Committee is satisfied does not breach the independence of KPMG LLP.

Sharon Barber-Lui
Chair of Audit Committee

April 27, 2023

Directors' Remuneration Report for the year ended December 31, 2022

Dr. John LaMattina
Chair,
Remuneration
Committee

The Directors' Remuneration Report is split into three sections, namely:

- This Annual Statement: summarizing and explaining the major decisions on Directors' remuneration in the year;
- The Directors' Remuneration Policy: setting out the framework for remuneration for our Directors on pages 90 to 94; and
- The Annual Report on Remuneration: setting out the implementation of the Remuneration Policy in the year ended December 31, 2022 and the intended implementation for the year ending December 31, 2023 on pages 95 to 102.

The current Directors' Remuneration Policy was last approved at the 2021 AGM, and such approval is effective until the 2024 AGM. The Directors' Remuneration Report (excluding that part of the report containing the Directors' Remuneration Policy on pages 90 to 94) will be subject to a shareholder vote at the 2023 AGM. This vote is advisory only and does not affect the actual historical remuneration paid to any individual Director. We will also be asking shareholders to approve a separate AGM proposal to introduce a new Performance Share Plan ("PSP"), as explained below.

Committee responsibilities

The Remuneration Committee's primary purpose is to assist the Board in determining the Company's remuneration policies. The Remuneration Committee has the responsibility for setting the remuneration policy for all Executive Directors and the Chairman of the Company, including pension rights and compensation payments, and in determining such policy must take into account all factors which it deems necessary including regulatory requirements, with the objective of attracting, retaining and motivating executive management having regard to views of shareholders and stakeholders and the risk appetite of the Company and alignment to the Company's long term goals and strategic plan. The Remuneration Committee also recommends and monitors the level and structure of remuneration for senior management. The Remuneration Committee shall, in consultation with the Chairman and/or the Chief Executive Officer, determine the total individual remuneration package of each Executive Director, including share awards. The Remuneration Committee shall also have regard to current information for remuneration in other companies of comparable scale and complexity and can appoint remuneration consultants to assist in such process. The Remuneration Committee also has responsibility to review the design of all share incentive plans and determine awards under such plans. A full copy of the Remuneration Committee's Terms of Reference is available on request from the Company Secretary and within the Investors section of the Company's website at www.puretechhealth.com.

Committee membership

The Remuneration Committee consists of Dr. Kucherlapati, Dr. LaMattina and Ms. Mazumdar-Shaw, with Dr. LaMattina serving as Chair of the Committee. The biographies of the Committee members can be found on pages 66 to 67. The Committee met three times during the year, with each Committee member in attendance for all three meetings. The Committee also acted by unanimous written consent three times during the year. The Chief Executive Officer and the President were invited to all of the meetings, with Ms. Zohar attending each meeting and Dr. Chowrira attending two of the three meetings. However, no Executive Director was permitted to participate in discussions or decisions about his or her personal remuneration.

Our Remuneration Policy

The success of PureTech depends on the motivation and retention of our highly skilled workforce with significant expertise across a range of science and technology disciplines, as well as our highly-experienced management team and seasoned Directors. PureTech's Remuneration Policy is therefore an important part of our business strategy. Our guiding principle is to provide market competitive remuneration packages, including with respect to cash compensation in the form of base salary, annual bonuses and benefits as well as share based compensation, benchmarked against data generated from our local markets to enable us to put together and retain a top tier team.

The Directors' Remuneration Policy was approved by shareholders at the 2021 AGM with 83.9% support, and the Remuneration Report was approved by shareholders at the 2022 AGM with 86.2% support. Whilst the Committee was pleased with the support received in each instance, it recognizes that some shareholders had concerns with aspects of our approach. The Committee recognizes that the quantum of long-term share awards may be higher than the norm in the UK market but believes that such awards are near the median of peer companies in Boston, Massachusetts, the largest biotechnology cluster in the world and where the Company is headquartered. Share based remuneration is a vital component of the remuneration packages of both executives and the Board of Directors, as well as for our broader employee base, and allows us to compete for, attract and retain talent in the U.S. market.

We remain committed to long-term performance-based remuneration delivered through the PSP and believe that our current remuneration policy provides an appropriate framework to incentivize and motivate our senior management team with competitive U.S. remuneration packages, while also ensuring the overall structure of the PSP is aligned to UK practice.

All tables within the Directors' Remuneration Report are audited under the International Standards on Auditing (UK) ("ISAs (UK)") unless otherwise noted.

Objectives of the Remuneration Policy for our CEO and Senior Executives

In the construction of our Executive Director Remuneration Policy, the Committee paid particular regard to the market practice of U.S. peer companies to ensure that packages are competitive, recognizing the predominantly U.S. market in which we compete for talent. At the same time, the structure of the packages was designed to be in line with the principles of the UK Corporate Governance Code and best practice.

The key aims of the Remuneration Policy and the Code principles to which they relate are as follows:

- promote our long-term success (Code principle: Proportionality);
- attract, retain and motivate high caliber senior management and focus them on the delivery of our long-term strategic and business objectives (Proportionality, alignment to culture and risk);
- be simple and understandable, both externally and internally (Clarity, simplicity, predictability and proportionality);
- achieve consistency of approach across senior management to the extent appropriate and informed by relevant market benchmarks (Clarity and alignment to culture); and
- encourage widespread equity ownership across the executive team to ensure a long-term focus and alignment of interest with shareholders (Alignment to culture, risk).

Performance and reward in 2022

During 2022, PureTech delivered strong execution and achievement of key strategic and financial goals, which has been reflected in the annual bonus outcome. The Company delivered substantial growth and generated momentum to support future growth in the coming years as our balance sheet, Founded Entities equity and royalty stakes, and Wholly Owned programs position PureTech with the strength to build substantial value for shareholders in the current environment. This growth is due in large part to (i) significant development and advancement of our Wholly Owned Pipeline and activities initiated or progressed to potentially bring these innovative therapies to market, (ii) generation of over $115 million of non-dilutive cash income in 2022 from the sale of equity holdings in Founded Entities, (iii) completion of various strategic sourcing and strategic planning initiatives with the forward looking goal to enhance shareholder value, (iv) substantial development and expansion of the Company's intellectual property portfolio and (v) key support provided to the Founded Entities as their businesses progress and, in certain cases, execute key transactions or financings. This increase in value, together with management's operational performance at PureTech and within the Wholly Owned Pipeline and Founded Entities, resulted in the Remuneration Committee approving 90% of the target performance goals. In line with our standard approach, the Committee then reviewed the overall performance of the Company and the individual Executive Directors before determining the final bonus payout.

The Committee considered operational performance, the overall growth of the business during the year, the extent to which the target performance goals had in some cases been exceeded and the individual contributions of the Executive Directors. Following this exercise, the Committee determined that a bonus equal to 90% of target (or 45% of base salary) was to be awarded to the Executive Directors. The Committee is of the view that this is appropriate in recognizing the Executive Directors' achievements in 2022. See highlights of 2022 on pages 1 to 5.

In relation to the PSP, PureTech's performance over the last three financial years was very strong in terms of achievement of strategic objectives despite such performance not being rewarded with an increase in the Company's share price. Overall, the share price declined from an average price of 261 pence during the last three months of 2019 to an average price of 253 pence during the last three months of 2022. However, strong strategic performance over the three-year performance period resulted in the vesting of 24.2 percent of the PSP awards granted to the executive management team, including the two Executive Directors, in 2020.

For the year ended December 31, 2022, the Committee believes the Remuneration Policy operated as intended and that remuneration outcomes are appropriate, taking into account outcomes throughout the business, company performance and the stakeholder experience. No discretion has been exercised in relation to the annual bonus or PSP vesting outcome.

The year ahead

For 2023, the following key decisions have been made in relation to how the Policy will be implemented:

- Base salaries for the Executive Directors will be increased by 8.5 percent, which is slightly below the average increase for the general workforce taking into consideration a number of factors, with a primary consideration being the current inflationary pressures in the United States;
- The annual bonus target and maximum will remain at 50 percent and 100 percent of base salary, respectively; and
- The grants of PSP awards in 2023 will be at levels of 600 percent of base salary for the Chief Executive Officer and 300 percent of salary for the President, in line with the limits as set out in the Policy.

Operation of the Performance Share Plan

In addition to matters relating to Executive Directors' remuneration, the Committee also considers the use of equity compensation throughout the whole organization. PureTech grants its employees awards of performance shares and restricted shares under the PSP as well as market-value stock options. In line with the rules of the PSP, the number of new shares that can be issued to satisfy equity awards is limited to 10% of the issued share capital over a 10-year period, consistent with UK standard practice and the expectations of UK institutional investors, which limitation was initially put into place when the plan was implemented in 2015 following PureTech's initial public offering.

We will have granted awards that will have used up substantially all of the current 10% dilution limit by the time of the 2023 AGM. While a non-trivial portion of these may ultimately never be issued into the market as ordinary shares due to forfeitures, cancellations or tax withholdings, among other reasons, we believe it is imperative to act now to set new dilution limits to ensure we can meet our obligations, appropriately incentivise our workforce and attract and retain talent as we continue to strive to deliver long-term shareholder value. In addition, we have not raised dilutive funding in the past five years, which would have increased our overall share capital. This contributes to our need to adjust our approach to dilution at the current time.

The Company is proposing to implement a new approach to equity dilution, more in line with its peer U.S. listed companies, which will provide a level of additional flexibility which is considered vital for us to be able to compete for talent in our core markets, while retaining governance protections appropriate for a UK-listed company. The Company is proposing new dilution limits for the issue of new shares under equity plans. Essentially, the current "10% in 10 years" limit will be extinguished as of the 2023 AGM, and a new forward-looking limit of 10% of the issued share capital over the next 5 years will be instituted for all awards from the 2023 AGM. Any forfeitures, cancellations, or withholdings from shares granted under the prior extinguished limit will not be eligible to be re-granted at any time after the 2023 AGM under the new limit. As part of the change, we will also remove the separate "5% in 10 years" dilution limit applicable to awards granted to senior employees such as Executive Directors, to ensure we have full flexibility in operating the plan.

In order to implement this new approach to dilution, we will be asking shareholders to approve a resolution to adopt a new performance share plan at the AGM.

Our more detailed rationale for the changes is as follows:

- Equity is a critically important part of our compensation packages. As a company operating in the US biopharma space, we have an in-depth programme to discover, develop and commercialise new medicines through our own pipeline and occasionally invest in other entities with exceptional potential. This includes a number of candidates in our wholly owned pipeline that we are advancing ourselves, which has required us to expand our team with experienced professional leadership at and immediately below the executive level. The development of this wholly owned pipeline is the most critical aspect of our long-term business strategy and has the potential to deliver tremendous value to shareholders. Our business, programs, and approach to new medicines is covered on pages 1 to 14 of this Report. Developing pharmaceutical therapies is expensive and cash-intensive, and our inherent preference in line with our capital allocation strategy is for using cash resources primarily to fund our own R&D and investments and to return capital to shareholders where possible. As a result, and in common with other innovative pharmaceutical and biotechnology companies, there is a greater weight on equity in our compensation programmes than across industry more widely, and this is based on newly issued shares, rather than using cash to purchase shares for employee programmes.
- We therefore need to have the appropriate capacity to issue equity to our employees in addition to the cash remuneration we provide. Furthermore, to ensure we can attract and retain talent at all levels of our highly skilled workforce we have a policy of granting equity throughout the whole organisation, both upon hire and on an ongoing basis in line with market trends. PureTech has significantly built out its overall team at all levels over the period since listing in 2015. All of this has put additional pressure on the existing dilution limits.
- PureTech has not raised capital by issuing new shares since March 2018. This conservative approach to funding has meant that the number of shares outstanding has remained consistent for the past five years. (An equity raise would have the result of increasing the share capital, and thus provide extra headroom in the dilution limits.) Instead, we have raised significant non-dilutive funding (over $680m) through the sale of our equity interests in our Founded Entities to invest in our Wholly Owned Pipeline as well as giving us flexibility to directly return value to shareholders through our stock buyback programme.
- Our compensation approach is not unique to PureTech: many U.S. pharma and biotech companies operate in a similar fashion, preferring equity rather than cash compensation. Although PureTech has a UK listing, we are based in Boston, the largest biotechnology cluster in the United States, and our key comparators are US companies with a similar focus. US companies in our sector use equity incentives significantly more than the wider US market, or UK companies of a similar size. The annual median gross burn rate of a Russell 3000 pharma and biotech company with a similar market capitalisation to PureTech is circa 5% of the issued share capital (for employee incentives). ISS' analysis of US equity plans uses a current annual burn rate benchmark of 5.36% for Russell 3000 pharma and biotech stocks (albeit ISS now takes a slightly different approach to calculating the burn rate). Our current UK-compliant annual burn rate of only 1% is very uncompetitive, and this presents us with a number of serious challenges.
- Critically, we are competing for key talent with these U.S. organisations. The ability to offer a compelling package based around a competitive equity element is crucial to attracting and retaining the best people in the business. Constraints on our equity offering can limit the talent pool available and thus our ability to operate to our fullest potential.
- We are, however, conscious that as a UK-registered company and one with some significant UK shareholders, we cannot ignore UK rules and standards. We are not therefore proposing an open-ended ability to issue new shares for equity incentive purposes; our suggested 10% in 5 years limit still implies an annual burn rate of 2%, which is well below comparative US practice.
- Furthermore, we are retaining the features of our plan which comply with UK best practice, for example, granting performance shares to Executive Directors, which require stretching performance targets to be met, based on measures including TSR. This contrasts with typical practice at our US competitors, where CEOs and other leading executives receive restricted shares and stock options with no performance targets (and sometimes performance shares in addition). Unlike their US counterparts, our Executive Directors are further required to hold any vested awards for an additional two-year period, in line with UK norms, and also meet stretching minimum shareholding requirements.

Overall, we believe that our proposed approach represents a suitable balance between UK good practice and the commercial realities of operating in a competitive market for talent in our sector in the U.S. We recently consulted with our major shareholders on the specifics of this proposal and were very grateful to receive indications of support from those who provided feedback.

Closing comments

The Committee is comfortable that the operation of the Policy for 2022 has demonstrated a robust link between performance and reward. The Committee believes the proposed operation of the Policy for 2023 is appropriate and takes into account the wider stakeholder experience.

The Committee looks forward to shareholders' support at the 2023 Annual General Meeting for (i) the advisory resolution covering this Annual Statement and the Annual Report on Remuneration and (ii) the adoption of a new performance share plan, as explained above.

Directors' Remuneration Policy

This part of the Directors' Remuneration Report sets out the Remuneration Policy for the Executive Directors and has been prepared in accordance with the provisions of the Companies Act 2006, The Large and Medium Sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2008 and the subsequent amendments, and the UK Listing Authority Listing Rules.

This Directors' Remuneration Policy was approved by a binding shareholder vote at the Company's AGM on May 27, 2021.

All tables within this Directors' Remuneration Policy section are audited under the International Standards on Auditing (UK) ("ISAs (UK)") unless otherwise noted.

Decision making process for determination, review and implementation of Directors' Remuneration Policy

The Committee reviews the Policy and its operation to ensure it continues to support and align to the business strategy and appropriately reward the Executive Directors and takes into account relevant market practice, regulation and governance developments, institutional investor views and the views of our shareholders. The Committee also has regard to the remuneration arrangements, policies and practices of the workforce as a whole and takes this into account when reviewing Executive Director pay.

The Policy is reviewed annually by the Committee. If changes are required, a new policy (or an amendment to the policy) will be put forward to shareholder vote prior to the normal triennial shareholder vote. The Committee consults with shareholders on remuneration proposals and will consider the feedback in finalizing the Policy.

Operation of the Policy is considered annually for the year ahead, including metrics for incentives, weightings and targets. The Committee reviews operation for the prior year and considers whether, in light of the strategy, changes are required for the year ahead or if remuneration remains appropriate for the year ahead. Shareholders' views may be sought depending on the changes proposed.

Policy table

Element	How component supports corporate strategy	Operation	Maximum	Performance targets and recovery provisions
Base salary	To recognize the market value of the employee and the role.	Normally reviewed annually. Salaries are benchmarked periodically primarily against biotech, pharmaceutical and specialty finance companies listed in the U.S. and UK. The committee also considers UK-listed general industry companies of similar size to PureTech as a secondary point of reference.	There is no prescribed maximum base salary or annual salary increase. The Committee is guided by the general increase for the broader employee population but may decide to award a lower increase for Executive Directors or indeed exceed this to recognize, for example, an increase in the scale, scope or responsibility of the role and/or to take account relevant market movements. Current salary levels are set out in the Annual Report on Remuneration.	Not applicable.
Pension	To provide a market competitive level of contribution to pension.	The company operates a 401k Plan for its U.S. Executive Directors. The operation of the Plan is in line with the operation for all other employees.	Under the 401k Plan, Company contributions are capped at the lower of 3 percent of base salary or the maximum permitted by the U.S. IRS ($30,000 for 2021).	Not applicable.
Benefits	To provide a market competitive level of benefits.	Includes: private medical and dental cover, disability, life insurance. Additional benefits may also be provided in certain circumstances, such as those provided to all employees.	Cost paid by the company.	Not applicable.

Element	How component supports corporate strategy	Operation	Maximum	Performance targets and recovery provisions
Annual Bonus Plan (ABP)	To drive and reward annual performance of individuals, teams and PureTech.	Based on performance during the relevant financial year. Paid in cash. The Committee has discretion to adjust payout levels if it considers the formulaic outcome inappropriate taking into account the underlying financial performance of the Company, share price performance, the investment return to shareholders during the year, and such other factors as it considers appropriate.	Up to 100 percent of base salary.	Performance period: Normally one year. Payments are normally based on a scorecard of strategic and/or financial measures. Up to 0 percent of salary payable for threshold performance, 50 percent of base salary normally payable for the achievement of 'target' performance and 100 percent of base salary payable for the achievement of stretch performance. Recovery and withholding provisions are in place.
Long-term incentives	To drive and reward our sustained performance and to align the interests with those of shareholders.	The Company can make long-term incentive awards with the following features: • performance shares. • vesting is dependent on the satisfaction of performance targets and continued service. • performance and vesting periods are normally three years. Awards granted from 2019 onwards will be subject to a two-year post-vesting holding period during which vested shares cannot be sold other than to settle tax. This post-vesting period continues post-cessation of employment. The Committee also has the discretion to adjust vesting levels of performance-related awards to override formulaic outcomes, taking into account similar factors as apply in relation to annual bonus awards, but by reference to the performance period.	600 percent of salary for the Chief Executive Officer, 300 percent of base salary for the other Executive Directors. Participants may benefit from the value of dividends paid over the vesting period to the extent that awards vest. This benefit is delivered in the form of cash or additional shares at the time that awards vest.	Performance period: Normally three years. Up to 25 percent of an award vests at threshold performance (0 percent vests below this), increasing to 100 percent pro-rata for maximum performance. Normally at least half of any award will be measured against TSR targets with the remainder measured against relevant financial or strategic measures. Recovery and withholding provisions are in place.
Share ownership/ Holding Period	Further aligns executives with investors, while encouraging employee share ownership.	The Committee requires that Executive Directors who participate in a long-term incentive plan operated by the Company retain half of the net shares vesting under any long-term incentive plan until a shareholding requirement is met.	Minimum of 400 percent of base salary for the Chief Executive Officer and a minimum of 200 percent of base salary for the other Executive Directors.	None.
Post-cessation holding period	Aligns executives with investors and promotes long-term decision making	Executive Directors must hold shares for two years after the date of termination of their employment.	Lower of (i) 400 percent of base salary for the Chief Executive Officer and 200 percent of base salary for the other Executive Directors and (ii) the Executive Director's shareholding at the date that notice is served.	None.

Element	How component supports corporate strategy	Operation	Maximum	Performance targets and recovery provisions
Non-Executive Directors	To provide fee levels and structure reflecting time commitments and responsibilities of each role, in line with those provided by similarly-sized companies and companies operating in our sector.	Remuneration provided to Non-Executive Directors is operated in line with the terms set out in the Articles of Association. Cash fees, normally paid on a quarterly basis, are comprised of the following elements: • Base fee. • Additional fees. Beginning in 2021, a portion of the compensation to our Non-Executive Directors was in the form of our ordinary shares. Additional remuneration is payable for additional services to PureTech such as the Chairship of a Committee or membership on a Committee. Additional remuneration is also payable for services provided beyond those services traditionally provided as a director, and can be provided for a material increase in time commitment. Fees are reviewed annually and take into account: • the median level of fees for similar positions in the market; and • the time commitment each Non-Executive Director makes to us. Taxable benefits may be provided and may be grossed up where appropriate.	Any remuneration provided to a Non-Executive Director will be in line with the limits set out in the Articles of Association.	None.

Notes:

1 In the event that the Company elects any non-U.S. Executive Directors, the 401k Plan may not be an appropriate pension arrangement. In such cases an alternative pension arrangement may be offered. Any such arrangement would not be higher than the pension rate operated for the majority of employees in that jurisdiction.

2 For those below Board level, a lower annual bonus opportunity and PSP award size may apply. In general, these differences arise from the development of remuneration arrangements that are market competitive for the various categories of individuals, together with the fact that remuneration of the Executive Directors and senior executives typically has a greater emphasis on performance-related pay.

3 The choice of the performance metrics for the annual bonus scheme reflects the Committee's belief that incentive compensation should be appropriately challenging and linked to the delivery of the Company's strategy. Further information on the choice of performance measures and targets is set out in the Annual Report on Remuneration.

4 The performance conditions applicable to the PSP (see Annual Report on Remuneration) are selected by the Remuneration Committee on the basis that they reward the delivery of long-term returns to shareholders and are consistent with the Company's objective of delivering superior levels of long-term value to shareholders while providing the Company with tools to successfully recruit and retain employees in the U.S.

5 For the avoidance of doubt, the Company reserves the right to honour any commitments entered into in the past with current or former Directors (such as the vesting/exercise of share awards) notwithstanding that these may not be in line with this Remuneration Policy. Details of any payments to former Directors will be set out in the Annual Report on Remuneration as they arise.

Recovery and withholding provisions

Recovery and withholding provisions (''clawback and malus'') may be operated at the discretion of the Remuneration Committee in respect of awards granted under the Performance Share Plan and in certain circumstances under the Annual Bonus Plan (including where there has been a material misstatement of accounts, or in the event of fraud, gross misconduct or conduct having a materially detrimental effect on the Company's reputation).

The issue giving rise to the recovery and withholding must be discovered within three years of vesting or payment and there is flexibility to recover overpayments by withholding future incentive payments and recovering the amount directly from the employee.

Discretions in the policy

To ensure the efficient administration of the variable incentive plans outlined above, the Committee will apply certain operational discretions. These include the following:

- selecting the participants in the plans on an annual basis;
- determining the timing of grants of awards and/or payments;
- determining the quantum of awards and/or payments (within the limits set out in the Policy table above);
- reviewing performance against LTI performance metrics;
- determining the extent of vesting based on the assessment of performance;
- making the appropriate adjustments required in certain circumstances, for instance for changes in capital structure;
- deciding how to settle awards made under the plans, e.g. in cash, shares, nil-cost options or as otherwise permitted under the plan rules;

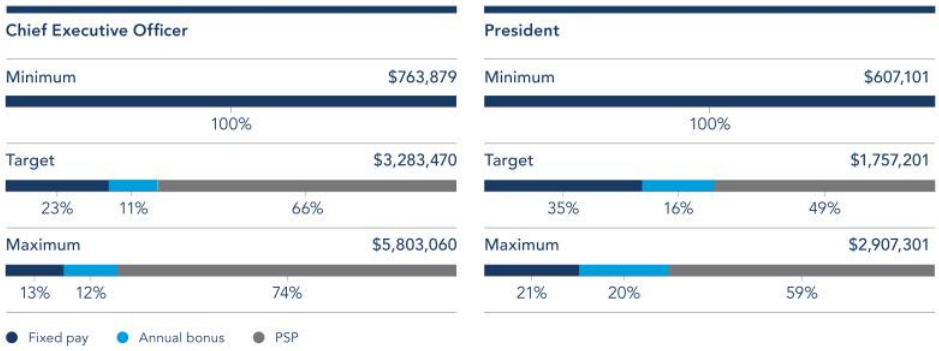
- overriding formulaic outcomes of incentive plans if determined by the Committee not to be reflective of company performance;
- determining "good leaver" status for incentive plan purposes and applying the appropriate treatment; further details on the discretion applicable in relation to leavers are set out on page 94;
- undertaking the annual review of weighting of performance measures and setting targets for the annual bonus plan and other incentive schemes, where applicable, from year to year; and
- discretion, in the event of a change in control of the Company, to determine that time pro-rating shall not apply to outstanding awards.

If an event occurs which results in the annual bonus plan or PSP performance conditions and/or targets being deemed no longer appropriate (e.g. material acquisition or divestment), the Committee will have the ability to adjust appropriately the measures and/or targets and alter weightings, provided that the revised conditions are not materially less challenging than the original conditions.

Reward scenarios

The charts below show how the composition of 2023 remuneration for the Chief Executive Officer and the President varies at different levels of performance under the Policy set out above, as a percentage of total remuneration opportunity and as a total value.

Executive Director compensation (unaudited)



Notes:

1 The minimum performance scenario comprises the fixed elements of remuneration only, including:
- Salary for FY2023 as set out in the Annual Report on Remuneration.
- Pension in line with policy and benefits as disclosed for FY2022 in the Annual Report on Remuneration.

2 The On-Target level of bonus is taken to be 50 percent of the maximum bonus opportunity (50 percent of salary). The On-Target level of PSP vesting is assumed to be 50 percent of the face value of the PSP award (i.e. 300 percent of base salary for the CEO and 150 percent of base salary for the President). These values are included in addition to the components/values of Minimum remuneration.

3 Maximum assumes full bonus pay-out (100 percent of base salary) and the full face value of the proposed PSP awards (i.e. 600 percent of base salary for the CEO and 300 percent of base salary for the President), in addition to fixed components/values of Minimum remuneration.

4 No share price growth has been factored into the calculations of minimum, target and maximum compensation. An additional maximum scenario has been shown which assumes 50% share price appreciation for the PSP during the performance period.

Approach to recruitment and promotions

The remuneration package for a new Executive Director would be set in accordance with the terms of the Company's prevailing approved Remuneration Policy at the time of appointment and take into account the skills and experience of the individual, the market rate for a candidate of that experience and the importance of securing the relevant individual.

Salary would be provided at such a level as required to attract the most appropriate candidate and may be set initially at or above mid-market level.

Additionally, salary may be provided at a below mid-market level on the basis that it may progress towards the mid-market level once expertise and performance has been proven and sustained. The annual bonus and long-term incentive awards would be limited in line with the policy. Depending on the timing of the appointment, the Committee may deem it appropriate to set annual bonus performance conditions for such appointee that are different than those applicable to the incumbent Executive Directors. A PSP award can be made shortly following an appointment.

In addition, the Committee may offer additional cash and/or share-based elements to replace deferred or incentive pay forfeited by an executive leaving a previous employer if required in order to facilitate, in exceptional circumstances, the recruitment of the relevant individual. It would seek to ensure, where possible, that these awards would be consistent with awards forfeited in terms of vesting periods, expected value, performance conditions and delivery mechanism.

For appointment of an Executive Director who was employed by the Company prior to the appointment, any variable pay element awarded in respect of the prior role may be allowed to pay out according to its terms. In addition, any other ongoing remuneration obligations existing prior to appointment may continue.

For any Executive Director appointment, the Committee may agree that the Company will meet certain relocation and/or incidental expenses as appropriate.

Service contracts

Executive Directors' service contracts do not provide for liquidated damages, longer periods of notice on a change of control of the Company or additional compensation on an Executive Director's cessation of employment with us, except as discussed below.

The Committee's Policy is to offer service contracts for Executive Directors with notice periods of no more than 12 months, and typically between 60 to 180 days.

Service contracts provide for severance pay following termination in the case that employment is terminated by the Company without 'cause', or by the employee for 'good reason'. In this case severance pay as set out in the contract is no greater than 12-months' base salary and is aligned to the duration of any restrictive covenants placed on the employee. Service contracts may also provide for the continuation of benefits but for no longer than a 12-month period post termination.

Service contracts also provide for the payment of international tax in non-U.S. jurisdictions if applicable to the Executive Director. They also can provide for garden leave and, if required by applicable law, the recovery and withholding of incentive payments.

Service contracts are available for inspection at the company's registered office.

Policy on termination of employment

The Policy on termination is that the Company does not make payments beyond its contractual obligations and the commitments entered into as part of any incentive plan operated by the Company. In addition, Executive Directors will be expected to mitigate their loss. The Committee ensures that there have been no unjustified payments for failure.

An Executive Director may be eligible for an annual bonus payment for the final year in which that Director served as an employee, provided that they are deemed to be a 'good leaver'. If so, any such annual bonus payment will be subject to performance testing and a pro-rata reduction will normally be applied based on the time served during the relevant financial year.

The default treatment for any share-based entitlements under the PSP is that any unvested outstanding awards lapse on cessation of employment. However, in certain prescribed circumstances, or at the discretion of the Remuneration Committee, 'good leaver' status can be applied. In these circumstances, a participant's awards will vest subject to the satisfaction of the relevant performance criteria and, ordinarily, on a time pro-rated basis, with the balance of the awards lapsing. The two-year post vest holding period will usually continue to apply. The Committee has discretion to permit the early vesting at the date of cessation of employment, again based on performance and ordinarily on a time pro-rated basis.

In addition, the Company can pay for any administrative expenses, legal expenses or outplacement services arising from the termination where considered appropriate.

External appointments

The Board can allow Executive Directors to accept appropriate outside commercial Non-Executive Director appointments provided that the duties and time commitment required are compatible with their duties and time commitment as Executive Directors.

Non-Executive Directors

Non-Executive Directors are appointed as a Non-Executive Director of the Company by a letter of appointment. These letters usually provide for a notice period of one month from the Company and the Non-Executive Director prior to termination.

Consideration of shareholder views

The Committee will carefully consider shareholder feedback received in relation to the AGM each year. This feedback, plus any additional feedback received during any meetings from time to time, is then considered as part of the annual review of the Remuneration Policy.

The Company will seek to engage directly with major shareholders and their representative bodies should any material changes be proposed to the Remuneration Policy or its implementation. Details of votes cast for and against the resolution to approve the prior year's remuneration report and any matters discussed with shareholders during the year will be set out in the Annual Report on Remuneration. The Company consulted with shareholders in early 2023, in relation to the proposed new performance share plan, and we are pleased to receive support from those consulted.

Consideration of our employment conditions generally

To ensure a coherent cascade of the Remuneration Policy throughout the organization, no element of remuneration is operated solely for Executive Directors and all elements of remuneration provided to the Executive Directors are generally operated for other employees, including participation in stock-based incentive plans. In addition, the Committee considers the general base salary increase for the broader employee population when determining the annual salary increases for the Executive Directors. The Remuneration Committee has general responsibility for determining pay for senior management as well as Executive Directors. Employees (other than senior executives) have not been consulted in respect of the design of our Remuneration Policy, although the Committee will keep this under review.

Annual Report on Remuneration

Implementation of the Remuneration Policy for the year ending December 31, 2023

All tables within the Annual Report on Remuneration are audited under the International Standards on Auditing (UK) ("ISAs (UK)") unless otherwise noted.

Base salary

The Committee reviewed the base salary levels for the Executive Directors in early 2023 and an increase of 8.5 percent was awarded. This increase was slightly below the average increase for the general workforce, which was largely driven by cost of living considerations in the US.

		2022 Base salary	**2023 Base salary**
Daphne Zohar	Chief Executive Officer	$663,487	**$719,883**
Bharatt Chowrira	President, Chief Business, Financial and Operating Officer, Corporate Secretary ("President")	$530,000	**$575,050**

Pension

We will continue to contribute under the 401k Plan subject to the maximum set out in the Policy table.

Benefits

Benefits provided will continue to include private medical, disability and dental cover.

Annual bonus

For 2023, the operation of the annual bonus plan will be similar to that operated in 2022. The maximum annual bonus will continue to be 100 percent of base salary for all Executive Directors. The 2023 annual bonus will be based on internal program development goals and strategic development, financial and capital markets based goals. The performance metrics and targets will be disclosed in the FY2023 Annual Report and Accounts.

Long-term incentives

Awards under the PSP will be made to the Executive Directors in 2023. The Chief Executive Officer will receive a PSP award with a face value of 600 percent of base salary, and the President will receive an award with a face value of 300 percent of base salary.

The PSP awards will be subject to the performance conditions described below. As a clinical-stage therapeutics company, the Company believes that TSR is an appropriate and objective measure of the Company's performance. In addition, measuring TSR on both an absolute and relative basis rewards our management team for absolute value creation for our shareholders whilst also incentivizing outperformance of the market. To provide a balance to the TSR performance conditions that is more directly based on Management's long term strategic performance, TSR is complemented by measures linked to strategic delivery. There will be a robust assessment of the achievement of the strategic targets over the three year period with full disclosure in the Directors' Remuneration Report following the end of the performance period.

Further detail of the performance conditions is set out below:

- 40 percent of the shares under award will vest based on the achievement of absolute TSR targets.
- 20 percent of the shares under award will vest based on the achievement of a relative TSR performance condition, 10 percent each against two benchmarks (explained below).
- 40 percent of the shares under award will vest based on the achievement of strategic targets.

The minimum performance target for the absolute TSR portion of the award will be TSR equal to 7 percent per annum, whilst the maximum target will be TSR equal to 15 percent per annum. Relative TSR will be measured against the constituent companies in the FTSE 250 Index (excluding Investment Trusts) and the MSCI Europe Health Care Index (for 10 percent of the award, respectively). The minimum performance target will be achievement of TSR equal to the median company in the Index and the maximum performance target will be achievement of upper quartile TSR performance. 25 percent of each element of the TSR targets will vest for threshold performance. Strategic measures will be based on the achievement of milestones and other qualitative measures of performance over the performance period. Strategic targets will be set at the outset based on internal program development, financial achievements, including monetization of Founded Entities, product pipeline growth, operational excellence, strategic development or transaction related goals and other shareholder value enhancing metrics in line with our strategic plan. Full disclosure of the measures, weightings and strategic targets will be made retrospectively.

The Committee believes that this combination of measures is appropriate. TSR measures the success of our management team in identifying and developing new therapeutics whilst strategic targets help incentivize our management team through the stages which ultimately result in successful therapeutics.

Non-Executive Directors

Fees for our Board of Directors were reviewed for 2023 and remain unchanged from 2022.

	FY2022 and FY2023
Chair fee	**$125,000**
Basic fee	**$75,000**
Equity-based Component	**$50,000**
Additional fees:	
Chair of a committee	**$10,000**
Membership of a committee	**$5,000**
Membership of a subsidiary board	**$0 to $10,000**

As our Board of Directors consists of leading experts with the experience of successfully developing technologies and bringing them to market, this gives rise to the possibility that the intellectual property we seek to acquire has been developed by one of our Non-Executive Directors and/or that our Non-Executive Directors provide technical or otherwise specialized advisory services to the Company above and beyond the services typically provided by a Non-Executive Director. In such exceptional circumstances, our Remuneration Policy provides us with the flexibility to remunerate them with equity in the relevant subsidiary company as we would any other inventor of the intellectual property or provider of technical advisory services. This practice is in line with other companies in the life sciences sector. If the Company is unable to offer market-competitive remuneration in these circumstances, it risks forfeiting opportunities to obtain intellectual property developed by our Non-Executive Directors and/or foregoing valuable advisory services. The Company believes foregoing such intellectual property and/or advisory services would not be in the long-term interest of our shareholders. Accordingly, subsidiary equity grants may be made to Non-Executive Directors upon the occurrence of the exceptional circumstances set out above.

Remuneration for the year ended December 31, 2022

Single total figure of remuneration for each Director (audited)

The table below sets out remuneration paid in relation to the 2022 financial year with a comparative figure for the 2021 financial year. There were no exercises of share options by Executive Directors or Non-Executive Directors in either of the 2022 or 2021 financial years.

	2021 and 2020 Remuneration								
	Year	Basic Salary/ Fees	Benefits[1]	Annual Bonus Plan	Performance Share Plan (Vested)[2]	Pension	Total Remuneration	Total Variable	Total Fixed
Executive Directors									
Daphne Zohar	**2022**	**$663,487**	**$34,846**	**$298,569**	**$491,377**	**$9,150**	**$1,497,429**	**$789,946**	**$707,483**
	2021	$625,931	$33,465	$469,448	$1,335,256[6]	$8,700	$2,472,800	$1,804,704	$668,096
Bharatt Chowrira[3]	**2022**	**$530,000**	**$22,901**	**$238,500**	**$187,390**	**$9,150**	**$987,941**	**$425,890**	**$562,051**
	2021	$500,000	$25,452	$375,000	$253,306[6]	$8,700	$1,162,458	$628,306	$534,152
Non-Executive Directors									
Sharon Barber-Lui[4]	**2022**	**$115,123[7]**	**—**	**—**	**—**	**—**	**$115,123**	**—**	**$115,123**
Raju Kucherlapati	**2022**	**$135,000[7]**	**—**	**—**	**—**	**—**	**$135,000**	**—**	**$135,000**
	2021	$145,000[7]	—	—	—	—	$145,000	—	$145,000
John LaMattina	**2022**	**$145,000[7]**	**—**	**—**	**—**	**—**	**$145,000**	**—**	**$145,000**
	2021	$145,000[7]	—	—	—	—	$145,000	—	$145,000
Robert Langer	**2022**	**$145,000[7]**	**—**	**—**	**—**	**—**	**$145,000**	**—**	**$145,000**
	2021	$145,000[7]	—	—	—	—	$145,000	—	$145,000
Kiran Mazumdar-Shaw	**2022**	**$135,000[7]**	**—**	**—**	**—**	**—**	**$135,000**	**—**	**$135,000**
	2021	$135,000[7]	—	—	—	—	$135,000	—	$135,000
Dame Marjorie Scardino[5]	**2022**	**$140,000[7]**	**—**	**—**	**—**	**—**	**$140,000**	**—**	**$140,000**
	2021	$140,000[7]	—	—	—	—	$140,000	—	$140,000
Christopher Viehbacher	**2022**	**$189,536[7]**	**—**	**—**	**—**	**—**	**$189,536**	**—**	**$189,536**
	2021	$195,000[7]	—	—	—	—	$195,000	—	$195,000
TOTAL	**2022**	**$2,398,146**	**$57,747**	**$537,069**	**$678,768**	**$18,300**	**$3,490,030**	**$1,215,837**	**$2,274,193**
TOTAL	2021	$2,030,931	$58,917	$844,448	$1,588,562	$17,400	$4,540,529	$2,433,010	$2,107,248

Notes:

1 Benefits comprise the following elements: private medical, disability and dental cover and parking.

2 The shares underlying the vested 2020 Performance Share Plan awards will be issued after the finalisation of this report. As a result, the share price on the date of issuance is not known at the date of this report and the figures shown above for the PSP awards have been valued using a share price of £2.530873, which was the average share price during the last three months of 2022, and an exchange rate of GBP 1 : USD 1.175155385, which was the average exchange rate over the last three months of 2022.

3 Dr. Chowrira joined the Board in February 2021.

4 Ms. Barber-Lui joined the Board in March 2022.

5 Dame Marjorie retired from the Board at the conclusion of December 2022.

6 These amounts have been updated from those listed in the 2021 Annual Report and Accounts to reflect the actual values paid, which was not known at the date of publication of the 2021 Annual Report and Accounts.

7 These amounts include grants of share based remuneration in July 2021 and 2022 in the form of time-vesting restricted stock units with a face value of $50,000.

Annual bonus outcome for 2022

For the 2022 annual bonus, targets were set for a balanced scorecard at the beginning of the year. The 2022 targets were focused on (i) internal program development goals designed to incentivize the team to continue development of the Company's Wholly Owned Pipeline, generate valuable clinical data in support of the Company's programs, create innovative programs, publish key results and achieve patent protection for the Company's programs; and (ii) strategic goals designed to incentivize the team to complete important deals, execute strategic partnerships, monetize Founded Entity holdings or otherwise strengthen the Company's balance sheet, strengthen the Company's investor base and provide support for Founded Entity transactions and financings. In addition, the Remuneration Committee took into account other goals and other achievements by the management team in setting final achievement attainment and fixing bonus payouts. The table below sets out the performance assessment and associated bonus outcomes:

Target Goals – Maximum 100 percent Achievement

Performance Measures Category	Achievement	Percentage of Target Attained
Internal Program Development	The Internal Program Development Goals were 100 percent achieved in 2022. The management team's performance resulted in an achievement outcome of 50 percent which was equal to the pre-specified cap of 50 percent for this category of the goals. A description of performance in 2022 is set out below: The Company completed multiple ascending dose studies for LYT-100 in healthy older adults to support proceeding in IPF and initiated a Phase 2 study in IPF, completed studies of LYT-100 in Long COVID and Lymphedema, achieved Phase 1b study results with LYT-200 and generated data to support the initiation of Phase 2 studies of LYT-200 in leukemia and solid tumors, completed a Phase 1 study of LYT-300 to select doses for a Phase 2 study, nominated LYT-310 as an additional therapeutic candidate, generated a key publication in conjunction with a key collaborator and generated several patent allowances and issuances in the U.S.	50%
Strategic Goals	The Strategic Goals were 65 percent achieved in 2022. The management team's performance resulted in an achievement outcome of 32.5 percent out of a pre-specified cap of 50 percent for this category of the goals. A description of performance in 2022 is set out below: The Company extensively evaluated certain strategic transactions and options to enhance shareholder value, monetized approximately $115 million of its Founded Entity equity holdings, and supported its Founded Entities to achieve certain strategic transactions, financings and grant funding.	32.5%
Other Achievements	The management team evidenced further exceptional performance as described below: The Company completed various strategic sourcing initiatives for new programs and strategic transactions, conducted extensive outreach to raise the corporate profile and cultivate new investors and analysts, conducted significant and robust activities to strengthen the Company's intellectual property portfolio and generated value accretion through the successful activities of certain Founded Entities, especially Karuna.	7.5%
Pre-Specified Maximum Total		**90%**

Accordingly, the Committee determined that the Company had achieved 90 percent of its target goals for 2022.

Each of the above target categories are subject to maximum percentage achievement limits capped at 100 percent of the target bonus (i.e. 50 percent of salary). In this case, the Committee determined that payouts at 90 percent of target (i.e. 45 percent of salary) are appropriate taking into account the overall performance of the Executive Directors and the achievements set forth above. The Committee believes that such a bonus award is appropriate to reward and retain top management.

Long-term incentive awards vesting in respect of the year (audited)

The 2020 PSP awards to Executive Directors granted on July 20, 2020 were subject to three-year performance conditions covering the period from January 1, 2020 to December 31, 2022. Following an assessment of the performance conditions, the Remuneration Committee determined that the awards will vest at 24.2 percent of the maximum. The 2021 awards of RSUs to Non-executive directors granted on July 21, 2021 vested immediately prior to the 2022 AGM and were issued on August 12, 2022.

	Scheme	Basis of award granted	Shares awarded	Shares vested	Shares lapsed	Value of vested awards[1]
Daphne Zohar	PSP 2020	400% of salary	683,652	165,215	518,437	$491,377[2]
Bharatt Chowrira	PSP 2020	200% of salary	260,715	63,006	197,2097	$187,390[2]
Raju Kucherlapati	PSP 2021	$50,000	11,190	11,190	–	$31,920[3]
John LaMattina	PSP 2021	$50,000	11,190	11,190	–	$31,920[3]
Robert Langer	PSP 2021	$50,000	11,190	11,190	–	$31,920[3]
Kiran Mazumdar-Shaw	PSP 2021	$50,000	11,190	11,190	–	$31,920[3]
Dame Marjorie Scardino	PSP 2021	$50,000	11,190	11,190	–	$31,920[3]
Christopher Viehbacher	PSP 2021	$50,000	11,190	11,190	–	$31,920[3]

1 The value of the awards attributable to share price appreciation is nil for all Executive Directors and Non-Executive Directors.
2 Share awards have been valued using a share price of £2.530873, which was the average share price during the last three months of 2022, and an exchange rate of GBP 1 : USD 1.175155385, which was the average exchange rate over the last three months of 2022.
3 Represents the value of the 11,190 shares on August 12, 2022, the date of issuance to each Non-executive Director.

The outcome of the performance condition relating to the performance based awards granted to the Executive Directors is set out below (audited):

Measure and weighting	Threshold	Maximum	Achievement	Vesting (% of each element)
Absolute TSR (50%)	7% p.a.	15% p.a.	(1%) p.a.	0%
Total return against FTSE Small Cap Index (12.5%)	At or above median	Upper quartile	43rd percentile	0%
Total return against MSCI Euro Healthcare Index (12.5%)	At or above median	Upper quartile	20th percentile	0%
Strategic measures (25%)	See description below			24.2%

The strategic measures over the three-year period were focused on (i) financial goals (55 percent), (ii) clinical development goals (40 percent), and (iii) operational excellence (5 percent). The financial achievements resulting in satisfaction of 52 percent of the vesting of the strategic measures included, among other things, obtaining over $680 million for PureTech by monetizing certain Founded Entity equity, the closing of initial public offerings of two Founded Entities and two SPAC transactions for Founded Entities, the execution of several partnership agreements which brought in non-dilutive funding and the completion of certain investor-related activities, including generation of new analyst coverage for the Company. The clinical development achievements resulting in satisfaction of 40 percent of the vesting of the strategic measures included, among other things, the successful initiation, enrollment and completion of several Phase 1 and Phase 2 clinical studies for LYT-100 and the initiation of the LYT-100 IPF phase 2 study, the advancement of other programs within our Wholly Owned Pipeline, the advancement of certain programs at the Company's Founded Entities, including receipt of U.S. marketing clearances for two programs. The operational excellence achievements resulting in satisfaction of 5 percent of the vesting of the strategic measures include the operation of the Company's programs within projected timelines and budgets, successfully managing operations through the COVID-19 pandemic, building out a world-class development organization, the in-licensing and creation of new programs, the issuance of certain intellectual property, the advancement of certain pre-clinical programs and the publication of validating data in top tier peer-reviewed academic journals.

Long-term incentive awards granted during the year (unaudited)

The following long-term Incentive awards were granted to Executive Directors during 2022:

	Scheme	Basis of award granted	Shares awarded (as conditional award of shares)	Share price at date of grant[1]	Face value of award	% of face value vesting at threshold performance	Vesting determined by performance over
Daphne Zohar	PSP 2022	500% of salary	1,532,051	175.20 pence	$3,317,434	25%	Three financial years to December 31, 2024
Bharatt Chowrira	PSP 2022	250% of salary	611,909	175.20 pence	$1,325,000	25%	

1 The share price at the date of grant is based on the 3-day average closing price immediately prior to the grant of the award.

The PSP awards granted in 2022 are subject to (i) achievement of absolute TSR targets (40 percent of the awards), (ii) achievement of TSR targets as compared to TSR performance of the constituent companies in the FTSE 250 Index (excluding Investment Trusts) and the MSCI Europe Health Care Index (20 percent of the awards, 10 percent against each benchmark) and (iii) achievement of targets based on strategic measures (40 percent of the awards), measured over the three year period to December 31, 2024.

The minimum performance target for the absolute TSR portion of the award is TSR equal to 7 percent per annum, whilst the maximum target is TSR equal to 15 percent per annum. The minimum performance target for the relative TSR portion of the award is TSR equal to the median of the index, whilst the maximum target will be TSR equal to the upper quartile of the index. Strategic measures are based on the achievement of project milestones and other qualitative measures of performance. Strategic targets have been set based on financial achievements, including monetization of Founded Entities, clinical development progress, product pipeline growth, operational excellence and other shareholder value enhancing metrics in line with our strategic plan. The Committee believes that this combination of measures and the equal weighting on TSR

and strategic objectives is appropriate. TSR measures the success of our management team in identifying and developing new therapeutics whilst strategic targets help incentivize our management team through the stages which ultimately result in successful therapeutics.

Full disclosure of the strategic targets will be made retrospectively.

In addition, each Non-Executive Director was granted share based remuneration on July 21, 2022 in the form of 21,507 time-vesting restricted stock units. The equity awards granted to our Non-Executive Directors vest in their entirety immediately prior to Company's 2023 AGM, provided that the Non-Executive Directors continue their service through such date. This share based element is part of the annual fee for Non-Executive Directors and is not subject to performance (unaudited).

Non-Executive Directors	Shares awarded	Face value of award	Vesting date
Sharon Barber-Lui	21,507	$50,000	June 13, 2023
Raju Kucherlapati	21,507	$50,000	June 13, 2023
John LaMattina	21,507	$50,000	June 13, 2023
Robert Langer	21,507	$50,000	June 13, 2023
Kiran Mazumdar-Shaw	21,507	$50,000	June 13, 2023
Dame Marjorie Scardino[1]	21,507	$50,000	June 13, 2023
Christopher Viehbacher	21,507	$50,000	June 13, 2023

1 The RSUs awarded to Dame Marjorie were forfeited upon her retirement at the conclusion of December 2022.

Payments for Loss of Office (unaudited)

There were no payments for Loss of Office during 2022.

Payments to past Directors (unaudited)

No payments to past Directors were made during 2022.

Directors' shareholdings (audited)

Executive Directors are required to maintain share ownership equal to a minimum of 400 percent of base salary for the Chief Executive Officer and a minimum of 200 percent of base salary for the other Executive Directors. The Chief Executive Officer and President both satisfy this requirement, and neither has disposed of any company shares since the Company's IPO. Post-employment shareholding requirements will apply.

The table below sets out current Directors' shareholdings which are beneficially owned or subject to a performance condition and interests of connected persons.

	Director Shareholdings					
	Total Share Awards not subject to Service Conditions		Share awards subject to performance conditions		Total	
Director	**Dec 31, 2022**	Dec 31, 2021	**Dec 31, 2022**	Dec 31, 2021	**Dec 31, 2022**	Dec 31, 2021
Daphne Zohar[1]	**12,564,189**[2]	12,197,307	**2,372,519**[3]	1,524,120	**14,936,708**	13,721,427
Bharatt Chowrira	**2,490,789**[6]	2,213,689	**1,322,596**[7]	1,158,902	**3,813,385**	3,372,591
Sharon Barber-Lui[8]	**—**	—	**21,507**[9]	—	**21,507**	—
Raju Kucherlapati	**2,471,021**	2,459,831	**21,507**[9]	11,190	**2,492,528**	2,471,021
John LaMattina[10]	**1,443,623**	1,492,463	**21,507**[9]	11,190	**1,465,130**	1,503,653
Robert Langer[11]	**2,955,324**	2,944,134	**21,507**[9]	11,190	**2,976,831**	2,955,324
Kiran Mazumdar-Shaw	**11,190**	—	**21,507**[9]	11,190	**32,697**	11,190
Dame Marjorie Scardino	**809,900**[12]	798,710	**21,507**[13]	11,190	**831,407**[13]	809,900
Chris Viehbacher	**1,056,836**[14]	1,045,646	**21,507**[9]	11,190	**1,078,343**	1,056,836

1 A portion of Ms. Zohar's shareholding in the Company is indirect. As of December 31, 2020, an aggregate of 8,464,189 ordinary shares and 410,000 ADSs are held by (i) the Zohar Family Trust I, a U.S.-established trust of which Ms. Zohar is a beneficiary and trustee, (ii) the Zohar Family Trust II, a U.S.-established trust of which Ms Zohar is a beneficiary (in the event of her spouse's death) and trustee, (iii) Zohar LLC, a U.S.-established limited liability company, and (iv) directly by Ms. Zohar. Ms. Zohar owns or has a beneficial interest in 100 percent of the share capital of Zohar LLC.

2 Includes 410,000 ADSs, which are convertible into 4,100,000 ordinary shares. Does not include 165,215 shares which are issuable pursuant to the PSP award granted to Ms. Zohar covering the financial years 2020, 2021 and 2022 which have vested but not yet been issued.

3 Includes the following PSP awards, which are subject to performance conditions: 840,468 (2021) and 1,532,051 (2022). Does not include 165,215 shares which are issuable pursuant to the PSP award granted to Ms. Zohar covering the financial years 2020, 2021 and 2022 which have vested but not yet been issued.

6 Includes 915,789 shares of stock owned by Dr. Chowrira and 1,575,000 vested stock options, none of which have been exercised. Does not include 63,006 shares which are issuable pursuant to the PSP award granted to Dr. Chowrira covering the financial years 2020, 2021 and 2022 which have vested but not yet been issued.

7 Includes the following PSP awards, which are subject to performance conditions: 335, 687 (2021) and 611,909 (2022), as well as 375,000 unvested stock options. Does not include 63,006 shares which are issuable pursuant to the PSP award granted to Dr. Chowrira covering the financial years 2020, 2021 and 2022 which have vested but not yet been issued.

8 Ms. Barber-Lui joined the Board in March 2022.

9 Denotes RSUs, which are subject to continued employment, that were granted in July 2022 and vest immediately prior to the 2023 Annual General Meeting.

10 A portion of Dr. LaMattina's shareholding in the Company is indirect. As of December 31, 2022, an aggregate of 1,443,623 ordinary shares are held by (i) John L LaMattina Revocable Trust, (ii) John L LaMattina 2020-2 GRAT, and (iii) LaMattina Charitable Trust.

11 A portion of Dr. Langer's shareholding in the Company is indirect. As of December 31, 2022, an aggregate of 2,955,324 ordinary shares are held by (i) Langer Family 2020 Trust and (ii) directly by Dr. Langer.

12 Includes 100 ADSs, which are convertible into 1,000 ordinary shares.

13 Includes 21,507 RSUs which were forfeited by Dame Marjorie upon her retirement from the Board at the close of business on December 31, 2022.

14 Includes 2,000 ADSs, which are convertible into 20,000 ordinary shares.

Directors' service contracts (unaudited)

Detail of the service contracts of current Directors is set out below:

Executive Directors	Notice period	Contract date	Maximum potential termination payment	Potential payment on change of control/liquidation
Daphne Zohar	180 days	June 18, 2015	12 months' salary	Nil
Bharatt Chowrira	60 days	March 1, 2017	12 months' salary	Nil

Contracts for the above Executive Directors will continue until terminated by notice either by the Company or the Executive Director. Dame Marjorie Scardino informed the Company of her intention to retire on August 24, 2022, which retirement became effective as of the close of business on December 31, 2022. Mr. Viehbacher Informed the Company on December 21, 2022 that he would not stand for re-election at the Company's 2023 AGM.

Non-Executive Directors	Notice period	Contract date	Contract expiration date
Sharon Barber-Lui	30 days	March 24, 2022	March 24, 2025
Raju Kucherlapati	30 days	June 5, 2021	June 5, 2024
John LaMattina	30 days	June 5, 2021	June 5, 2024
Robert Langer	30 days	June 5, 2021	June 5, 2024
Kiran Mazumdar-Shaw	30 days	September 28, 2020	September 28, 2023
Marjorie Scardino	30 days	June 5, 2021	n/a
Christopher Viehbacher	30 days	June 5, 2021	n/a

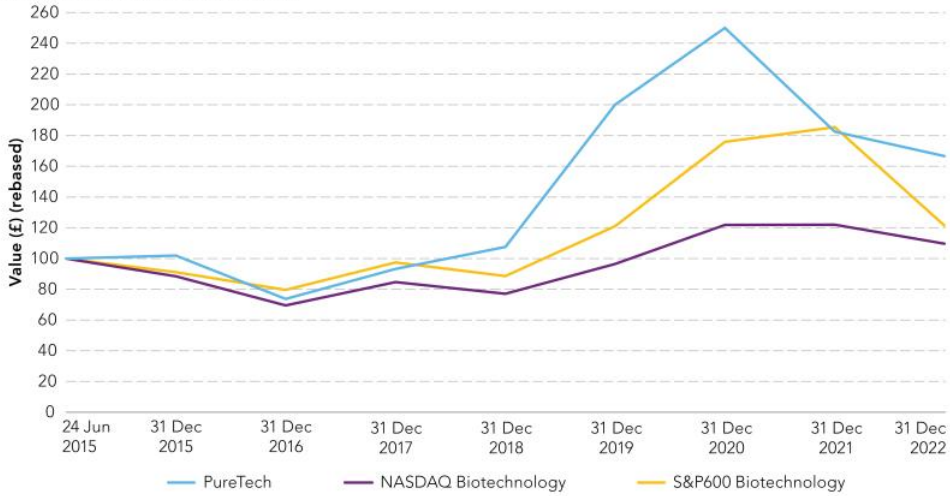
The Company and the Non-Executive Directors listed above, other than Dame Marjorie and Mr. Viehbacher, intend to enter into new contracts prior to their expiration.

TSR performance graph (unaudited)

The graph shows the Company's performance, measured by total shareholder return (TSR), compared with the Nasdaq Biotechnology Index and S&P600 Biotechnology Index since the Company's IPO. The Committee considers these to be relevant indices for TSR comparison as they are broad-based measures of the performance of the biotechnology industry.

Total shareholder return (unaudited)

Source: Datastream (Thomson Reuters)



This graph shows the value, by December 31, 2022, of £100 invested in PureTech on the date of Admission (June 24, 2015), compared with the value of £100 invested in the Nasdaq Biotechnology and S&P600 Biotechnology indices on the same date.

The other points plotted are the values at intervening financial year-ends.

Chief Executive Officer's Remuneration History (unaudited)

Year	Incumbent	Role	Single figure of total remuneration	Annual bonus pay-out against maximum	PSP Vesting against maximum opportunity
2015	Daphne Zohar	Chief Executive Officer	$955,599	100%	n/a
2016	Daphne Zohar	Chief Executive Officer	$747,634	38.75%	n/a
2017	Daphne Zohar	Chief Executive Officer	$821,898	50%	n/a
2018	Daphne Zohar	Chief Executive Officer	$2,139,870	65%	50%
2019	Daphne Zohar	Chief Executive Officer	$5,783,682	100%	100%
2020	Daphne Zohar	Chief Executive Officer	$7,194,841	100%	100%
2021	Daphne Zohar	Chief Executive Officer	$2,472,800	75%	95.8%
2022	**Daphne Zohar**	**Chief Executive Officer**	**$1,497,429**	**45%**	**24.2%**

Percentage change in remuneration of Directors and employees (unaudited)

The table below shows the change in the Directors' remuneration compared to the change in remuneration of all of our full-time employees who were employed throughout the same periods:

	2021 to 2022			2020 to 2021			2019 to 2020		
	Base salary[1]	Benefits	Annual bonus	Base salary	Benefits	Annual bonus	Base Salary	Benefits	Annual Bonus
Daphne Zohar (CEO)	6%	4%	(36%)	3%	6%	(23%)	3%	0%	3%
Bharatt Chowrira (President)[2]	6%	(10%)	(36%)	N/A	N/A	N/A	N/A	N/A	N/A
Sharon Barber-Lui[3]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Raju Kucherlapati	(7%)	N/A	N/A	38.1%	N/A	N/A	11%	N/A	N/A
John LaMattina	0%	N/A	N/A	16%	N/A	N/A	19%	N/A	N/A
Robert Langer	0%	N/A	N/A	16%	N/A	N/A	13%	N/A	N/A
Kiran Mazumdar-Shaw	0%	N/A	N/A	635%	N/A	N/A	N/A	N/A	N/A
Marjorie Scardino	0%	N/A	N/A	55%	N/A	N/A	0%	N/A	N/A
Christopher Viehbacher	(3%)	N/A	N/A	26%	N/A	N/A	45%	N/A	N/A
Employees[4]	12%	6%	(22%)	9%	7%	1%	8%	16%	14%

1 Base salary amounts for Non-Executive Directors in 2021 and 2022 include grants of share based remuneration in the form of time-vesting restricted stock units with a face value of $50,000.
2 Joined the Board effective February 2021.
3 Joined the Board effective March 2022.
4 Does not include employees of Founded Entities.

Relative importance of spend on pay (unaudited)

The following table sets out the percentage change in overall spend on pay and distributions to shareholders in 2022 compared to 2021:

	2022	2021	% change
Staff costs[1]	**$32,050,089**	$22,136,823	59%
Distributions to Shareholders	**$26,359,851[2]**	—	—

1 Excludes Founded Entities.
2 Represents the value of the 10,595,347 ordinary shares repurchased under the Company's share repurchase programme during 2022.

Details of the Remuneration Committee, advisors to the Committee and their fees

The Remuneration Committee consists of Dr. LaMattina, Ms. Mazumdar-Shaw and Dr. Kucherlapati, with Dr. LaMattina serving as the Chair of the Committee. In 2022 the Committee received independent remuneration advice from Korn Ferry (UK) Limited, who was appointed by and is accountable to the Committee. A separate practice within Korn Ferry provides certain other candidate placement services to the Company. The terms of engagement between the Committee and Korn Ferry are available from the Company Secretary on request. The Committee also consults with the Chief Executive Officer and President. However, no Director is permitted to participate in discussions or decisions about their personal remuneration. During the year, fees in respect of remuneration advice from Korn Ferry amounted to £27,900. Korn Ferry is a founder member of the Remuneration Consultants' Group and complies with its Code of Conduct which sets out guidelines to ensure that its advice is independent and free of undue influence.

Statement of voting at general meeting (unaudited)

The table below sets out the proxy results of the vote on our Remuneration Report at our 2022 AGM:

Resolutions	For	%	Against	%	Withheld	Total votes cast
To approve the Directors' Remuneration Report	186,654,636	86.20%	29,871,462	13.80%	390,360	216,526,098

The table below sets out the proxy results of the vote on our Remuneration Policy at our 2021 AGM:

Resolutions	For	%	Against	%	Withheld	Total votes cast
To approve the Directors' Remuneration Policy	187,285,809	83.90%	35,930,008	16.10%	2,309,748	223,215,817

2023 AGM

The Company's AGM will be held at 11:00 am EDT (4:00 pm BST) on June 13, 2023 at the Company's headquarters at 6 Tide Street, Boston, Massachusetts. Information regarding the voting outcome will be disclosed in next year's Annual Report on Remuneration.

This report has been prepared by the Remuneration Committee and has been approved by the Board. It complies with the UK Companies Act 2006 and related regulations. This report will be put to shareholders for approval at the forthcoming AGM, alongside a vote to approve the new performance share plan.

On behalf of the Board of Directors

Bharatt Chowrira
Company Secretary

April 27, 2023

[Pages 103-111 have been removed]

Consolidated Statements of Comprehensive Income/(Loss)

For the years ended December 31

	Note	2022 $000s	2021 $000s	2020 $000s
Contract revenue	3	**2,090**	9,979	8,341
Grant revenue	3	**13,528**	7,409	3,427
Total revenue		**15,618**	17,388	11,768
Operating expenses:				
General and administrative expenses	7	**(60,991)**	(57,199)	(49,440)
Research and development expenses	7	**(152,433)**	(110,471)	(81,859)
Operating income/(loss)		**(197,807)**	(150,282)	(119,531)
Other income/(expense):				
Gain on deconsolidation of subsidiary	5	**27,251**	—	—
Gain/(loss) on investment held at fair value	5	**(32,060)**	179,316	232,674
Realized loss on sale of investments	5	**(29,303)**	(20,925)	(54,976)
Other income/(expense)	6, 16	**8,131**	1,592	1,035
Other income/(expense)		**(25,981)**	159,983	178,732
Finance income/(costs):				
Finance income	9	**5,799**	214	1,183
Finance costs – contractual	9	**(3,939)**	(4,771)	(2,946)
Finance income/(costs) – fair value accounting	9	**137,063**	9,606	(4,351)
Net finance income/(costs)		**138,924**	5,050	(6,115)
Share of net loss of associates accounted for using the equity method	6	**(27,749)**	(73,703)	(34,117)
Gain on dilution of ownership interest in associate	6	**28,220**	—	—
Impairment of investment in associate	6	**(8,390)**	—	—
Income/(loss) before taxes		**(92,783)**	(58,953)	18,969
Taxation	25	**55,719**	(3,756)	(14,401)
Income/(Loss) for the year		**(37,065)**	(62,709)	4,568
Other comprehensive income/(loss):				
Items that are or may be reclassified as profit or loss				
Equity-accounted associate – share of other comprehensive income (loss)		**(166)**	—	469
Reclassification of foreign currency differences on dilution of interest		**(213)**	—	—
Total other comprehensive income/(loss)		**(379)**	—	469
Total comprehensive income/(loss) for the year		**(37,444)**	(62,709)	5,037
Income/(loss) attributable to:				
Owners of the Company		**(50,354)**	(60,558)	5,985
Non-controlling interests	18	**13,290**	(2,151)	(1,417)
		(37,065)	(62,709)	4,568
Comprehensive income/(loss) attributable to:				
Owners of the Company		**(50,733)**	(60,558)	6,454
Non-controlling interests	18	**13,290**	(2,151)	(1,417)
		(37,444)	(62,709)	5,037
		$	$	$
Earnings/(loss) per share:				
Basic earnings/(loss) per share	10	**(0.18)**	(0.21)	0.02
Diluted earnings/(loss) per share	10	**(0.18)**	(0.21)	0.02

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Financial Position

As of December 31,

	Note	2022 $000s	2021 $000s
Assets			
Non-current assets			
Property and equipment, net	11	**22,957**	26,771
Right of use asset, net	21	**14,281**	17,166
Intangible assets, net	12	**831**	987
Investments held at fair value	5, 16	**251,892**	397,179
Investment in associates – equity method	6	**9,147**	—
Note from associate	16	**16,501**	—
Lease receivable – long-term	21	**835**	1,285
Other non-current assets		**10**	810
Total non-current assets		**316,454**	444,197
Current assets			
Trade and other receivables	22	**11,867**	3,174
Income tax receivable	25	**10,040**	4,514
Prepaid expenses		**11,617**	10,755
Lease receivable – short-term	21	**450**	415
Other financial assets	13, 22	**2,124**	2,124
Short-term note from associate		**—**	15,120
Short-term investments	22	**200,229**	—
Cash and cash equivalents	22	**149,866**	465,708
Total current assets		**386,192**	501,809
Total assets		**702,647**	946,006
Equity and liabilities			
Equity			
Share capital		**5,455**	5,444
Share premium		**289,624**	289,303
Treasury stock		**(26,492)**	—
Merger reserve		**138,506**	138,506
Translation reserve		**89**	469
Other reserve		**(14,478)**	(40,077)
Retained earnings/(accumulated deficit)		**149,516**	199,871
Equity attributable to the owners of the Company	14	**542,220**	593,515
Non-controlling interests	18	**5,369**	(9,368)
Total equity		**547,589**	584,147
Non-current liabilities			
Deferred tax liability	25	**19,645**	89,765
Lease liability, non-current	21	**24,155**	29,040
Long-term loan	20	**10,244**	14,261
Liability for share based awards	8	**4,128**	2,659
Total non-current liabilities		**58,172**	135,725
Current liabilities			
Deferred revenue	3	**2,185**	65
Lease liability, current	21	**4,972**	3,950
Trade and other payables	19	**54,840**	35,817
Subsidiary:			
Notes payable	16, 17	**2,345**	4,641
Warrant liability	16	**47**	6,787
Preferred shares	15, 16	**27,339**	174,017
Current portion of long-term loan	20	**5,156**	857
Total current liabilities		**96,885**	226,135
Total liabilities		**155,057**	361,859
Total equity and liabilities		**702,647**	946,006

Please refer to the accompanying Notes to the consolidated financial information. Registered number: 09582467.
The Consolidated Financial Statements were approved by the Board of Directors and authorized for issuance on April 27, 2023 and signed on its behalf by:

Daphne Zohar
Chief Executive Officer
April 27, 2023

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Changes in Equity

For the years ended December 31

	Share Capital			Treasury Shares								
	Shares	Amount $000s	Share premium $000s	Shares	Amount $000s	Merger reserve $000s	Translation reserve $000s	Other reserve $000s	Retained earnings/ (accumulated deficit) $000s	Total Parent equity $000s	Non-controlling interests $000s	Total Equity $000s
Balance January 1, 2020	285,370,619	5,408	287,962	—	—	138,506	—	(18,282)	254,444	668,037	(17,639)	650,398
Net income/(loss)	—	—	—	—	—	—	—	—	5,985	5,985	(1,417)	4,568
Other comprehensive income/(loss), net	—	—	—	—	—	—	469	—	—	469	—	469
Total comprehensive income/(loss) for the year	**—**	**—**	**—**	**—**	**—**	**—**	**469**	**—**	**5,985**	**6,454**	**(1,417)**	**5,037**
Exercise of share-based awards	514,406	9	1,016	—	—	—	—	—	—	1,025	11	1,036
Revaluation of deferred tax assets related to share-based awards	—	—	—	—	—	—	—	(684)	—	(684)	—	(684)
Equity settled share-based awards	—	—	—	—	—	—	—	7,805	—	7,805	2,822	10,627
Settlement of restricted stock units (RSU)	—	—	—	—	—	—	—	(12,888)	—	(12,888)	—	(12,888)
Other	—	—	—	—	—	—	—	—	—	—	13	13
Balance December 31, 2020	**285,885,025**	**5,417**	**288,978**	**—**	**—**	**138,506**	**469**	**(24,050)**	**260,429**	**669,748**	**(16,209)**	**653,539**
Net income/(loss)	—	—	—	—	—	—	—	—	(60,558)	(60,558)	(2,151)	(62,709)
Total comprehensive income/(loss) for the year	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**(60,558)**	**(60,558)**	**(2,151)**	**(62,709)**
Exercise of share-based awards	1,911,560	27	326	—	—	—	—	—	—	352	—	352
Revaluation of deferred tax assets related to share-based awards	—	—	—	—	—	—	—	615	—	615	—	615
Equity settled share-based awards	—	—	—	—	—	—	—	7,109	—	7,109	6,252	13,361
Settlement of restricted stock units	—	—	—	—	—	—	—	(10,749)	—	(10,749)	—	(10,749)
Reclassification of equity settled awards to liability awards	—	—	—	—	—	—	—	(6,773)	—	(6,773)	—	(6,773)
Vesting of share-based awards and net share exercise	—	—	—	—	—	—	—	(2,582)	—	(2,582)	—	(2,582)
Acquisition of subsidiary non-controlling interest	—	—	—	—	—	—	—	(9,636)	—	(9,636)	8,668	(968)
NCI exercise of share options in subsidiaries	—	—	—	—	—	—	—	5,988	—	5,988	(5,922)	66
Distributions	—	—	—	—	—	—	—	—	—	—	(6)	(6)
Balance December 31, 2021	**287,796,585**	**5,444**	**289,303**	**—**	**—**	**138,506**	**469**	**(40,077)**	**199,871**	**593,515**	**(9,368)**	**584,147**
Net income/(loss)	—	—	—	—	—	—	—	—	(50,354)	(50,354)	13,290	(37,065)
Other comprehensive income/(loss), net	—	—	—	—	—	—	(379)	—	—	(379)	—	(379)
Total comprehensive income/(loss) for the year	**—**	**—**	**—**	**—**	**—**	**—**	**(379)**	**—**	**(50,354)**	**(50,733)**	**13,290**	**(37,444)**
Deconsolidation of Subsidiary	—	—	—	—	—	—	—	—	—	—	11,904	11,904
Exercise of share-based awards	577,022	11	321	—	—	—	—	—	—	332	—	332
Revaluation of deferred tax assets related to share-based awards	—	—	—	—	—	—	—	45	—	45	—	45
Purchase of Treasury stock	—	—	—	(10,595,347)	(26,492)	—	—	—	—	(26,492)	—	(26,492)
Equity settled share-based awards	—	—	—	—	—	—	—	8,856	—	8,856	4,711	13,567
Partial settlement of share based liability awards and settlement of equity based RSUs	788,046	—	—	—	—	—	—	1,528	—	1,528	—	1,528
NCI exercise of share options in subsidiaries	—	—	—	—	—	—	—	15,171	—	15,171	(15,164)	7
Other	—	—	—	—	—	—	—	—	—	—	(4)	(4)
Balance December 31, 2022	**289,161,653**	**5,455**	**289,624**	**(10,595,347)**	**(26,492)**	**138,506**	**89**	**(14,478)**	**149,516**	**542,220**	**5,369**	**547,589**

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Cash Flows

For the years ended December 31

	Note	2022 $000s	2021 $000s	2020 $000s
Cash flows from operating activities				
Income/(loss)		**(37,065)**	(62,709)	4,568
Adjustments to reconcile net income/(loss) to net cash used in operating activities:				
Non-cash items:				
Depreciation and amortization	11, 21	**8,893**	7,287	6,645
Share-based compensation expense	8	**14,698**	13,950	10,718
(Gain)/loss on investment held at fair value	5	**32,060**	(179,316)	(232,674)
Realized loss on sale of investments	5	**29,303**	20,925	54,976
Gain on dilution of ownership interest in associate	6	**(28,220)**	—	—
Impairment of investment in associate	6	**8,390**	—	—
Gain on deconsolidation of subsidiary	5	**(27,251)**	—	—
Share of net loss of associates accounted for using the equity method	6	**27,749**	73,703	34,117
Fair value gain on other financial instruments	6, 16	**(8,163)**	(800)	—
Loss on disposal of assets	11	**138**	53	66
Income taxes, net	25	**(55,719)**	3,756	14,402
Finance (income)/costs, net	9	**(138,924)**	(5,050)	6,114
Changes in operating assets and liabilities:				
Trade and other receivables		**(7,734)**	(617)	(529)
Prepaid expenses		**(862)**	(5,350)	(3,371)
Deferred revenue	3	**2,123**	(1,407)	(5,223)
Trade and other payables	19	**22,033**	8,338	605
Other		**359**	(103)	(7)
Income taxes paid		**(20,696)**	(27,766)	(20,737)
Interest received		**3,460**	214	1,155
Interest paid	20, 21	**(3,366)**	(3,382)	(2,651)
Net cash used in operating activities		**(178,792)**	(158,274)	(131,827)
Cash flows from investing activities:				
Purchase of property and equipment	11	**(2,176)**	(5,571)	(5,170)
Proceeds from sale of property and equipment		**—**	30	—
Purchases of intangible assets	12	**—**	(90)	(254)
Investment in associates	6	**(19,961)**	—	—
Purchase of associate preferred shares held at fair value	5	**—**	—	(10,000)
Purchase of investments held at fair value	5	**(5,000)**	(500)	(1,150)
Sale of investments held at fair value	5	**118,710**	218,125	350,586
Purchase of short-term note from associate	16	**—**	(15,000)	—
Repayment of short-term Note from associate	16	**15,000**	—	—
Purchase of Convertible Note from associate	16	**(15,000)**	—	—
Cash derecognized upon loss of control over subsidiary (see table below)		**(479)**	—	—
Purchases of short-term investments	22	**(248,733)**	—	—
Proceeds from maturity of short-term investments	22	**50,000**	—	30,116
Receipt of payment of sublease	21	**415**	381	350
Net cash provided by (used in) investing activities		**(107,223)**	197,375	364,478
Cash flows from financing activities:				
Receipt of PPP loan		**—**	—	68
Issuance of long term loan	20	**—**	—	14,720
Issuance of subsidiary preferred Shares	15	**—**	37,610	13,750
Issuance of Subsidiary Convertible Note	17	**393**	2,215	25,000
Payment of lease liability	21	**(4,025)**	(3,375)	(2,908)
Exercise of stock options		**332**	352	1,036
Settlement of restricted stock unit equity awards		**—**	(10,749)	(12,888)
Vesting of restricted stock units and net share exercise		**—**	(2,582)	—
NCI exercise of stock options in subsidiary	15	**7**	66	—
Issuance of warrants in subsidiary		**—**	—	92
Purchase of treasury stock	14	**(26,492)**	—	—
Acquisition of a non-controlling Interest of a subsidiary		**—**	(806)	—
Other		**(41)**	(5)	—
Net cash provided by (used in) financing activities		**(29,827)**	22,727	38,869
Net increase (decrease) in cash and cash equivalents		**(315,842)**	61,827	271,520
Cash and cash equivalents at beginning of year		**465,708**	403,881	132,360
Cash and cash equivalents at end of year		**149,866**	465,708	403,881
Supplemental disclosure of non-cash investment and financing activities:				
Partial settlement of share based liability award through issuance of equity		**1,528**	—	—
Purchase of property, plant and equipment against trade and other payables	11	**—**	1,841	—
Leasehold improvements purchased through lease incentives (deducted from Right of Use Asset)	11	**—**	1,010	—
Conversion of subsidiary convertible note into preferred share liabilities	17	**—**	25,797	—

Consolidated Statements of Cash Flows — continued

For the years ended December 31

Assets, Liabilities and non controlling interests other than cash in deconsolidated subsidiary

	2022 $000s
Trade and other payables	1,407
Subsidiary notes payable	3,403
Subsidiary preferred shares	15,853
Other assets and liabilities, net	123
Non-controlling interest	(11,904)
	8,882
Investment retained in deconsolidated subsidiary	18,848
Gain on deconsolidation	(27,251)
Cash in deconsolidated subsidiary	479

The accompanying notes are an integral part of these financial statements.

Notes to the Consolidated Financial Statements

1. Accounting policies

Description of Business

PureTech Health plc ("PureTech," the "Parent" or the "Company") is a public company incorporated, domiciled and registered in the United Kingdom ("UK"). The registered number is 09582467 and the registered address is 8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom.

PureTech's group financial statements consolidate those of the Company and its subsidiaries (together referred to as the "Group"). The Parent company financial statements present financial information about the Company as a separate entity and not about its Group.

The accounting policies set out below have, unless otherwise stated, been applied consistently to all periods presented in these group financial statements.

Basis of Presentation

The consolidated financial statements of the Group are presented as of December 31, 2022 and 2021, and for the years ended December 31, 2022, 2021 and 2020. The Group financial statements have been approved by the Directors on April 27, 2023, and are prepared in accordance with UK-adopted International Financial Reporting Standards (IFRSs). The Consolidated Financial Statements also comply fully with IFRSs as issued by the International Accounting Standards Board (IASB). UK-adopted IFRSs differs in certain respects from IFRS as issued by the IASB. However, the differences have no impact for the periods presented.

For presentation of the Consolidated Statements of Comprehensive Income/(Loss), the Company uses a classification based on the function of expenses, rather than based on their nature, as it is more representative of the format used for internal reporting and management purposes and is consistent with international practice.

Certain amounts in the Consolidated Financial Statements and accompanying notes may not add due to rounding. All percentages have been calculated using unrounded amounts.

Basis of Measurement

The consolidated financial statements are prepared on the historical cost basis except that the following assets and liabilities are stated at their fair value: investments held at fair value, short-term and convertible note from associate and liabilities classified as fair value through the profit or loss.

Use of Judgments and Estimates

In preparing these consolidated financial statements, management has made judgements, estimates and assumptions that affect the application of the Group's accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an on-going basis.

Significant estimation is applied in determining the following:

- Financial instruments valuations (Note 16): when estimating the fair value of subsidiary preferred shares, subsidiary warrants, and subsidiary convertible notes carried at fair value through profit and loss (FVTPL) as well as investments held at fair value, at initial recognition and upon subsequent measurement. Valuation of the aforementioned financial instruments (assets and liabilities) includes making significant estimates, specifically determining the appropriate valuation methodology and making certain estimates such as the future expected returns on the financial instrument in different scenarios, earnings potential of the subsidiary businesses, appropriate discount rate, appropriate volatility, appropriate term to exit and other industry and company specific risk factors.

Significant judgement is also applied in determining the following:

- Subsidiary preferred shares liability classification (Note 15): when determining the classification of financial instruments in terms of liability or equity. These judgements include an assessment of whether the financial instruments include any embedded derivative features, whether they include contractual obligations of the Group to deliver cash or other financial assets or to exchange financial assets or financial liabilities with another party, and whether that obligation will be settled by the Company exchanging a fixed amount of cash or other financial assets for a fixed number of its own equity instruments. Further information about these critical judgements and estimates is included below under Financial Instruments.
- When the power to control the subsidiaries exists (please refer to Notes 5 and 6 and accounting policy below Subsidiaries). This judgement includes an assessment of whether the Company has (i) power over the investee; (ii) exposure, or rights, to variable returns from its involvement with the investee; and (iii) the ability to use its power over the investee to affect the amount of the investor's returns. The Company considers among others its voting shares, shareholder agreements, ability to appoint board members, representation on the board, rights to appoint management, de facto control, investee dependence on the Company etc. If the power to control investees exists we consolidate the financial statements of such investee in the consolidated financial statements of the Group. Upon issuance of new shares in a subsidiary and/or a change in any shareholders or governance agreements, the Group reassesses its ability to control the investee based on the revised voting interest and board composition and revised subsidiary governance and management structure. When such new circumstances result in the Group losing its power to control the investee, the investee is deconsolidated.
- Whether the Company has significant influence over financial and operating policies of investees in order to determine if the Company should account for its investment as an associate based on IAS 28 or based on IFRS 9, Financial Instruments (please refer to Note 5). This judgement includes, among others, an assessment whether the Company has representation on the Board of Directors of the investee, whether the Company participates in the policy making processes of the investee, whether there is any interchange of managerial personnel, whether there is any essential technical information provided to the investee and if there are any transactions between the Company and the investee.

1. Accounting policies — continued

- Upon determining that the Company does have significant influence over the financial and operating policies of an investee, if the Company holds more than a single instrument issued by its equity-accounted investee, judgement is required to determine whether the additional instrument forms part of the investment in the associate, which is accounted for under IAS 28 and scoped out of IFRS 9, or it is a separate financial instrument that falls in the scope of IFRS 9 (please refer to Notes 5 and 6). This judgement includes an assessment of the characteristics of the financial instrument of the investee held by the Company and whether such financial instrument provides access to returns underlying an ownership interest.
- Where the company has other investments in an equity accounted investee that are not accounted for under IAS 28, judgement is required in determining if such investments constitute Long-Term Interests for the purposes of IAS 28 (please refer to Notes 5 and 6). This determination is based on the individual facts and circumstances and characteristics of each investment, but is driven, among other factors, by the intention and likelihood to settle the instrument through redemption or repayment in the foreseeable future, and whether or not the investment is likely to be converted to common stock or other equity instruments (please also refer to accounting policy with regard to Investments in Associates below). When the Group considered the individual facts and circumstances of the Group's investment in its associate's preferred stock in the manner described above, including the long-term nature of such investment, the ability of the Group to convert its preferred stock investment to an investment in common shares and the likelihood of such conversion, we concluded that such investment was considered a Long Term Interest.

As of December 31, 2022, the Group had cash and cash equivalents of $149.9 million and short-term investments of $200.2 million. Considering the Group's and the Company's financial position as of December 31, 2022, and its principal risks and opportunities, a going concern analysis has been prepared for at least the twelve-month period from the date of signing the Consolidated Financial Statements ("the going concern period") utilizing realistic scenarios and applying a severe but plausible downside scenario. Even under the downside scenario, the analysis demonstrates the Group and the Company continue to maintain sufficient liquidity headroom and continue to comply with all financial obligations. The Directors believe the Group and the Company is adequately resourced to continue in operational existence for at least the twelve-month period from the date of signing the Consolidated Financial Statements. Accordingly, the Directors considered it appropriate to adopt the going concern basis of accounting in preparing the Consolidated Financial Statements and the PureTech Health plc Financial Statements.

Basis of consolidation

The consolidated financial information as of December 31, 2022 and 2021, and for each of the years ended December 31, 2022, 2021 and 2020, comprises an aggregation of financial information of the Company and the consolidated financial information of PureTech Health LLC ("PureTech LLC"). Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated.

Subsidiaries

As used in these financial statements, the term subsidiaries refers to entities that are controlled by the Group. Financial results of subsidiaries of the Group as of December 31, 2022, are reported within the Internal segment, Controlled Founded Entities segment or the Parent Company and Other section (please refer to Note 4). Under applicable accounting rules, the Group controls an entity when it is exposed to, or has the rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. In assessing control, the Group takes into consideration potential voting rights, board representation, shareholders' agreements, ability to appoint Directors and management, de facto control and other related factors. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so causes the non-controlling interests to have a deficit balance.

A list of all current and former subsidiaries organized with respect to classification as of December 31, 2022, and the Group's total voting percentage, based on outstanding voting common and preferred shares as of December 31, 2022, 2021 and 2020, is outlined below. All current subsidiaries are domiciled within the United States and conduct business activities solely within the United States.

1. Accounting policies — continued

	Voting percentage at December 31, through the holdings in					
	2022		2021		2020	
Subsidiary	**Common**	**Preferred**	Common	Preferred	Common	Preferred
Subsidiary operating companies						
Alivio Therapeutics, Inc.[1,2]	**—**	**100.0**	—	100.0	—	91.9
Entrega, Inc. (indirectly held through Enlight)[1,2]	**—**	**77.3**	—	77.3	—	83.1
Follica, Incorporated[1,2]	**28.7**	**56.7**	28.7	56.7	28.7	56.7
PureTech LYT (formerly Ariya Therapeutics, Inc.)	**—**	**100.0**	—	100.0	—	100.0
PureTech LYT-100	**—**	**100.0**	—	100.0	—	100.0
PureTech Management, Inc.[3]	**100.0**	**—**	100.0	—	100.0	—
PureTech Health LLC[3]	**100.0**	**—**	100.0	—	100.0	—
Vedanta Biosciences, Inc.[1,2]	**—**	**47.0**	—	48.6	—	59.3
Vedanta Biosciences Securities Corp. (indirectly held through Vedanta)[1,2]	**—**	**47.0**	—	48.6	—	59.3
Deconsolidated former subsidiary operating companies						
Sonde Health, Inc.[1,2,5]	**—**	**40.2**	—	51.8	—	51.8
Akili Interactive Labs, Inc.[6]	**14.7**	**—**	—	26.7	—	41.9
Gelesis, Inc.[1,2,6]	**22.8**	**—**	4.8	19.7	4.9	20.2
Karuna Therapeutics, Inc.[1,2]	**3.1**	**—**	5.6	—	12.6	—
Vor Biopharma Inc.1,2	**4.1**	**—**	8.6	—	—	16.4
Nontrading holding companies						
Endra Holdings, LLC (held indirectly through Enlight)[2]	**86.0**	**—**	86.0	—	86.0	—
Ensof Holdings, LLC (held indirectly through Enlight)[2]	**86.0**	**—**	86.0	—	86.0	—
PureTech Securities Corp.[2]	**100.0**	**—**	100.0	—	100.0	—
PureTech Securities II Corp.[2]	**100.0**	**—**	100.0	—	100.0	—
Inactive subsidiaries						
Appeering, Inc.[2]	**—**	**100.0**	—	100.0	—	100.0
Commense Inc.[2]	**—**	**99.1**	—	99.1	—	99.1
Enlight Biosciences, LLC[2]	**86.0**	**—**	86.0	—	86.0	—
Ensof Biosystems, Inc. (held indirectly through Enlight)[1,2]	**57.7**	**28.3**	57.7	28.3	57.7	28.3
Knode Inc. (indirectly held through Enlight)[2]	**—**	**86.0**	—	86.0	—	86.0
Libra Biosciences, Inc.[2]	**—**	**100.0**	—	100.0	—	100.0
Mandara Sciences, LLC[2]	**98.3**	**—**	98.3	—	98.3	—
Tal Medical, Inc.[1,2]	**—**	**100.0**	—	100.0	—	100.0

1 The voting percentage is impacted by preferred shares that are classified as liabilities, which results in the ownership percentage not being the same as the ownership percentage used in allocations to non-controlling interests disclosed in Note 18. The allocation of losses/profits to the noncontrolling interest is based on the holdings of subordinated stock that provide ownership rights in the subsidiaries. The ownership of liability classified preferred shares are quantified in Note 15.

2 Registered address is Corporation Trust Center, 1209 Orange St., Wilmington, DE 19801, USA.

3 Registered address is 2711 Centerville Rd., Suite 400, Wilmington, DE 19808, USA.

4 The Company's interests in its subsidiaries are predominantly in the form of preferred shares, which have a liquidation preference over the common stock, are convertible into common stock at the holder's discretion or upon certain liquidity events, are entitled to one vote per share on all matters submitted to shareholders for a vote and entitled to receive dividends when and if declared. In the case of Enlight, Mandara and PureTech Health LLC, the holdings are membership interests in an LLC. The holders of common stock are entitled to one vote per share on all matters submitted to shareholders for a vote and entitled to receive dividends when and if declared.

5 On May 25, 2022 PureTech lost control over Sonde and Sonde was deconsolidated from the Group's financial statements, resulting in only the profits and losses generated by Sonde through the deconsolidation date being included in the Group's Consolidated Statement of Comprehensive Income/(Loss). See Notes 5 and 6 for further details about the accounting for the investments in Sonde subsequent to deconsolidation.

6 See Notes 5 and 6 for the Gelesis and Akili SPAC merger and for the exchange of the Group's preferred stock investments for common stock of those entities.

Change in subsidiary ownership and loss of control

Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

Where the Group loses control of a subsidiary, the assets and liabilities are derecognized along with any related non-controlling interest ("NCI"). Any interest retained in the former subsidiary is measured at fair value when control is lost. Any resulting gain or loss is recognized as profit or loss in the Consolidated Statements of Comprehensive Income/(Loss).

Associates

As used in these financial statements, the term associates are those entities in which the Group has no control but maintains significant influence over the financial and operating policies. Significant influence is presumed to exist when the Group holds between 20 and 50 percent of the voting power of an entity, unless it can be clearly demonstrated that this is not the case. The Group evaluates if it maintains significant influence over associates by assessing if the Group has lost the power to participate in the financial and operating policy decisions of the associate.

1. Accounting policies — continued

Application of the equity method to associates

Associates are accounted for using the equity method (equity accounted investees) and are initially recognized at cost, or if recognized upon deconsolidation they are initially recorded at fair value at the date of deconsolidation. The consolidated financial statements include the Group's share of the total comprehensive income and equity movements of equity accounted investees, from the date that significant influence commences until the date that significant influence ceases.

To the extent the Group holds interests in associates that are not providing access to returns underlying ownership interests, the instrument held by PureTech is accounted for in accordance with IFRS 9 as investments held at fair value.

When the Group's share of losses exceeds its equity method investment in the investee, losses are applied against Long-Term Interests, which are investments accounted for under IFRS 9. Investments are determined to be Long-Term Interests when they are long-term in nature and in substance they form part of the Group's net investment in that associate. This determination is impacted by many factors, among others, whether settlement by the investee through redemption or repayment is planned or likely in the foreseeable future, whether the investment can be converted and/or is likely to be converted to common stock or other equity instrument and other factors regarding the nature of the investment. Whilst this assessment is dependent on many specific facts and circumstances of each investment, typically conversion features whereby the investment is likely to convert to common stock or other equity instruments would point to the investment being a Long-Term Interest. Similarly, where the investment is not planned or likely to be settled through redemption or repayment in the foreseeable future, this would indicate that the investment is a Long-Term Interest. When the net investment in the associate, which includes the Group's investments in other long-term interests, is reduced to nil, recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of an investee.

The Group has also adopted the amendments to IAS 28 Investments in Associates that addresses the dual application of IAS 28 and IFRS 9 (see below) when equity method losses are applied against Long-Term Interests (LTI). The amendments provide the annual sequence in which both standards are to be applied in such a case. The Group has applied the equity method losses to the LTIs presented as part of Investments held at fair value subsequent to remeasuring such investments to their fair value at balance sheet date.

Financial Instruments

Classification

The Group classifies its financial assets in the following measurement categories:

- Those to be measured subsequently at fair value (either through other comprehensive income, or through profit or loss), and
- Those to be measured at amortized cost.

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses are recorded in profit or loss. For investments in equity instruments that are not held for trading, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at FVOCI. As of balance sheet dates, none of the Company's financial assets are accounted for as FVOCI.

Measurement

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at FVTPL, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets that are carried at FVTPL are expensed.

Impairment

The Group assesses on a forward-looking basis the expected credit losses associated with its debt instruments carried at amortized cost. For trade receivables, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognized from initial recognition of the receivables.

Financial Assets

The Group's financial assets consist of cash and cash equivalents, investments in debt securities, trade and other receivables, notes, restricted cash deposits and investments in equity securities. The Group's financial assets are virtually all classified into the following categories: investments held at fair value, notes, trade and other receivables, short-term investments and cash and cash equivalents. The Group determines the classification of financial assets at initial recognition depending on the purpose for which the financial assets were acquired.

1. Accounting policies — continued

Investments held at fair value are investments in equity instruments that are not held for trading. Such investments consist of the Group's minority interest holdings where the Group has no significant influence or preferred share investments in the Group's associates that are not providing access to returns underlying ownership interests. These financial assets are initially measured at fair value and subsequently re-measured at fair value at each reporting date. The Company elects if the gain or loss will be recognized in Other Comprehensive Income/(Loss) or through profit and loss on an instrument by instrument basis. The Company has elected to record the changes in fair values for the financial assets falling under this category through profit and loss. Please refer to Note 5.

Changes in the fair value of financial assets at FVTPL are recognized in other income/(expense) in the Consolidated Statements of Comprehensive Income/(Loss) as applicable.

The notes from an associate, since their contractual terms do not consist solely of cash flow payments of principal and interest on the principal amount outstanding, such notes are initially and subsequently measured at fair value, with changes in fair value recognized through profit and loss.

Short term investments consist of short-term US treasury bills that are held to maturity. The contractual terms consist solely of payment of the principal and the Group's business model is to hold the treasury bills to maturity. As such, such short term investments are recorded at amortized cost. As of balance sheet date amortized cost approximated the fair value of such short-term investments.

Trade and other receivables are non-derivative financial assets with fixed and determinable payments that are not quoted on active markets. These financial assets are carried at the amounts expected to be received less any expected lifetime losses. Such losses are determined taking into account previous experience, credit rating and economic stability of counterparty and economic conditions. When a trade receivable is determined to be uncollectible, it is written off against the available provision. As of balance sheet date, The Group did not incur or record any such expected lifetime losses. Trade and other receivables are included in current assets, unless maturities are greater than 12 months after the end of the reporting period.

Financial Liabilities

The Group's financial liabilities consist of trade and other payables, subsidiary notes payable, long-term loan, preferred shares, and warrant liability.

Warrant liabilities are initially recognized at fair value. After initial recognition, these financial liabilities are re-measured at FVTPL using an appropriate valuation technique.

Subsidiary notes payable without embedded derivatives and the long-term loan are accounted for at amortized cost.

The majority of the Group's subsidiaries have preferred shares and certain notes payable with embedded derivatives, which are classified as current liabilities. When the Group has preferred shares and notes with embedded derivatives that qualify for bifurcation, the Group has elected to account for the entire instrument as FVTPL after determining under IFRS 9 that the instrument qualifies to be accounted for under such FVTPL method.

The Group derecognizes a financial liability when its contractual obligations are discharged, cancelled or expire.

Equity Instruments Issued by the Group

Financial instruments issued by the Group are treated as equity only to the extent that they meet the following two conditions, in accordance with IAS 32:

1. They include no contractual obligations upon the Group to deliver cash or other financial assets or to exchange financial assets or financial liabilities with another party under conditions that are potentially unfavorable to the Group; and
2. Where the instrument will or may be settled in the Group's own equity instruments, it is either a non-derivative that includes no obligation to deliver a variable number of the Group's own equity instruments or is a derivative that will be settled by the Group exchanging a fixed amount of cash or other financial assets for a fixed number of its own equity instruments.

To the extent that this definition is not met, the financial instrument is classified as a financial liability. Where the instrument so classified takes the legal form of the Group's own shares, the amounts presented in the Group's shareholders' equity exclude amounts in relation to those shares.

Changes in the fair value of liabilities at FVTPL are recognized in Net finance income (costs) in the Consolidated Statements of Comprehensive Income/(Loss) as applicable.

IFRS 15, Revenue from Contracts with Customers

The standard establishes a five-step principle-based approach for revenue recognition and is based on the concept of recognizing an amount that reflects the consideration for performance obligations only when they are satisfied and the control of goods or services is transferred.

The majority of the Group's contract revenue is generated from licenses and services, some of which are part of collaboration arrangements.

Management reviewed contracts where the Group received consideration in order to determine whether or not they should be accounted for in accordance with IFRS 15. To date, PureTech has entered into transactions that generate revenue and meet the scope of either IFRS 15 or IAS 20 Accounting for Government Grants. Contract revenue is recognized at either a point-in-time or over time, depending on the nature of the performance obligations.

1. Accounting policies — continued

The Group accounts for agreements that meet the definition of IFRS 15 by applying the following five step model:

- Identify the contract(s) with a customer – A contract with a customer exists when (i) the Group enters into an enforceable contract with a customer that defines each party's rights regarding the goods or services to be transferred and identifies the payment terms related to those goods or services, (ii) the contract has commercial substance and, (iii) the Group determines that collection of substantially all consideration for goods or services that are transferred is probable based on the customer's intent and ability to pay the promised consideration.
- Identify the performance obligations in the contract – Performance obligations promised in a contract are identified based on the goods or services that will be transferred to the customer that are both capable of being distinct, whereby the customer can benefit from the good or service either on its own or together with other resources that are readily available from third parties or from the Group, and are distinct in the context of the contract, whereby the transfer of the goods or services is separately identifiable from other promises in the contract.
- Determine the transaction price – The transaction price is determined based on the consideration to which the Group will be entitled in exchange for transferring goods or services to the customer. To the extent the transaction price includes variable consideration, the Group estimates the amount of variable consideration that should be included in the transaction price utilizing either the expected value method or the most likely amount method depending on the nature of the variable consideration. Variable consideration is included in the transaction price if, in the Group's judgement, it is probable that a significant future reversal of cumulative revenue under the contract will not occur.
- Allocate the transaction price to the performance obligations in the contract – If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price basis.
- Recognize revenue when (or as) the Group satisfies a performance obligation – The Group satisfies performance obligations either over time or at a point in time as discussed in further detail below. Revenue is recognized at the time the related performance obligation is satisfied by transferring a promised good or service to a customer.

Revenue generated from services agreements (typically where licenses and related services were combined into one performance obligation) is determined to be recognized over time when it can be determined that the services meet one of the following: (a) the customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs; (b) the entity's performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or (c) the entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

It was determined that the Group has contracts that meet criteria (a), since the customer simultaneously receives and consumes the benefits provided by the Company's performance as the Company performs. Therefore revenue is recognized over time using the input method based on costs incurred to date as compared to total contract costs. The Company believes that in research and development service type agreements using costs incurred to date represents the most faithful depiction of the entity's performance towards complete satisfaction of a performance obligation.

Revenue from licenses that are not part of a combined performance obligation are recognized at a point in time due to the licenses relating to intellectual property that has significant stand-alone functionality and as such represent a right to use the entity's intellectual property as it exists at the point in time at which the license is granted.

Royalty income received in respect of licensing agreements is recognized as the related third party sales in the licensee occur.

Amounts that are receivable or have been received per contractual terms but have not been recognized as revenue since performance has not yet occurred or has not yet been completed are recorded as deferred revenue. The Company classifies as non-current deferred revenue amounts received for which performance is expected to occur beyond one year or one operating cycle.

Grant Income

The Company recognizes grants from governmental agencies as grant income in the Consolidated Statement of Comprehensive Income/(Loss), gross of the expenditures that were related to obtaining the grant, when there is reasonable assurance that the Company will comply with the conditions within the grant agreement and there is reasonable assurance that payments under the grants will be received. The Company evaluates the conditions of each grant as of each reporting date to ensure that the Company has reasonable assurance of meeting the conditions of each grant arrangement and that it is expected that the grant payment will be received as a result of meeting the necessary conditions.

The Company submits qualifying expenses for reimbursement after the Company has incurred the research and development expense. The Company records an unbilled receivable upon incurring such expenses. In cases were grant income is received prior to the expenses being incurred or recognized, the amounts received are deferred until the related expense is incurred and/or recognized. Grant income is recognized in the Consolidated Statements of Comprehensive Income/(Loss) at the time in which the Company recognizes the related reimbursable expense for which the grant is intended to compensate.

1. Accounting policies — continued

Functional and Presentation Currency
These consolidated financial statements are presented in United States dollars ("US dollars"). The functional currency of all members of the Group is the U.S. dollar. The Group's share in foreign exchange differences in associates were reported in Other Comprehensive Income/(Loss).

Foreign Currency
Transactions in foreign currencies are translated to the respective functional currencies of Group entities at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are retranslated to the functional currency at the foreign exchange rate ruling at that date. Foreign exchange differences arising on remeasurement are recognized in the Consolidated Statement of Comprehensive Income/(Loss). Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

Cash and Cash Equivalents
Cash and cash equivalents include all highly liquid instruments with original maturities of three months or less.

Share Capital
Ordinary shares are classified as equity. The Group's equity is comprised of share capital, share premium, merger reserve, other reserve, translation reserve, and retained earnings/accumulated deficit.

Treasury Shares
Treasury shares are recognized at cost and are deducted from shareholders' equity. No gain or loss is recognized in profit and loss for the purchase, sale, re-issue or cancellation of the Company's own equity shares

Property and Equipment
Property and equipment is stated at cost less accumulated depreciation and any accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. Assets under construction represent leasehold improvements and machinery and equipment to be used in operations or research and development activities. When parts of an item of property and equipment have different useful lives, they are accounted for as separate items (major components) of property and equipment. Depreciation is calculated using the straight-line method over the estimated useful life of the related asset:

Laboratory and manufacturing equipment	2-8 years
Furniture and fixtures	7 years
Computer equipment and software	1-5 years
Leasehold improvements	5-10 years, or the remaining term of the lease, if shorter

Depreciation methods, useful lives and residual values are reviewed at each balance sheet date.

Intangible Assets
Intangible assets, which include purchased patents and licenses with finite useful lives, are carried at historical cost less accumulated amortization, if amortization has commenced. Intangible assets with finite lives are amortized from the time they are available for their intended use. Amortization is calculated using the straight-line method to allocate the costs of patents and licenses over their estimated useful lives.

Research and development intangible assets, which are still under development and have accordingly not yet obtained marketing approval, are presented as In-Process Research and Development (IPR&D). IPR&D is not amortized since it is not yet available for its intended use, but it is evaluated for potential impairment on an annual basis or more frequently when facts and circumstances warrant.

Impairment
Impairment of Non-Financial Assets
The Group reviews the carrying amounts of its property and equipment and intangible assets at each reporting date to determine whether there are indicators of impairment. If any such indicators of impairment exist, then an asset's recoverable amount is estimated. The recoverable amount is the higher of an asset's fair value less cost of disposal and value in use.

The Company's IPR&D intangible assets are not yet available for their intended use. As such, they are tested for impairment at least annually.

An impairment loss is recognized when an asset's carrying amount exceeds its recoverable amount. For the purposes of impairment testing, assets are grouped at the lowest levels for which there are largely independent cash flows. If a non-financial asset instrument is impaired, an impairment loss is recognized in the Consolidated Statements of Comprehensive Income/(Loss).

Investments in associates are considered impaired if, and only if, objective evidence indicates that one or more events, which occurred after the initial recognition, have had an impact on the future cash flows from the net investment and that impact can be reliably estimated. If an impairment exists the Company measures an impairment by comparing the carrying value of the net investment in the associate to its recoverable amount and recording any excess as an impairment loss. See Note 6 for impairment recorded in respect of an investment in associate during the year ended December 31, 2022.

1. Accounting policies — continued

Employee Benefits

Short-Term Employee Benefits

Short-term employee benefit obligations are measured on an undiscounted basis and expensed as the related service is provided. A liability is recognized for the amount expected to be paid if the Group has a present legal or constructive obligation due to past service provided by the employee, and the obligation can be estimated reliably.

Defined Contribution Plans

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and has no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution plans are recognized as an employee benefit expense in the periods during which related services are rendered by employees. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

Share-based Payments

Share-based payment arrangements, in which the Group receives goods or services as consideration for its own equity instruments, are accounted for as equity-settled share-based payment transactions (except certain restricted stock units – see below) in accordance with IFRS 2, regardless of how the equity instruments are obtained by the Group. The grant date fair value of employee share-based payment awards is recognized as an expense with a corresponding increase in equity over the requisite service period related to the awards. The amount recognized as an expense is adjusted to reflect the actual number of awards for which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that do meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with market conditions, the grant date fair value is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

Certain restricted stock units are treated as liability settled awards starting in 2021. Such awards are remeasured at every reporting date until settlement date and are recognized as compensation expense over the requisite service period. Differences in remeasurement are recognized in profit and loss. The cumulative cost that will ultimately be recognized in respect of these awards will equal to the amount at settlement.

The fair value of the awards is measured using option pricing models and other appropriate models, which take into account the terms and conditions of the awards granted. See further details in Note 8.

Development Costs

Expenditures on research activities are recognized as incurred in the Consolidated Statements of Comprehensive Income/(Loss). In accordance with IAS 38 development costs are capitalized only if the expenditure can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, the Group can demonstrate its ability to use or sell the intangible asset, the Group intends to and has sufficient resources to complete development and to use or sell the asset, and it is able to measure reliably the expenditure attributable to the intangible asset during its development. The point at which technical feasibility is determined to have been reached is, generally, when regulatory approval has been received where applicable. Management determines that commercial viability has been reached when a clear market and pricing point have been identified, which may coincide with achieving meaningful recurring sales. Otherwise, the development expenditure is recognized as incurred in the Consolidated Statements of Comprehensive Income/(Loss). As of balance sheet date the Group has not capitalized any development costs.

Provisions

A provision is recognized in the Consolidated Statements of Financial Position when the Group has a present legal or constructive obligation due to a past event that can be reliably measured, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects risks specific to the liability.

1. Accounting policies — continued

Leases

The Group leases real estate (and some minor equipment) for use in operations. These leases generally have lease terms of 1 to 10 years. The Group includes options that are reasonably certain to be exercised as part of the determination of the lease term. The group determines if an arrangement is a lease at inception of the contract in accordance with guidance detailed in IFRS 16. ROU assets represent the Group's right to use an underlying asset for the lease term and lease liabilities represent the Group's obligation to make lease payments arising from the lease. Operating lease ROU assets and lease liabilities are recognized at commencement date based on the present value of the lease payments over the lease term. As most of the Group's leases do not provide an implicit rate, The Group used its estimated incremental borrowing rate, based on information available at commencement date, in determining the present value of future payments.

The Group's leases are virtually all leases of real estate.

The Group has elected to account for lease payments as an expense on a straight-line basis over the life of the lease for:

- Leases with a term of 12 months or less and containing no purchase options; and
- Leases where the underlying asset has a value of less than $5,000.

The right-of-use asset is depreciated on a straight-line basis and the lease liability gives rise to an interest charge.

Further information regarding the subleases, right of use asset and lease liability can be found in Note 21.

Finance Income and Finance Costs

Finance income is comprised of income on funds invested in U.S. treasuries, income on money market funds and income on a finance lease. Financing income is recognized as it is earned. Finance costs comprise mainly of loan, notes and lease liability interest expenses and the changes in the fair value of financial liabilities carried at FVTPL (such changes can consist of finance income when the fair value of such financial liabilities decreases).

Taxation

Tax on the profit or loss for the year comprises current and deferred income tax. In accordance with IAS 12, tax is recognized in the Consolidated Statements of Comprehensive Income/(Loss) except to the extent that it relates to items recognized directly in equity.

Current income tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantially enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognized due to temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax assets are recognized for unused tax losses, unused tax credits and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be used. Deferred tax assets with respect to investments in associates are recognized only to the extent that it is probable the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

1. Accounting policies — continued

Fair Value Measurements

The Group's accounting policies require that certain financial assets and certain financial liabilities be measured at their fair value.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The Group recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

The carrying amount of cash and cash equivalents, accounts receivable, restricted cash, deposits, accounts payable, accrued expenses and other current liabilities in the Group's Consolidated Statements of Financial Position approximates their fair value because of the short maturities of these instruments.

Operating Segments

Operating segments are reported in a manner that is consistent with the internal reporting provided to the chief operating decision maker ("CODM"). The CODM reviews discrete financial information for the operating segments in order to assess their performance and is responsible for making decisions about resources allocated to the segments. The CODM has been identified as the Group's Directors.

2. New Standards and Interpretations Not Yet Adopted

A number of new standards, interpretations, and amendments to existing standards are effective for annual periods commencing on or after January 1, 2023 and have not been applied in preparing the consolidated financial information. The Company's assessment of the impact of these new standards and interpretations is set out below.

Effective January 1, 2023, the definition of accounting estimates has been amended as an amendment to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. The amendments clarify how companies should distinguish changes in accounting policies from changes in accounting estimates. The distinction is important because changes in accounting estimates are applied prospectively only to future transactions and future events, but changes in accounting policies are generally also applied retrospectively to past transactions and other past events. This amendment is not expected to have an impact on the Group's financial statements.

Effective January 1, 2023, IAS 1 has been amended to clarify that liabilities are classified as either current or non-current, depending on the rights that exist at the end of the reporting period. Classification is unaffected by the expectations of the entity or events after the reporting date. The Company does not expect this amendment will have a material impact on its financial statements.

Effective January 1, 2023, IAS 12 is amended to narrow the scope of the initial recognition exemption (IRE) so that it does not apply to transactions that give rise to equal and offsetting temporary differences. As a result, companies will need to recognise a deferred tax asset and a deferred tax liability for temporary differences arising on initial recognition of a lease and a decommissioning provision. The amendment is not expected to have an impact on the Group's financial statements as the Group has already recognized a deferred tax asset and deferred tax liability that arose on initial recognition of its leases (the Group does not have decommissioning provisions).

None of the other new standards, interpretations, and amendments are applicable to the Company's financial statements and therefore will not have an impact on the Company.

3. Revenue

Revenue recorded in the Consolidated Statement of Comprehensive Income/(Loss) consists of the following:

For the years ended December 31,	**2022 $000s**	2021 $000s	2020 $000s
Contract revenue	**2,090**	9,979	8,341
Grant income	**13,528**	7,409	3,427
Total revenue	**15,618**	17,388	11,768

All amounts recorded in contract revenue were generated in the United States. For the years ended December 31, 2022, 2021 and 2020 contract revenue includes royalties received from an associate in the amount of $509 thousand, $231 thousand, and $54 thousand, respectively.

Primarily all of the Company's other contracts for the years ended December 31, 2022, 2021 and 2020 were determined to have a single performance obligation which consists of a combined deliverable of license to intellectual property and research and development services (not including the license acquired by Imbrium upon option exercise – see below). Therefore, for such contracts, revenue is recognized over time based on the input method which the Company believes is a faithful depiction of the transfer of goods and services. Progress is measured based on costs incurred to date as compared to total projected costs. Payments for such contracts are primarily made up front on a periodic basis.

During the year ended December 31, 2021, the company received a $6.5 million payment from Imbrium Therapeutics, Inc. following the exercise of the option to acquire an exclusive license for the Initial Product Candidate, as defined in the agreement. Since the license transferred was a functional license, revenue from the option exercise was recognized at a point in time upon transfer of the license, which occurred during the year ended December 31, 2021.

During the year ended December 31, 2020, the Company received a $2.0 million milestone payment from Karuna Therapeutics, Inc. following initiation of its KarXT Phase 3 clinical study pursuant to the Exclusive Patent License Agreement between PureTech and Karuna. This milestone was recognized as revenue during the year ended December 31, 2020.

Disaggregated Revenue

The Group disaggregates contract revenue in a manner that depicts how the nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factors. The Group disaggregates revenue based on contract revenue or grant revenue, and further disaggregates contract revenue based on the transfer of control of the underlying performance obligations.

Timing of contract revenue recognition For the years ended December 31,	**2022 $000s**	2021 $000s	2020 $000s
Transferred at a point in time – Licensing Income[1]	**527**	6,809	2,054
Transferred over time[2]	**1,563**	3,171	6,286
	2,090	9,979	8,341

1 2022 – Attributed to Non-Controlled Founded Entities segment ($19 thousand) and to Parent Company and Other ($509 thousand); 2021 – Attributed to the Internal segment ($6,500 thousand), Non-Controlled Founded Entities segment ($74 thousand), and to Parent Company and Other ($235 thousand); 2020 – Attributed to Parent Company and Other. See note 4, Segment information.

2 2022 – Attributed to Controlled Founded Entities segment ($1,500 thousand) and to Non-Controlled Founded Entities segment ($63 thousand); 2021 – Attributed to Internal segment ($1,629 thousand), Non-Controlled Founded Entities segment ($41 thousand), and to Controlled Founded Entities segment ($1,500 thousand). 2020 – Attributed to Internal segment ($5,297 thousand), Controlled Founded Entities segment ($896 thousand), and to Non-Controlled Founded Entities segment ($93 thousand). See Note 4, Segment Information.

3. Revenue — continued

Customers over 10% of revenue	**2022 $000s**	2021 $000s	2020 $000s
Customer A	**—**	—	1,518
Customer B	**1,500**	1,500	896
Customer C	**—**	—	2,043
Customer D	**—**	7,250	1,736
Customer E	**—**	—	2,000
Customer F	**509**	—	—
	2,009	8,750	8,193

Accounts receivables represent rights to consideration in exchange for products or services that have been transferred by the Group, when payment is unconditional and only the passage of time is required before payment is due. Accounts receivables do not bear interest and are recorded at the invoiced amount. Accounts receivable are included within Trade and other receivables on the Consolidated Statement of Financial Position.

Contract liabilities represent the Group's obligation to transfer products or services to a customer for which consideration has been received, or for which an amount of consideration is due from the customer. Contract liabilities are included within deferred revenue on the Consolidated Statement of Financial Position.

Contract Balances	**2022 $000s**	2021 $000s
Accounts receivable	**606**	704
Deferred revenue – short term	**—**	65

During the year ended December 31, 2022, $65 thousand of revenue was recognized from deferred revenue outstanding at December 31, 2021.

Remaining performance obligations represent the transaction price of unsatisfied or partially satisfied performance obligations within contracts with an original expected contract term that is greater than one year and for which fulfillment of the contract has started as of the end of the reporting period. The aggregate amount of transaction consideration allocated to remaining performance obligations as of December 31, 2022, was nil.

As of December 31, 2022 the deferred revenue balance related entirely to deferred grant income.

4. Segment Information

Basis for Segmentation

The Directors are the Group's strategic decision-makers. The Group's operating segments are reported based on the financial information provided to the Directors periodically for the purposes of allocating resources and assessing performance. The Group has determined that each entity is representative of a single operating segment as the Directors monitor the financial results at this level. When identifying the reportable segments the Group has determined that it is appropriate to aggregate multiple operating segments into a single reportable segment given the high level of operational and financial similarities across the entities.

The Group has identified multiple reportable segments as presented below. There was no change to reportable segments in 2022, except for the transfer of Sonde Health, Inc. to the Non-Controlled Founded Entities segment due to the deconsolidation of Sonde Health, Inc (Sonde) on May 25, 2022.

The Non-Controlled Founded Entities segment includes Sonde Health, Inc. which was deconsolidated on May 25, 2022. Segment results incorporate the operational results of Sonde Health, Inc. to the date of deconsolidation. Following the date of deconsolidation, the Company accounts for its investment in Sonde Health, Inc. at the parent level, and therefore the results associated with investment activity following the date of deconsolidation (including the Group's share in Sonde losses) is included in the Parent Company and Other section.

The Company has revised in these financial statements the prior year financial information to conform to the presentation as of and for the year ending December 31, 2022 to include Sonde in the Non-Controlled Founded Entities segment. The change in segments reflects how the Company's Board of Directors reviews the Group's results, allocates resources and assesses performance of the Group at this time.

Virtually all of the revenue and profit generating activities of the Group are generated within the United States and accordingly, no geographical disclosures are provided.

Internal

The Internal segment (the "Internal segment"), is advancing Wholly Owned Programs which are focused on treatments for patients with devastating diseases. The Internal segment is comprised of the technologies that are wholly owned and will be advanced through either PureTech Health funding or non-dilutive sources of financing in the near-term. The operational management of the Internal segment is conducted by the PureTech Health team, which is responsible for the strategy, business development, and research and development. As of December 31, 2022, this segment included PureTech LYT, PureTech LYT-100 and Alivio Therapeutics, Inc.

Controlled Founded Entities

The Controlled Founded Entity segment (the "Controlled Founded Entity segment") is comprised of the Group's subsidiaries that are currently consolidated operational subsidiaries that either have, or have plans to hire, independent management teams and currently have already raised third-party dilutive capital. These subsidiaries have active research and development programs and either have entered into or plan to seek an equity or debt investment partner, who will provide additional industry knowledge and access to networks, as well as additional funding to continue the pursued growth of the company. As of December 31, 2022, this segment included Entrega Inc., Follica Incorporated, and Vedanta Biosciences, Inc.

Non-Controlled Founded Entities

The Non-Controlled Founded Entities segment (the "Non-Controlled Founded Entities segment") is comprised of the entities in respect of which PureTech Health no longer has control over the entity. Upon deconsolidation of an entity the segment disclosure is restated to reflect the change on a retrospective basis, as this constitutes a change in the composition of its reportable segments. The Non-Controlled Founded Entities segment includes Sonde Health Inc. which was deconsolidated on May 25, 2022.

The Non-Controlled Founded Entities segment incorporates the operational results of the aforementioned entity to the date of deconsolidation. Following the date of deconsolidation, the Company accounts for its investment in each entity at the parent level, and therefore the results associated with investment activity (including the recognition of equity method income/ (losses)) following the date of deconsolidation is included in the Parent Company and Other section.

Parent Company and Other

Parent Company and Other includes activities that are not directly attributable to the operating segments, such as the activities of the Parent, corporate support functions and certain research and development support functions that are not directly attributable to a strategic business segment as well as the elimination of intercompany transactions. Intercompany transactions between segments consist primarily of management fees charged from the Parent Company to the other segments. This section also captures the accounting for the Company's holdings in entities for which control has been lost, which is inclusive of the following items: gain on deconsolidation, gain or loss on investments held at fair value, realized loss on sale of investments, the share of net income/ (loss) of associates accounted for using the equity method, gain on dilution of ownership interest in associate, impairment of investment in associate. As of December 31, 2022, this segment included PureTech Health plc, PureTech Health LLC, PureTech Management, Inc., PureTech Securities Corp. and PureTech Securities II Corp., as well as certain other dormant, inactive and shell entities.

4. **Segment Information** — continued

Information About Reportable Segments:

	2022				
	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Consolidated $000s
Consolidated Statements of Comprehensive Income/(Loss)					
Contract revenue	—	1,500	81	509	2,090
Grant revenue	2,826	10,702	—	—	13,528
Total revenue	2,826	12,202	81	509	15,618
General and administrative expenses	(8,301)	(16,462)	(1,296)	(34,933)	(60,991)
Research and development expenses	(116,054)	(34,668)	(826)	(885)	(152,433)
Total operating expense	(124,355)	(51,130)	(2,122)	(35,817)	(213,425)
Other income/(expense):					
Gain on deconsolidation of subsidiary	—	—	—	27,251	27,251
Gain/(loss) on investment held at fair value	—	—	—	(32,060)	(32,060)
Realized loss on sale of investments	—	—	—	(29,303)	(29,303)
Other income/(expense)	(204)	(3)	—	8,338	8,131
Total other income/(expense)	(204)	(3)	—	(25,775)	(25,981)
Net finance income/(costs)	615	138,006	(3,045)	3,348	138,924
Share of net income/(loss) of associates accounted for using the equity method	—	—	—	(27,749)	(27,749)
Gain on dilution of ownership interest in associate	—	—	—	28,220	28,220
Impairment of investment in associate	—	—	—	(8,390)	(8,390)
Income/(loss) before taxes	(121,118)	99,075	(5,085)	(65,655)	(92,783)
Income/(loss) before taxes pre IFRS 9 fair value accounting, share-based payment expense, depreciation of tangible assets and amortization of intangible assets	(114,255)	(32,468)	(2,079)	(57,452)	(206,254)
Finance income/(costs) – IFRS 9 fair value accounting	—	140,056	(2,993)	—	137,063
Share-based payment expense	(5,136)	(4,703)	(8)	(4,852)	(14,699)
Depreciation of tangible assets	(1,727)	(2,526)	(4)	(1,588)	(5,845)
Amortization of ROU assets	—	(1,283)	—	(1,764)	(3,047)
Amortization of intangible assets	—	—	(1)	—	(1)
Taxation	—	—	—	55,719	55,719
Income/(loss) for the year	(121,118)	99,075	(5,085)	(9,936)	(37,065)
Other comprehensive income/(loss)	—	—	—	(379)	(379)
Total comprehensive income/(loss) for the year	(121,118)	99,075	(5,085)	(10,316)	(37,444)
Total comprehensive income/(loss) attributable to:					
Owners of the Company	(121,118)	85,471	(4,755)	(10,331)	(50,733)
Non-controlling interests	—	13,604	(330)	15	13,290
	December 31, 2022 $000s				
Consolidated Statements of Financial Position:					
Total assets	51,599	35,341	—	615,707	702,647
Total liabilities[1]	271,186	76,635	—	(192,763)	155,057
Net assets/(liabilities)	(219,587)	(41,294)	—	808,470	547,589

1 Parent Company and Other Includes eliminations of intercompany liabilities between the Parent Company and the reportable segments in the amount of $255.5 million.

4. Segment Information — continued

	2021				
	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Consolidated $000s
Consolidated Statements of Comprehensive Income/(Loss)					
Contract revenue	8,129	1,500	115	235	9,979
Grant revenue	1,253	6,156	—	—	7,409
Total revenue	9,382	7,656	115	235	17,388
General and administrative expenses	(8,673)	(17,504)	(3,225)	(27,797)	(57,199)
Research and development expenses	(65,444)	(40,667)	(3,116)	(1,244)	(110,471)
Total Operating expenses	(74,118)	(58,171)	(6,341)	(29,041)	(167,671)
Other income/(expense):					
Gain/(loss) on investment held at fair value	—	—	—	179,316	179,316
Realized loss on sale of investments	—	—	—	(20,925)	(20,925)
Other income/(expense)	—	70	—	1,523	1,593
Total other income/(expense)	(1)	70	—	159,914	159,983
Net finance income/(costs)	(16)	7,528	(784)	(1,679)	5,050
Share of net income/(loss) of associate accounted for using the equity method	—	—	—	(73,703)	(73,703)
Income/(loss) before taxes	(64,753)	(42,917)	(7,010)	55,727	(58,953)
(Loss)/income before taxes pre IFRS 9 fair value accounting, finance costs – subsidiary preferred shares, share-based payment expense, depreciation of tangible assets and amortization of intangible assets	(60,368)	(44,335)	(6,248)	63,628	(47,323)
Finance income/(costs) – IFRS 9 fair value accounting	—	10,322	(716)	—	9,606
Share-based payment expense	(3,066)	(6,224)	(32)	(4,628)	(13,950)
Depreciation of tangible assets	(1,319)	(1,506)	(12)	(1,510)	(4,347)
Amortization of ROU assets	—	(1,174)	—	(1,764)	(2,938)
Amortization of intangible assets	—	—	(2)	—	(2)
Taxation	—	—	—	(3,756)	(3,756)
Income/(loss) for the year	(64,753)	(42,917)	(7,010)	51,971	(62,709)
Other comprehensive income/(loss)	—	—	—	—	—
Total comprehensive income/(loss) for the year	(64,753)	(42,917)	(7,010)	51,971	(62,709)
Total comprehensive income/(loss) attributable to:					
Owners of the Company	(64,657)	(41,283)	(6,574)	51,956	(60,558)
Non-controlling interests	(96)	(1,634)	(436)	15	(2,151)
	December 31, 2021 $000s				
Consolidated Statements of Financial Position:					
Total assets	125,726	64,508	1,765	754,007	946,006
Total liabilities[1]	228,789	209,212	19,645	(95,787)	361,859
Net (liabilities)/assets	(103,063)	(144,704)	(17,880)	849,794	584,147

1 Parent Company and Other Includes eliminations of intercompany liabilities between the Parent Company and the reportable segments in the amount of $233.3 million.

The proportion of net assets shown above that is attributable to non-controlling interest is disclosed in Note 18.

4. Segment Information — continued

	2020				
	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Consolidated $000s
Consolidated Statements of Comprehensive Loss					
Contract revenue	5,297	896	93	2,054	8,341
Grant revenue	1,563	1,864	—	—	3,427
Total revenue	6,860	2,760	93	2,054	11,768
General and administrative expenses	(3,482)	(10,752)	(2,939)	(32,267)	(49,440)
Research and development expenses	(45,346)	(33,152)	(3,128)	(234)	(81,859)
Total operating expense	(48,828)	(43,904)	(6,067)	(32,500)	(131,299)
Other income/(expense):					
Gain/(loss) on investment held at fair value	—	—	—	232,674	232,674
Realized loss on sale of investments	—	—	—	(54,976)	(54,976)
Gain/(loss) on disposal of assets	(15)	(15)	—	—	(30)
Other income/(expense)	—	100	—	965	1,065
Other income/(expense)	(15)	85	—	178,662	178,732
Net finance income/(costs)	19	(4,352)	(852)	(930)	(6,115)
Share of net income/(loss) of associate accounted for using the equity method	—	—	—	(34,117)	(34,117)
Income/(loss) before taxes	(41,964)	(45,410)	(6,826)	113,170	18,969
(Loss)/income before taxes pre IAS 39 fair value accounting, finance costs – subsidiary preferred shares, share-based payment expense, depreciation of tangible assets and amortization of intangible assets	(38,349)	(36,736)	(5,866)	121,644	40,694
Finance income/(costs) – IFRS 9 fair value accounting	—	(3,492)	(859)	—	(4,351)
Share-based payment expense	(2,762)	(2,469)	(83)	(5,405)	(10,718)
Depreciation of tangible assets	(854)	(1,528)	(17)	(1,547)	(3,945)
Amortization of ROU assets	—	(1,186)	—	(1,523)	(2,709)
Amortization of intangible assets	—	—	(1)	—	(1)
Taxation	—	(1)	—	(14,400)	(14,401)
Income/(loss) for the year	(41,964)	(45,411)	(6,826)	98,769	4,568
Other comprehensive income/(loss)	—	—	—	469	469
Total comprehensive income/(loss) for the year	(41,964)	(45,411)	(6,826)	99,238	5,037
Total comprehensive income/(loss) attributable to:					
Owners of the Company	(41,773)	(44,506)	(6,519)	99,253	6,454
Non-controlling interests	(191)	(905)	(306)	(15)	(1,417)

5. Investments held at fair value

Investments held at fair value include both unlisted and listed securities held by PureTech. These investments, which include interests in Akili, Vor, Karuna, Gelesis (preferred shares until exchanged for common stock, accounted for under the equity method, and Earn-out shares following exchange), Sonde and other insignificant investments, are initially measured at fair value and are subsequently re-measured at fair value at each reporting date with changes in the fair value recorded through profit and loss. Interests in these investments were accounted for as shown below:

Investments held at fair value	$000's
Balance as of January 1, 2021	553,167
Sale of Karuna shares	(218,125)
Loss realised on sale of investments	(20,925)
Cash purchase of Vor preferred shares	500
Gain – change in fair value through profit and loss	179,271
Balance as of December 31, 2021 and January 1, 2022 before allocation of share in associate loss to long-term interest*	493,888
Investment in Sonde Preferred shares – Sonde deconsolidation	11,168
Sale of Karuna and Vor shares	(118,710)
Loss realised on sale of investments as a result of written call option	(29,303)
Cash Investment (Akili)	5,000
Gelesis Earn out shares received in SPAC exchange	14,214
Exchange of Gelesis preferred shares to Gelesis common shares	(92,303)
Loss – change in fair value through profit and loss	(32,060)
Balance as of December 31, 2022	251,892

* Share in associate losses allocated to long-term interest amounted to $96.7 million as of December 31, 2021 and January 1, 2022

Vor

Vor was deconsolidated in February 2019. As PureTech did not hold common shares in Vor upon deconsolidation and the preferred shares it held did not have equity-like features, PureTech had no basis to account for its investment in Vor under IAS 28. The preferred shares held by PureTech fell under the guidance of IFRS 9 and were treated as a financial asset held at fair value with changes in fair value recorded in the Consolidated Statement of Comprehensive Income/(Loss).

2020

On February 12, 2020, PureTech participated in the second closing of Vor's Series A-2 Preferred Share financing. For consideration of $0.7 million, PureTech received 1,625,000 A-2 shares. On June 30, 2020, PureTech participated in the first closing of Vor's Series B Preferred Share financing. For consideration of $0.5 million, PureTech received 961,538 shares. Upon the conclusion of such Vor financings PureTech no longer had significant influence over Vor.

2021

On January 8, 2021, PureTech participated in the second closing of Vor's Series B Preferred Share financing. For consideration of $0.5 million, PureTech received an additional 961,538 B Preferred shares.

On February 9, 2021, Vor closed its initial public offering (IPO) of 9,828,017 shares of its common stock at a price to the public of $18.00 per share. Subsequent to the closing, PureTech held 3,207,200 shares of Vor common stock, representing 8.6 percent of Vor common stock. Following its IPO, the valuation of Vor common stock is based on level 1 inputs in the fair value hierarchy. See Note 16.

2022

In August and December 2022, PureTech sold an aggregate of 535,400 shares of Vor common shares for aggregate proceeds of $3.3 million.

During the years ended December 31, 2022, 2021 and 2020, the Company recognized a loss of $16.2 million, a gain of $3.9 million, and a gain of $19.1 million, respectively for the changes in the fair value of the investment that were recorded in the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss). Please refer to Note 16 for information regarding the valuation of these instruments.

5. Investments held at fair value — continued

Gelesis

Gelesis was deconsolidated in July 2019. The common stock held in Gelesis is accounted for under the equity method, while the preferred shares and warrants held by PureTech fell under the guidance of IFRS 9 and were treated as financial assets held at fair value, where changes to the fair value of the preferred shares and warrant were recorded through the Consolidated Statement of Income/(Loss). Please refer to Note 6 for information regarding the Company's investment in Gelesis as an associate.

2020

On April 1, 2020, PureTech participated in the 2nd closing of Gelesis's Series 3 Growth Preferred Share financing. For consideration of $10.0 million, PureTech received 579,038 Series 3 Growth shares.

2020 and 2021

During the years ended December 31, 2021 and 2020, due to the equity method based investment in Gelesis being reduced to zero, the Group allocated a portion of its share in the net loss in Gelesis in the years ended December 31, 2021 and 2020, totaling $73.7 million, and $23.0 million, respectively, to its preferred share and warrant investments in Gelesis, which were considered to be long-term interests in Gelesis.

2022

On January 13, 2022, Gelesis completed its business combination with Capstar Special Purpose Acquisition Corp ("Capstar"). As part of the business combination, all shares in Gelesis, common and preferred, including the shares held by PureTech, were exchanged for common shares of the merged entity and unvested common shares that will vest upon the stock price of the new combined entity reaching certain target prices (hereinafter "Earn-out shares"). In addition, PureTech invested $15.0 million in the class A common shares of Capstar as part of the Private Investment in Public Equity ("PIPE") transaction that took place immediately prior to the closing of the business combination and an additional approximately $5.0 million, as part of the Backstop agreement signed with Capstar on December 30, 2021 (See Note 6). Pursuant to the business combination, Gelesis became a wholly-owned subsidiary of Capstar and Capstar changed its name to Gelesis Holdings, Inc., which began trading on the New York Stock Exchange under the ticker symbol "GLS" on January 14, 2022. The exchange of the preferred stock (including warrants) for common stock (including common stock warrants) represents an additional investment in Gelesis equity investment. The Group recorded the changes in fair value of the preferred stock (including warrant) through the date of the exchange upon which the preferred stock were derecognized and recorded as an additional investment in Gelesis equity interest – See Note 6 for the net gain on the dilution of the equity interest in Gelesis, resulting from the exchange of all preferred stock in Gelesis to common stock of Gelesis Holdings Inc, the PIPE transaction and the closing of the merger. All equity method losses allocated in prior periods against the investment in Gelesis held at fair value are now included within the equity method investment in Gelesis and were offset against the gain on dilution of interest – see Note 6.

As part of the aforementioned exchange PureTech received 4,526,622 Earn-out shares, which were valued on the date of the exchange at $14.2 million. The Group accounts for such Earn-out shares under IFRS 9 as investments held at fair value with changes in fair value recorded through profit and loss.

During the years ended December 31, 2022, 2021 and 2020, the Company recognized a loss of $4.4 million, a gain of $34.6 million, and a gain of $7.1 million, respectively related to the change in the fair value of the preferred shares and warrants that was recorded in the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss).

In addition, the Company recognized a loss of $14.1 million during the year ended December 31, 2022 in respect of the Earn-out shares, for the change in the fair value related to such investment during the period. As of December 31, 2022 the value of such earn-out shares amounted to $0.1 million.

Karuna

Karuna was deconsolidated in March 2019. During 2019 Karuna completed its IPO and PureTech lost its significant influence in Karuna. The shares held in Karuna are accounted for as an investment held at fair value.

2020

On January 22, 2020, PureTech sold 2,100,000 shares of Karuna common shares for aggregate proceeds of $200.9 million. On May 26, 2020, PureTech sold an additional 555,500 Karuna common shares for aggregate proceeds of $45.0 million. On August 26, 2020, PureTech sold 1,333,333 common shares of Karuna for aggregate proceeds of $101.6 million. As a result of the sales, Puretech recorded a loss of $54.8 million attributable to blockage discount included in the sales price, to the line item Loss Realized on Sale of Investment within the Consolidated Statement of Comprehensive Income/(Loss). See below for gain recorded in respect of the change in fair value of the Karuna investment.

2021

On February 9, 2021, the Group sold 1,000,000 common shares of Karuna for $118.0 million. Following the sale the Group held 2,406,564 common shares of Karuna, which represented 8.2 percent of Karuna common stock at the time of sale. On November 9, 2021, the group sold an additional 750,000 common shares of Karuna for $100.1 million. Following the sale the group holds 1,656,564 common shares of Karuna, which represented 5.6 percent at time of sale. As a result of the aforementioned sales, the Company recorded a loss of $20.9 million, attributable to blockage discount included in the sales price, to the line item Loss Realised on Sale of Investment within the Consolidated Statement of Comprehensive Income/(Loss). See below for gain recorded in respect of the change in fair value of the Karuna investment.

5. Investments held at fair value — continued

2022

On August 8, 2022, the Company sold 125,000 shares of Karuna common stock. In addition, the Company wrote a series of call options entitling the holders thereof to purchase up to 477,100 Karuna common stock at a set price, which were exercised in full in August and September 2022. Aggregate proceeds to the Company from all aforementioned transactions amounted to $115.5 million, net of transaction fees. As a result of the aforementioned sales, the Company recorded a loss of $29.3 million, attributable to the exercise of the aforementioned call options, to the line item Realized Loss on Sale of Investment within the Consolidated Statement of Comprehensive Income/ (Loss).See below for gain recorded in respect of the change in fair value of the Karuna investment.

During the years ended December 31, 2022, 2021, and 2020 the Company recognized gains of $135.0 million, $110.0 million and $191.2 million, respectively for the changes in the fair value of the Karuna investment that were recorded in the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss). As of December 31, 2022, PureTech continued to hold Karuna common shares or 3.1 percent of total outstanding Karuna common shares. Please refer to Note 16 for information regarding the valuation of these instruments.

Akili

Akili was deconsolidated in 2018. As PureTech did not hold common shares in Akili and the preferred shares it held did not have equity-like features, PureTech had no basis to account for its investment in Akili under IAS 28. The preferred shares held by PureTech Health fell under the guidance of IFRS 9 and were treated as a financial asset held at fair value and all movements to the value of the preferred shares were recorded through the Consolidated Statements of Comprehensive Income/(Loss), in accordance with IFRS 9.

2021

On May 25, 2021, Akili completed its Series D financing for gross proceeds of $110.0 million in which Akili issued 13,053,508 Series D preferred shares. The Group did not participate in this round of financing and as a result, the Group's interest in Akili was reduced from 41.9 percent to 27.5 percent.

2022

On January 26, 2022, Akili Interactive and Social Capital Suvretta Holdings Corp. I, a special purpose acquisition company, announced they had entered into a definitive business combination agreement. The transaction closed on August 19, 2022 and the combined company's securities began trading on August 22, 2022 on the Nasdaq Stock Market under the ticker symbol "AKLI". As part of this transaction the Akili Interactive shares held by the Company were exchanged for the common stock of the combined company's securities as well as unvested common stock ("Akili Earnout Shares") that will vest when the share price exceeds certain thresholds. In addition, as part of a PIPE transaction that took place concurrently with the closing of the transaction, the Company purchased 500,000 shares in consideration for $5.0 million. Following the closing of the aforementioned transactions, the Company holds 12,527,477 shares of the combined entity (excluding the Akili Earnout Shares), which represents 14.7 percent of its outstanding common stock. The Company also holds 1,433,914 Akili Earn-out Shares, which fair value amounted to $1.0 million as of December 31, 2022.

During the years ended December 31, 2022, 2021 and 2020, the Company recognized a loss of $131.4 million, a gain of $32.2 million, and a gain of $14.4 million, respectively for the changes in the fair value of the investment in Akili that was recorded on the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss). Please refer to Note 16 for information regarding the valuation of these instruments.

resTORbio

On April 30, 2020, PureTech sold its remaining 2,119,696 resTORbio common shares, for aggregate proceeds of $3.0 million. As a result of the sale, the Company recorded a loss of $0.2 million attributable to blockage discount included in the sales price, to the line item Loss realized on sale of investments within the Consolidated Statement of Comprehensive Income/(Loss). Additionally, during the year ended December 31, 2020, the Company recognized a gain of $0.1 million that was recorded on the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss).

Sonde – Investment and gain on deconsolidation

On May 25, 2022, Sonde completed a Series B Preferred Share financing. As part of the financing a new investor invested $3.5 million in cash in exchange for 1,125,401 shares and all convertible notes, including the convertible notes held by PureTech, converted into Preferred B shares at the price per share paid by the investor minus a 20% discount. As a result of the aforementioned financing, the Group's voting interest was reduced below 50% and the Group no longer controls Sonde's Board of Directors, which is the governance body that has the power to direct the relevant activities of Sonde. Consequently, the Group concluded it lost control over Sonde and as such it should cease to consolidate Sonde on the date the round of financing was completed. Therefore, the results of operations of Sonde are included in the consolidated financial statements through the date of deconsolidation.

5. Investments held at fair value — continued

Following deconsolidation, the Group still has significant influence in Sonde through its voting interest in Sonde and its remaining representation on Sonde's Board of Directors. The Group holds Preferred A-1, A-2 and B shares. The Preferred A-1 shares, in substance, have the same terms as common stock and as such provide their shareholders with access to returns associated with a residual equity ownership in Sonde. Consequently, the investment in Preferred A-1 shares is accounted for under the equity method. The Preferred A-2 and B shares, however, do not provide their shareholders with access to returns associated with a residual equity interest and as such are accounted for under IFRS 9, as investments held at fair value with changes in fair value recorded in profit and loss.

Upon deconsolidation, the Group derecognized its assets and liabilities and non controlling interest in respect of Sonde and recorded its aforementioned investments in Sonde at fair value. The deconsolidation resulted in a gain of $27.3 million. As of the date of deconsolidation, the investment in Sonde preferred shares held at fair value amounted to $11.2 million.

During the year ended December 31, 2022, the Company recognized a gain of $0.2 million for the changes in the fair value of the investment in Sonde that was recorded on the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss). Please refer to Note 16 for information regarding the valuation of these instruments.

6. Investments in Associates

Gelesis

Gelesis was founded by PureTech and raised funding through preferred shares financings as well as issuances of warrants and loans. As of July 1, 2019, Gelesis was deconsolidated from the Group's financial statements. While the Group no longer controls Gelesis, it was concluded that PureTech still has significant influence over Gelesis and as such Gelesis is accounted for as an associate under IAS 28 in the consolidated financial statements.

Upon the date of deconsolidation, PureTech held preferred shares and common shares of Gelesis and warrants issued by Gelesis to PureTech. PureTech's investment in common shares of Gelesis is subject to equity method accounting. See table below for the Group's share in the profits and losses of Gelesis for the periods presented.

The preferred shares and warrants held by PureTech fell under the guidance of IFRS 9 and were treated as financial assets held at fair value, where changes to the fair value of the preferred shares and warrants were recorded through the Consolidated Statement of Comprehensive Income/(Loss). See Note 5 above.

Years ended December 31, 2020 and 2021

During the years ended December 31, 2021 and 2020, the Group recorded its share in the losses of Gelesis. In 2020 the Group's investment in associates accounted for under the equity method was reduced to zero. Since the Group had investments in Gelesis warrants and preferred shares that were deemed to be Long-term interests, the Company continued recognizing its share in Gelesis losses while applying such losses to its preferred share and warrant investment in Gelesis accounted for as an investment held at fair value. In 2021, the total investment in Gelesis, including the Long-term interests, was reduced to zero. Since the Group did not incur legal or constructive obligations or made payments on behalf of Gelesis, the Group discontinued recognizing equity method losses in 2021. As of December 31, 2021, unrecognized equity method losses amounted to $38.1 million, which included $0.7 million of unrecognized other comprehensive loss.

During 2021, due to exercise of stock options into common shares in Gelesis the Group's equity interest in Gelesis was reduced from 47.9 percent at December 31, 2020 to 42.0 percent as of December 31, 2021. The gain resulting from the issuance of shares to third parties and the resulting reduction in the Group's share in the accumulated deficit of Gelesis under the equity method was fully offset by the unrecognized equity method losses.

Backstop agreement – 2022 and 2021

On December 30, 2021, PureTech signed a Backstop agreement with Capstar according to which PureTech had committed to acquire Capstar class A common shares immediately prior to the closing of the business combination between Gelesis and Capstar, in case subsequent to the redemptions of Capstar shares being completed, the Available Funds, as defined in the agreement, were less than$15.0 million. PureTech had committed to acquire two thirds of the necessary shares at $10 per share so that the Available Funds increase to $15.0 million. According to the Backstop agreement, in case PureTech were required to acquire any shares under the agreement, PureTech would receive an additional 1,322,500 class A common shares of Capstar (immediately prior to the closing of the business combination) at no additional consideration.

The Company determined that such agreement meets the definition of a derivative under IFRS 9 and as such should be recorded at fair value with changes in fair value recorded through profit and loss. The derivative was initially recorded at fair value adjusted to defer the day 1 gain equal to the difference between the fair value of $11.2 million and transaction price of zero on the effective date and as such was initially recorded at zero. The deferred gain was amortized to Other income (expense) in the Consolidated Statement of Income (loss) over the period from the effective date until settlement date, January 13, 2022. During the years ended December 31, 2022 and 2021, the Group recognized income of $10.4 million and $0.8 million, respectively for the amortization of the deferred gain. During the year ended December 31, 2022 the Group recognized a loss of $2.8 million in respect of the decrease in the fair value of the derivative until date of settlement, resulting in a net gain of $7.6 million recorded during the year ended December 31, 2022 in respect of the Backstop agreement. The gain was recorded in the line item Other Income/(expense) in the Consolidated Statements of Comprehensive Income/(Loss).

6. Investments in Associates — continued

The fair value of the derivative on the date of settlement in the amount of $8.4 million represents an additional investment in Gelesis as part of the SPAC transaction described below.

On January 13, 2022, as part of the conclusion of the aforementioned Backstop agreement, the Group acquired 496,145 class A common shares of Capstar for $5.0 million and received an additional 1,322,500 common A shares of Capstar for no additional consideration.

2022

Share exchange – Capstar

On January 13, 2022, Gelesis completed its business combination with Capstar Special Purpose Acquisition Corp ("Capstar"). As part of the business combination, all shares in Gelesis, common and preferred, including the shares held by PureTech, were exchanged for common shares of the merged entity and unvested common shares that will vest upon the stock price of the new combined entity reaching certain target prices (hereinafter "Earn-out shares"). In addition, PureTech invested $15.0 million in the class A common shares of Capstar as part of the PIPE transaction that took place immediately prior to the closing of the business combination and an additional $5.0 million, as part of the Backstop agreement described above. Pursuant to the business combination, Gelesis became a wholly-owned subsidiary of Capstar and Capstar changed its name to Gelesis Holdings, Inc., which began trading on the New York Stock Exchange under the ticker symbol "GLS" on January 14, 2022. Following the closing of the business combination, the PIPE transaction, the settlement of the aforementioned Backstop agreement with Capstar, and the exchange of all preferred shares in Gelesis to common shares in the new combined entity, PureTech holds 16,727,582 common shares of Gelesis Holdings Inc., which was equal to approximately 23.2% of Gelesis Holdings Inc's outstanding common shares at the time of the exchange. Due to PureTech's significant equity holding and voting interest in Gelesis, PureTech continues to maintain significant influence in Gelesis and as such continues to account for its Gelesis equity investment under the equity method.

Gelesis was deemed to be the acquirer in Gelesis Holdings Inc. and the financial assets and financial liabilities in Capstar were deemed to be acquired by Gelesis in consideration for the shares held by Capstar legacy shareholders. As such, the Group did not revalue the retained investment in Gelesis but rather treated the exchange as a dilution of its equity interest in Gelesis from 42.0 percent as of December 31, 2021 to 22.8 percent as of January 13, 2022 (including warrants that provide its holders access to returns associated with equity holders). After considering the aforementioned additional investments, the exchange of the preferred stock, previously accounted for as an investment held at fair value, to common stock (and representing an additional equity investment in Gelesis – See Note 5), the Earn-out shares received in Gelesis (see Note 5) and the offset of previously unrecognized equity method losses, the net gain recorded on the dilution of interest amounted to $28.3 million.

Impairment

Following Gelesis's decline in its market price in 2022 and its lack of liquidity, the Group recorded an impairment loss of $8.4 million as of December 31, 2022 in respect of its investment in Gelesis. The recoverable amount of the investment in Gelesis was $4.9 million as of December 31, 2022, which was determined based on fair value less costs to sell (costs to sell were estimated to be insignificant). Fair value was determined based on level 1 of the fair value hierarchy as Gelesis shares were traded on an active market as of December 31, 2022.

The impairment loss was presented separately in the Consolidated Statement of Comprehensive Income/ (loss) for the year ended December 31, 2022 in the line item Impairment of investment in associate.

Sonde

On May 25, 2022, Sonde completed a Series B Preferred Share financing. As a result of the aforementioned financing, the Group's voting interest was reduced below 50% and the Group lost its control over Sonde and as such ceased to consolidate Sonde on the date the round of financing was completed. See Note 5 above for further details.

Following deconsolidation, the Group has significant influence in Sonde through its voting interest in Sonde and its remaining representation on Sonde's Board of Directors. The Group's voting interest at date of deconsolidation and as of December 31, 2022 was 48.2% and 40.17%, respectively. The Group holds Preferred A-1, A-2 and B shares. The Preferred A-1 shares, in substance, have the same terms as common stock and as such provide their shareholders with access to returns associated with a residual equity ownership in Sonde. Consequently, the investment in Preferred A-1 shares is accounted for under the equity method. The Preferred A-2 and B shares, however, do not provide their shareholders with access to returns associated with a residual equity interest and as such are accounted for under IFRS 9, as investments held at fair value. See Note 5.

The fair value of the Preferred A-1 shares on the date of deconsolidation amounted to $7.7 million, which is the initial value of the equity method investment in Sonde. When applying the equity method, the Group records its share of the losses in Sonde based on its equity interest in Sonde. Since only the common shares and Preferred A-1 shares in Sonde represent a residual equity interest and PureTech is the sole holder of the Preferred A-1 shares, the Group's share in Sonde's equity is 93.6%.

During the year ended December 31, 2022 the Company recorded $3.4 million of equity method losses in respect of Sonde.

6. Investments in Associates — continued

The following table summarizes the activity related to the investment in associates balance for the years ended December 31, 2022 and 2021.

Investment in Associates	$000's
As of January 1, 2021	—
Share of net loss in Gelesis – limited to net investment amount	(73,703)
Share of losses recorded against Long Term Interests (LTIs)	73,703
As of December 31, 2021 and January 1, 2022	—
Cash investment in associate	19,961
Additional investment as a result of backstop settlement (see above)	8,424
Gain on dilution of interest in associate*	13,793
Investment in Sonde – deconsolidation	7,680
Share in net loss of associates	(27,749)
Reversal of equity method losses recorded against LTIs (due to decrease in LTI fair value)	(4,406)
Share in other comprehensive loss of associates	(166)
Impairment	(8,390)
As of December 31, 2022	9,147

* Gain on dilution of interest was further increased due to the receipt of Gelesis earn out shares accounted for as investments held at fair value (see above).

Summarized financial information

The following table summarizes the financial information of Gelesis as included in its own financial statements, adjusted for fair value adjustments at deconsolidation and differences in accounting policies. The table also reconciles the summarized financial information to the carrying amount of the Company's interest in Gelesis.

As of and for the year ended December 31,	**2022 $000s**	2021 $000s
Percentage ownership interest	**22.5%**	42.0%
Non-current assets	**333,040**	357,508
Current assets	**23,495**	66,092
Non-current liabilities	**(99,053)**	(120,786)
Current liabilities	**(80,010)**	(537,432)
Non controlling interests and options issued to third parties	**(46,204)**	(14,216)
Net assets (deficit) attributable to shareholders of Gelesis Inc.	**131,268**	(248,834)
Group's share of net assets (net deficit)	**29,504**	(104,527)
Goodwill	**3,858**	7,211
Impairment	**(28,452)**	(37,495)
Equity method losses recorded against Long-term Interests	**—**	96,709
Unrecognized equity method losses*	**—**	38,101
Investment in associate	**4,910**	—

	2022 $000s	2021 $000s	2020 $000s
Revenue	**25,767**	11,185	21,442
Loss from continuing operations (100%)	**(111,567)**	(271,430)	(71,157)
Total comprehensive loss (100%)	**(112,285)**	(273,005)	(70,178)
Group's share in net losses – limited to net investment amount**	**(24,306)**	(73,703)	(34,117)
Group's share of total comprehensive loss – limited to net investment amount	**(24,472)**	(73,703)	(33,648)

* Unrecognized equity method losses includes unrecognized other comprehensive loss of $0.7 million for the year ended December 31, 2021.

** For the year ended December 31, 2022 includes $4.4 million reversal of equity method losses recorded against Long-Term Interest (LTI) due to the decrease in fair value of such LTI.

Subsequent to balance sheet date, on April 10, 2023, the NYSE commenced proceedings to delist the common stock of Gelesis from the NYSE due to Gelesis ceasing to meet certain conditions to trade on such stock exchange. Trading in Gelesis's common stock was suspended immediately, and it was subsequently delisted from the NYSE. The common stock of Gelesis is currently available for trading in the over-the-counter ("OTC") market under the symbol GLSH.

In addition, in April 2023 (subsequent to balance sheet date) PureTech submitted a non-binding proposal to acquire all of the outstanding equity of Gelesis. Negotiations related to the proposal and any potential deal remain ongoing and are subject to, among other things, approval of any definitive transaction by independent committees of the boards of both Gelesis and PureTech.

See note 16 for the note issued to the Group by Gelesis and see Note 26 for additional details, including information related to an additional note issued by Gelesis to the Group subsequent to balance sheet date.

7. Operating Expenses

Total operating expenses were as follows:

For the years ending December 31,	**2022 $000s**	2021 $000s	2020 $000s
General and administrative	**60,991**	57,199	49,440
Research and development	**152,433**	110,471	81,859
Total operating expenses	**213,425**	167,671	131,299

The average number of persons employed by the Group during the year, analyzed by category, was as follows:

For the years ending December 31,	**2022**	2021	2020
General and administrative	**57**	52	43
Research and development	**144**	119	95
Total	**201**	171	138

The aggregate payroll costs of these persons were as follows:

For the years ending December 31,	**2022 $000s**	2021 $000s	2020 $000s
General and administrative	**25,322**	26,438	22,943
Research and development	**36,321**	28,950	20,674
Total	**61,643**	55,388	43,616

Detailed operating expenses were as follows:

For the years ending December 31,	**2022 $000s**	2021 $000s	2020 $000s
Salaries and wages	**41,750**	36,792	29,403
Healthcare benefits	**2,908**	2,563	1,866
Payroll taxes	**2,286**	2,084	1,629
Share-based payments	**14,699**	13,950	10,718
Total payroll costs	**61,643**	55,388	43,616
Other general and administrative expenses	**35,669**	30,761	26,497
Other research and development expenses	**116,113**	81,521	61,186
Total other operating expenses	**151,782**	112,282	87,683
Total operating expenses	**213,425**	167,671	131,299

Auditor's remuneration:

For the years ending December 31,	**2022 $000s**	2021 $000s	2020 $000s
Audit of these financial statements	**1,716**	1,183	1,145
Audit of the financial statements of subsidiaries	**132**	312	291
Audit of the financial statements of associate**	**814**	571	350
Audit-related assurance services*	**1,157**	1,868	490
Non-audit related services	**—**	—	173
Total	**3,819**	3,934	2,449

* 2021 – $468.2 thousand represents prepaid expenses related to an expected initial public offering of a subsidiary.

** Audit fees of $720.0 thousand, $500.0 thousand and $350.0 thousand in respect of financial statements of associates for the years ended December 31, 2022, 2021, and 2020 respectively, are not included within the consolidated financial statements. Fees related to the audit of the financial statements of associates have been disclosed in respect of 2022, 2021, and 2020 as these fees went towards supporting the audit opinion on the Group accounts. Such amounts were not previously disclosed in the 2020 financial statements.

Please refer to Note 8 for further disclosures related to share-based payments and Note 24 for management's remuneration disclosures.

8. Share-based Payments

Share-based payments includes stock options, restricted stock units ("RSUs") and performance-based RSUs in which the expense is recognized based on the grant date fair value of these awards, except for performance based RSUs to executives that are treated as liability awards where expense is recognized based on reporting date fair value up until settlement date.

Share-based Payment Expense

The Group share-based payment expense for the years ended December 31, 2022, 2021 and 2020, were comprised of charges related to the PureTech Health plc incentive stock and stock option issuances and subsidiary stock plans.

The following table provides the classification of the Group's consolidated share-based payment expense as reflected in the Consolidated Statement of Income/(Loss):

Year ended December 31,	**2022 $000s**	2021 $000s	2020 $000s
General and administrative	**8,862**	9,310	7,650
Research and development	**5,837**	4,640	3,068
Total	**14,699**	13,950	10,718

The Performance Share Plan

In June 2015, the Group adopted the Performance Stock Plan ("PSP"). Under the PSP and subsequent amendments, awards of ordinary shares may be made to the Directors, senior managers and employees of, and other individuals providing services to the Company and its subsidiaries up to a maximum authorized amount of 10.0 percent of the total ordinary shares outstanding. The shares have various vesting terms over a period of service between two and four years, provided the recipient remains continuously engaged as a service provider.

The share-based awards granted under the PSP are generally equity settled (see cash settlements below) and expire 10 years from the grant date. As of December 31, 2022, the Company had issued share-based awards to purchase an aggregate of 24,889,462 shares under this plan.

RSUs

RSU activity for the years ended December 31, 2022, 2021 and 2020 is detailed as follows:

	Number of Shares/Units	Wtd Avg Grant Date Fair Value (GBP)*
Outstanding (Non-vested) at January 1, 2020	**4,636,347**	**2.08**
RSUs Granted in Period	1,759,011	1.80
Vested	(2,781,687)	1.54
Forfeited	(191,089)	2.37
Outstanding (Non-vested) at December 31, 2020 and January 1, 2021	**3,422,582**	**2.46**
RSUs Granted in Period	2,195,133	2.15
Vested	(1,176,695)	2.93
Forfeited	(808,305)	2.25
Outstanding (Non-vested) at December 31, 2021 and January 1, 2022	**3,632,715**	**1.91**
RSUs Granted in Period	4,309,883	1.76
Vested	(696,398)	2.80
Forfeited	(1,155,420)	2.67
Outstanding (Non-vested) at December 31, 2022	**6,090,780**	**1.74**

* 2021 – for liability awards based on fair value at reporting date.

Each RSU entitles the holder to one ordinary share on vesting and the RSU awards are generally based on a cliff vesting schedule over a one to three-year requisite service period in which the Company recognizes compensation expense for the RSUs. Following vesting, each recipient will be required to make a payment of one pence per ordinary share on settlement of the RSUs. Vesting of the majority of the RSUs is subject to the satisfaction of performance and market conditions. The grant date fair value of market condition awards that were treated as equity settled awards were measured to reflect such conditions and there was no true-up for differences between expected and actual outcomes. For liability settled awards, see below.

The Company recognizes the estimated fair value of performance-based awards as share-based compensation expense over the performance period based upon its determination of whether it is probable that the performance targets will be achieved. The Company assesses the probability of achieving the performance targets at each reporting period. Cumulative adjustments, if any, are recorded to reflect subsequent changes in the estimated outcome of performance-related conditions.

8. Share-based Payments — continued

The fair value of the market and performance-based awards is based on the Monte Carlo simulation analysis utilizing a Geometric Brownian Motion process with 100,000 simulations to value those shares. The model considers share price volatility, risk-free rate and other covariance of comparable public companies and other market data to predict distribution of relative share performance.

The performance and market conditions attached to the RSU awards are based on the achievement of total shareholder return ("TSR"), based on the achievement of absolute TSR targets, and to a lesser extent based on TSR as compared to the FTSE 250 Index, and the MSCI Europe Health Care Index. The remaining portion is based on the achievement of strategic targets. The RSU award performance criteria have changed over time as the criteria is continually evaluated by the Group's Remuneration Committee.

In 2017, the Company granted certain executives RSUs that vested based on the service, market and performance conditions, as described above. The vesting of all RSUs was achieved by December 31, 2019 where all service, market and performance conditions were met. The remuneration committee of PureTech's Board of Directors approved the achievement of the vesting conditions as of December 31, 2019 and reached the decision during the year ended December 31, 2020 to cash settle the 2017 RSUs. The settlement value was determined based on the 3 day average closing price of the shares. The settlement value was $12.5 million (which after deducting tax withheld on behalf of recipients amounted to $7.2 million). The settlement value did not exceed the fair value at settlement date and as such the cash settlement was treated as an equity transaction in the financial statements for the year ended December 31, 2020, whereby the full repurchase cash settlement amount was charged to equity in Other reserves.

Similarly in 2018, the Company granted certain executives RSUs that vested based on service, market and performance conditions, as described above. The vesting of all RSUs was achieved by December 31, 2020 where all service, market and performance conditions were met. In February 2021 the remuneration committee of PureTech's board of directors approved the achievement of the vesting conditions as of December 31, 2020 and on May 28, 2021 reached the decision to cash settle RSUs to certain employees while others were issued shares. The settlement value was determined based on the three day average closing price of the shares. The settlement value was $10.7 million (which after deducting tax withheld on behalf of recipients amounted to $6.4 million). The settlement value did not exceed the fair value at settlement date and as such the cash settlement was treated as an equity transaction, whereby the full repurchase cash settlement amount was charged to equity in Other reserves in the financial statements as of and for the year ended December 31, 2021.

Following the different cash settlements, the Company concluded that although the remaining RSUs are to be settled by shares according to their respective agreements, and any cash settlement is at the Company's discretion, due to past practice of cash settlement to multiple employees, some for multiple years, these RSUs to the company executives should be treated as liability awards and as such adjusted to fair value at every reporting date with changes in fair value recorded in earnings as stock based compensation expense.

Consequently, the Company reclassified during the year ended December 31, 2021 $1.9 million from equity to other non-current liabilities and $4.8 million from equity to other payables equal to the fair value of the awards at the date of reclassification. The Company treated the excess of the fair value at the reclassification date over the grant date fair value of the RSUs (for the portion of the vesting period that has already elapsed) in the amount of $2.9 million as an equity transaction. Therefore the full amount of the liability at reclassification was recorded as a charge to equity. The changes in fair value of the liability from reclassification date to balance sheet date or settlement date are recorded as stock-based compensation expense in the Consolidated Statement of Comprehensive Income (loss).

The Company incurred share-based payment expenses for performance, market and service based RSUs of $1.6 million (including $1.1 million expense in respect of RSU liability awards), $1.5 million (including $0.6 million expense in respect of RSU liability awards), and $5.7 million for the years ended December 31, 2022, 2021 and 2020, respectively. The decrease in the share based compensation expense in respect of the RSUs for the year ended December 31, 2021, as compared to the year ended December 31, 2020 is due to reduction in the fair value of the liability awards as compared to their value at the date the awards were reclassified from equity awards to liability awards, as well as forfeitures of certain awards due to unexpected terminations of RSU holders.

As of December 31, 2022, the carrying amount of the RSU liability awards was $5.9 million, $1.8 million current; $4.1 million non current, out of which $1.8 million related to awards that have met all their performance and market conditions.

8. Share-based Payments — continued

Stock Options

Stock option activity for the years ended December 31, 2022, 2021 and 2020, is detailed as follows:

	Number of Options	Wtd Average Exercise Price (GBP)	Wtd Average of remaining contractual term (in years)	Wtd Average Stock Price at Exercise (GBP)
Outstanding at January 1, 2020	**8,472,827**	**1.16**	**8.55**	
Granted	4,076,982	3.14		
Exercised	(514,410)	1.52		2.88
Forfeited and expired	(1,119,313)	1.88		
Options Exercisable at December 31, 2020 and January 1, 2021	**5,447,405**	**0.98**	**7.46**	
Outstanding at December 31, 2020 and January 1, 2021	**10,916,086**	**1.81**	**8.38**	
Granted	5,424,000	3.34		
Exercised	(2,238,187)	0.70		3.63
Forfeited and expired	(687,781)	2.53		
Options Exercisable at December 31, 2021 and January 1, 2022	**4,773,873**	**1.42**	**6.50**	
Outstanding at December 31, 2021 and January 1, 2022	**13,414,118**	**2.58**	**8.29**	
Granted	8,881,000	2.04		
Exercised	(577,022)	0.50		2.43
Forfeited and expired	(3,924,215)	2.89		
Options Exercisable at December 31, 2022	**6,185,216**	**2.03**	**6.21**	
Outstanding at December 31, 2022	**17,793,881**	**2.31**	**8.03**	

The fair value of the stock options awarded by the Company was estimated at the grant date using the Black-Scholes option valuation model, considering the terms and conditions upon which options were granted, with the following weighted-average assumptions:

At December 31,	**2022**	2021	2020
Expected volatility	**41.70%**	41.05%	41.25%
Expected terms (in years)	**6.11**	6.16	6.11
Risk-free interest rate	**2.13%**	1.06%	0.53%
Expected dividend yield	**—**	—	—
Grant date fair value	**$1.15**	$1.87	$1.72

The Company incurred share-based payment expense for the stock options of $8.4 million, $6.2 million and $2.1 million for the years ended December 31, 2022, 2021 and 2020, respectively. The increase in expense for the year ended December 31, 2022, as compared to the year ended December 31, 2021, is due to the new grants granted in 2022. The increase in expense for the year ended December 31, 2021, as compared to the year ended December 31, 2020, is due to new grants granted in 2021.

For shares outstanding as of December 31, 2022, the range of exercise prices is detailed as follows:

Range of Exercise Prices (GBP)	Options Outstanding	Wtd Average Exercise Price (GBP)	Wtd Average of remaining contractual term (in years)
0.01	439,490	—	6.76
1.00 to 2.00	6,276,391	1.58	7.00
2.00 to 3.00	5,375,750	2.26	8.92
3.00 to 4.00	5,702,250	3.34	8.40
Total	**17,793,881**	**2.31**	**8.03**

8. Share-based Payments — continued

Subsidiary Plans

Certain subsidiaries of the Group have adopted stock option plans. A summary of stock option activity by number of shares in these subsidiaries is presented in the following table:

	Outstanding as of January 1, 2022	**Granted During the Year**	**Exercised During the Year**	**Expired During the Year**	**Forfeited During the Year**	**Deconsolidation During the Year**	**Outstanding as of December 31, 2022**
Entrega	**349,500**	**45,000**	**—**	**(50,000)**	**—**	**—**	**344,500**
Follica	**2,686,120**	**90,000**	**—**	**—**	**—**	**—**	**2,776,120**
Sonde	**2,049,004**	**—**	**—**	**—**	**—**	**(2,049,004)**	**—**
Vedanta	**1,991,637**	**490,506**	**(400,000)**	**(65,235)**	**(192,332)**	**—**	**1,824,576**

	Outstanding as of January 1, 2021	Granted During the Year	Exercised During the Year	Expired During the Year	Forfeited During the Year	Deconsolidation During the Year	Outstanding as of December 31, 2021
Alivio	3,888,168	197,398	(2,373,750)	(506,260)	(1,205,556)	—	—
Entrega	962,000	—	(525,000)	(87,500)	—	—	349,500
Follica	1,309,040	1,383,080	—	(6,000)	—	—	2,686,120
Sonde	2,192,834	—	—	(51,507)	(92,323)	—	2,049,004
Vedanta	1,741,888	451,532	(52,938)	(76,491)	(72,354)	—	1,991,637

	Outstanding as of January 1, 2020	Granted During the Year	Exercised During the Year	Expired During the Year	Forfeited During the Year	Deconsolidation During the Year	Outstanding as of December 31, 2020
Alivio	3,698,244	189,924	—	—	—	—	3,888,168
Entrega	972,000	—	—	—	(10,000)	—	962,000
Follica	1,309,040	—	—	—	—	—	1,309,040
Sonde	1,829,004	363,830	—	—	—	—	2,192,834
Vedanta	1,450,100	493,951	(813)	—	(201,350)	—	1,741,888

The weighted-average exercise prices and remaining contractual life for the options outstanding as of December 31, 2022, were as follows:

Outstanding at December 31, 2022	**Number of options**	**Weighted-average exercise price $**	**Weighted-average contractual life outstanding**
Entrega	**344,500**	**1.91**	**4.92**
Follica	**2,776,120**	**1.41**	**6.38**
Vedanta	**1,824,576**	**15.89**	**6.88**

The weighted average exercise prices for the options granted for the years ended December 31, 2022, 2021 and 2020, were as follows:

For the years ended December 31,	**2022 $**	2021 $	2020 $
Alivio	**—**	—	0.47
Entrega	**0.02**	—	—
Follica	**1.86**	1.86	—
Sonde	**—**	—	0.18
Vedanta	**14.94**	19.69	19.59

8. Share-based Payments — continued

The weighted average exercise prices for options forfeited during the year ended December 31, 2022, were as follows:

Forfeited during the year ended December 31, 2022	Number of options	Weighted-average exercise price $
Vedanta	**192,332**	**19.64**

The weighted average exercise prices for options exercised during the year ended December 31, 2022, were as follows:

Exercised during the year ended December 31, 2022	Number of options	Weighted-average exercise price $
Vedanta	**400,000**	**0.02**

The weighted average exercise prices for options exercisable as of December 31, 2022, were as follows:

Exercisable at December 31, 2022	Number of Options	Weighted-average exercise price $	Exercise Price Range $
Entrega	**344,500**	**1.91**	**0.02-2.36**
Follica	**2,776,120**	**1.41**	**0.03-1.86**
Vedanta	**1,824,576**	**15.89**	**0.02-21.35**

Significant Subsidiary Plans

Vedanta 2020 Stock Incentive Plan

On June 2, 2020, the Company's Board of Directors approved the 2020 Stock Incentive Plan, or 2020 Plan, which replaced the 2010 Stock Incentive Plan, or 2010 Plan, which was set to expire in December 2020. All authorized and issued shares under the 2010 Plan were transferred to the 2020 Plan. The 2020 Plan provides for the grant of incentive stock options, nonqualified stock options, and restricted stock to employees, directors, and nonemployees of the Company up to an aggregate of 2,145,867 shares of the Company's common stock. In March 2021, the Company's Board of Directors approved an increase in the authorized shares of 151,188 for a total of 2,297,055. In July 2021, the Company's Board of Directors approved an increase in the authorized shares of 500,000 for a total of 2,797,055. Under the 2020 Plan, 914,331 shares remained available for issuance as of December 31, 2022.

The options granted under the 2020 Plan are equity settled and expire 10 years from the grant date. Typically, the awards vest in four years but vesting conditions can vary based on the discretion of Vedanta's Board of Directors.

Options granted under the 2020 Plan are exercisable at a price per share not less than the fair market value of the underlying ordinary shares on the date of grant. The estimated fair value of options, including the effect of estimated forfeitures, is recognized over the options' vesting period.

The fair value of the stock option grants has been estimated at the date of grant using the Black-Scholes option pricing model with the following range of assumptions:

Assumption/Input	**2022**	2021	2020
Expected award life (in years)	**6.00-8.33**	6.00-7.11	6.00-10.00
Expected award price volatility	**88.22%-89.68%**	88.05%-88.59%	89.24%-95.46%
Risk free interest rate	**1.67%-3.13%**	0.96%-1.32%	0.32%-0.87%
Expected dividend yield	**—**	—	—
Grant date fair value	**$10.51-$15.14**	$13.84-$16.23	$13.09-$16.54
Share price at grant date	**$14.00-$18.84**	$19.00-$21.35	$19.59

Vedanta incurred share-based compensation expense of $4.3 million, $5.4 million and $2.4 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Other Plans

The stock compensation expense under plans at other subsidiaries of the Group not including Vedanta amounted to $0.4 million, $0.8 million and $0.4 million for the years ended December 31, 2022, 2021 and 2020, respectively.

9. Finance Cost, net

The following table shows the breakdown of finance income and costs:

For the years ended December 31,	**2022 $000s**	2021 $000s	2020 $000s
Finance income			
Interest income from financial assets	**5,799**	214	1,183
Total finance income	**5,799**	214	1,183
Finance costs			
Contractual interest expense on notes payable	**(212)**	(1,031)	(96)
Interest expense on other borrowings	**(1,759)**	(1,502)	(496)
Interest expense on lease liability	**(1,982)**	(2,181)	(2,354)
Gain/(loss) on foreign currency exchange	**14**	(56)	—
Total finance cost – contractual	**(3,939)**	(4,771)	(2,946)
Gain/(loss) from change in fair value of warrant liability	**6,740**	1,419	(117)
Gain/(loss) from change in fair value of preferred shares	**130,825**	8,362	(4,234)
Gain/(loss) from change in fair value of convertible debt	**(502)**	(175)	—
Total finance income/(costs) – fair value accounting	**137,063**	9,606	(4,351)
Finance income/(costs), net	**138,924**	5,050	(6,115)

10. Earnings/(Loss) per Share

The basic and diluted income/(loss) per share has been calculated by dividing the income/(loss) for the year attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the years ended December 31, 2022, 2021 and 2020, respectively. During the years ended December 31, 2022 and 2021 the Company incurred a net loss and therefore all outstanding potential securities were considered anti-dilutive. The amount of potential securities that were excluded from the calculation amounted to 3,134,131 and 6,553,905 shares, respectively.

Earnings/(Loss) Attributable to Owners of the Company:

	2022		2021		2020	
	Basic $000s	**Diluted $000s**	Basic $000s	Diluted $000s	Basic $000s	Diluted $000s
Income/(loss) for the year, attributable to the owners of the Company	**(50,354)**	**(50,354)**	(60,558)	(60,558)	5,985	5,985
Income/(loss) attributable to ordinary shareholders	**(50,354)**	**(50,354)**	(60,558)	(60,558)	5,985	5,985

Weighted-Average Number of Ordinary Shares:

	2022		2021		2020	
	Basic	**Diluted**	Basic	Diluted	Basic	Diluted
Issued ordinary shares at January 1,	**287,796,585**	**287,796,585**	285,885,025	285,885,025	285,370,619	285,370,619
Effect of shares issued	**690,772**	**690,772**	705,958	705,958	233,048	233,048
Effect of dilutive shares (please refer to Note 8)	**—**	**—**	—	—	—	7,252,246
Effect of treasury shares purchased	**(3,727,922)**	**(3,727,922)**	—	—	—	—
Weighted average number of ordinary shares at December 31,	**284,759,435**	**284,759,435**	286,590,983	286,590,983	285,603,667	292,855,913

Earnings/(Loss) per Share:

	2022		2021		2020	
	Basic $	**Diluted $**	Basic $	Diluted $	Basic $	Diluted $
Basic and diluted earnings/(loss) per share	**(0.18)**	**(0.18)**	(0.21)	(0.21)	0.02	0.02

11. Property and Equipment

Cost	Laboratory and Manufacturing Equipment $000s	Furniture and Fixtures $000s	Computer Equipment and Software $000s	Leasehold Improvements $000s	Construction in process $000s	Total $000s
Balance as of January 1, 2021	8,420	1,452	1,519	18,054	3,852	33,297
Additions, net of transfers	1,424	—	92	183	6,723	8,422
Disposals	(323)	—	(282)	—	—	(605)
Reclassifications	2,211	—	—	248	(2,459)	—
Balance as of December 31, 2021	11,733	1,452	1,329	18,485	8,116	41,115
Additions, net of transfers	390	—	11	412	1,362	2,176
Disposals	(118)	—	—	—	(77)	(195)
Deconsolidation of subsidiaries	—	—	(58)	—	—	(58)
Reclassifications	1,336	58	137	5,067	(6,598)	—
Balance as of December 31, 2022	**13,341**	**1,510**	**1,419**	**23,964**	**2,803**	**43,037**

Accumulated depreciation and impairment loss	Laboratory and Manufacturing Equipment $000s	Furniture and Fixtures $000s	Computer Equipment and Software $000s	Leasehold Improvements $000s	Construction in process $000s	Total $000s
Balance as of January 1, 2021	(3,965)	(454)	(1,287)	(4,815)	—	(10,520)
Depreciation	(1,973)	(208)	(174)	(1,991)	—	(4,346)
Disposals	251	—	271	—	—	522
Balance as of December 31, 2021	(5,686)	(663)	(1,190)	(6,806)	—	(14,344)
Depreciation	(2,082)	(212)	(107)	(3,444)	—	(5,845)
Disposals	57	—	—	—	—	57
Deconsolidation of subsidiaries	—	—	53	—	—	53
Balance as of December 31, 2022	**(7,711)**	**(875)**	**(1,244)**	**(10,250)**	**—**	**(20,080)**

Property and Equipment, net	Laboratory and Manufacturing Equipment $000s	Furniture and Fixtures $000s	Computer Equipment and Software $000s	Leasehold Improvements $000s	Construction in process $000s	Total $000s
Balance as of December 31, 2021	6,047	790	139	11,679	8,116	26,771
Balance as of December 31, 2022	**5,630**	**635**	**174**	**13,714**	**2,803**	**22,957**

Depreciation of property and equipment is included in the General and administrative expenses and Research and development expenses line items in the Consolidated Statements of Comprehensive Income/(Loss). The Company recorded depreciation expense of $5.8 million, $4.3 million and $3.9 million for the years ended December 31, 2022, 2021 and 2020, respectively.

12. Intangible Assets

Intangible assets consist of licenses of intellectual property acquired by the Group through various agreements with third parties and are recorded at the value of the consideration transferred. Information regarding the cost and accumulated amortization of intangible assets is as follows:

Cost	Licenses $000s
Balance as of January 1, 2021	900
Additions	90
Balance as of December 31, 2021	990
Additions	25
Write-off	(163)
Deconsolidation of subsidiaries	(21)
Balance as of December 31, 2022	**831**

Accumulated amortization	Licenses $000s
Balance as of January 1, 2021	(1)
Amortization	(2)
Balance as of December 31, 2021	(3)
Amortization	(1)
Deconsolidation of subsidiary	4
Balance as of December 31, 2022	**—**

Intangible assets, net	Licenses $000s
Balance as of December 31, 2021	987
Balance as of December 31, 2022	**831**

Substantially all the intangible asset licenses represent in-process-research-and-development assets since they are still being developed and are not ready for their intended use. As such, these assets are not yet amortized but tested for impairment annually.

During 2022, the company wrote off one of its research intangible assets for which research was ceased in the amount of $162.5 thousand.

The Company tested all other such intangible assets for impairment as of balance sheet date and concluded that none of such assets were impaired.

During the year ended December 31, 2022, Sonde Health, Inc. was deconsolidated and as such $17.5 thousand in net assets were derecognised.

The company had negligible Amortization expense for the years ended December 31, 2022 2021 and 2020.

13. Other Financial Assets

Other financial assets consist of restricted cash held, which represents amounts that are reserved as collateral against letters of credit with a bank that are issued for the benefit of a landlord in lieu of a security deposit for office space leased by the Group. Information regarding restricted cash was as follows:

As of December 31,	**2022 $000s**	2021 $000s
Restricted cash	**2,124**	2,124
Total other financial assets	**2,124**	2,124

14. Equity

Total equity for PureTech as of December 31, 2022, and 2021, was as follows:

Equity	December 31, 2022 $000s	December 31, 2021 $000s
Share capital, £0.01 par value, issued and paid 278,566,306 and 287,796,585 as of December 31, 2022 and 2021, respectively	**5,455**	5,444
Merger Reserve	**138,506**	138,506
Share premium	**289,624**	289,303
Treasury shares, 10,595,347 and zero as of December 31, 2022 and 2021, respectively	**(26,492)**	—
Translation reserve	**89**	469
Other reserves	**(14,478)**	(40,077)
Retained earnings/(accumulated deficit)	**149,516**	199,871
Equity attributable to owners of the Group	**542,220**	593,515
Non-controlling interests	**5,369**	(9,368)
Total equity	**547,589**	584,147

Changes in share capital and share premium relate primarily to incentive options exercises during the period.

Shareholders are entitled to vote on all matters submitted to shareholders for a vote. Each ordinary share is entitled to one vote. Each ordinary share is entitled to receive dividends when and if declared by the Company's Directors. The Company has not declared any dividends in the past.

On June 18, 2015, the Company acquired the entire issued share capital of PureTech LLC in return for 159,648,387 Ordinary Shares. This was accounted for as a common control transaction at cost. It was deemed that the share capital was issued in line with movements in share capital as shown prior to the transaction taking place. In addition, the merger reserve records amounts previously recorded as share premium.

Other reserves comprise the cumulative credit to share-based payment reserves corresponding to share-based payment expenses recognized through Consolidated Statements of Comprehensive Income/(Loss), settlements of vested share based payment awards as well as other additions that flow directly through equity such as the excess or deficit from changes in ownership of subsidiaries while control is maintained by the Group.

On May 9, 2022, the Company announced the commencement of a $50.0 million share repurchase program the ("Program") of its ordinary shares of one pence each ("Ordinary Shares"). The Company is executing the Program in two equal tranches. In respect of the two tranches, PureTech entered into an irrevocable (see below) non-discretionary instruction with Jefferies International Limited ("Jefferies") in relation to the purchase by Jefferies of Ordinary Shares for an aggregate consideration (excluding expenses) of no greater than $25.0 million for each tranche and the simultaneous on-sale of such Ordinary Shares by Jefferies to PureTech, subject to certain volume and price restrictions. Jefferies makes its trading decisions in relation to the Ordinary Shares independently of, and uninfluenced by, the Company. Purchases may continue during any close period to which the Company is subject. The instruction to Jeffries may be amended or withdrawn so long as the Company is not in a close period or otherwise in possession of inside information.

Any purchases of Ordinary Shares under the Program were carried out on the London Stock Exchange and could be carried out on any other UK recognized investment exchange which may be agreed, in accordance with pre-set parameters and in accordance with, and subject to limits, including those limits related to daily volume and price, prescribed by the Company's general authority to repurchase Ordinary Shares granted by its shareholders at its annual general meeting on May 27, 2021, and relevant Rules and Regulations. All Ordinary Shares repurchased under the Program are held in treasury.

As of December 31, 2022, the Company's issued share capital was 278,566,306 shares, including 10,595,347 shares, which had been repurchased under the Program and were held by the Company in treasury.

15. Subsidiary Preferred Shares

Preferred shares issued by subsidiaries often contain redemption and conversion features that are assessed under IFRS 9 in conjunction with the host preferred share instrument. This balance represents subsidiary preferred shares issued to third parties.

The subsidiary preferred shares are redeemable upon the occurrence of a contingent event, other than full liquidation of the Company, that is not considered to be within the control of the Company. Therefore these subsidiary preferred shares are classified as liabilities. These liabilities are measured at fair value through profit and loss. The preferred shares are convertible into ordinary shares of the subsidiaries at the option of the holder and mandatorily convertible into ordinary shares upon a subsidiary listing in a public market at a price above that specified in the subsidiary's charter or upon the vote of the holders of subsidiary preferred shares specified in the charter. Under certain scenarios the number of ordinary shares receivable on conversion will change and therefore, the number of shares that will be issued is not fixed. As such the conversion feature is considered to be an embedded derivative that normally would require bifurcation. However, since the preferred share liabilities are measured at fair value through profit and loss, as mentioned above, no bifurcation is required.

15. Subsidiary Preferred Shares — continued

The preferred shares are entitled to vote with holders of common shares on an as converted basis.

The Group recognized the preferred share balance upon the receipt of cash financing or upon the conversion of notes into preferred shares at the amount received or carrying balance of any notes converted into preferred shares.

The balance as of December 31, 2022 and December 31, 2021, represents the fair value of the instruments for all subsidiary preferred shares. The following summarizes the subsidiary preferred share balance:

As of December 31,	**2022 $000s**	2021 $000s
Entrega	**169**	669
Follica	**350**	11,191
Sonde	**—**	13,362
Vedanta Biosciences	**26,820**	148,796
Total subsidiary preferred share balance	**27,339**	174,017

As is customary, in the event of any voluntary or involuntary liquidation, dissolution or winding up of a subsidiary, the holders of subsidiary preferred shares which are outstanding shall be entitled to be paid out of the assets of the subsidiary available for distribution to shareholders and before any payment shall be made to holders of ordinary shares. A merger, acquisition, sale of voting control or other transaction of a subsidiary in which the shareholders of the subsidiary immediately before the transaction do not own a majority of the outstanding shares of the surviving company shall be deemed to be a liquidation event. Additionally, a sale, lease, transfer or other disposition of all or substantially all of the assets of the subsidiary shall also be deemed a liquidation event.

As of December 31, 2022 and December 31, 2021, the minimum liquidation preference reflects the amounts that would be payable to the subsidiary preferred holders upon a liquidation event of the subsidiaries, which is as follows:

As of December 31,	**2022 $000s**	2021 $000s
Entrega	**2,216**	2,216
Follica	**6,405**	6,405
Sonde	**—**	12,000
Vedanta Biosciences	**149,568**	149,568
Total minimum liquidation preference	**158,189**	170,189

For the years ended December 31, 2022 and 2021, the Group recognized the following changes in the value of subsidiary preferred shares:

	$000s
Balance as of January 1, 2021	118,972
Issuance of new preferred shares – financing cash flow	37,610
Conversion of convertible notes	25,797
Decrease in value of preferred shares measured at fair value – finance costs (income)	(8,362)
Balance as of January 1, 2022	174,017
Decrease in value of preferred shares measured at fair value – finance costs (income)	(130,825)
Deconsolidation of subsidiary – (Sonde)	(15,853)
Balance as of December 31, 2022	**27,339**

2022

During the year ended December 31, 2022 there were no issuances of new preferred shares.

2021

On July 21, 2021 Vedanta closed a Series D financing in which Vedanta issued 2,387,675 Preferred D shares for consideration of $68.4 million. From such consideration of $68.4 million, $25.8 million was received from Pfizer through conversion of its convertible note (see Note 17) and $5.0 million was received from PureTech in exchange for 174,520 Preferred D shares. The amount received from PureTech was eliminated in the consolidated financial statements.

16. Financial Instruments

The Group's financial instruments consist of financial liabilities, including preferred shares, convertible notes, warrants and loans payable, as well as financial assets. Many of these financial instruments are presented at fair value with fair value changes recorded through profit and loss.

Fair Value Process

For financial instruments measured at fair value under IFRS 9, the change in the fair value is reflected through profit and loss. Using the guidance in IFRS 13, the total business enterprise value and allocable equity of each entity being valued was determined using a market backsolve approach through a recent arm's length financing round (or a future probable arm's length transaction), market PWERM approach, discounted cash flow income approach, or hybrid approaches. The approaches, in order of strongest fair value evidence, are detailed as follows:

Valuation Method	Description
Market – Backsolve	The market backsolve approach benchmarks the original issue price (OIP) of the company's latest funding transaction as current value.
Market/Asset – PWERM	Under a PWERM, the company value is based upon the probability-weighted present value of expected future investment returns, considering each of the possible future outcomes available to the enterprise. An asset approach may be included as an expected future outcome within the PWERM method. Possible future outcomes can include IPO scenarios, potential SPAC transactions, merger and acquisition transactions as well as other similar exit transactions of the investee.
Income Based – DCF	The income approach is used to estimate fair value based on the income streams, such as cash flows or earnings, that an asset or business can be expected to generate.

As of December 31, 2022 and 2021, at each measurement date, the fair value of preferred shares and warrant liabilities, including embedded conversion rights that are not bifurcated, as well as investments held at fair value (that are not publicly traded), were determined using the following allocation methods: option pricing model ("OPM"), Probability-Weighted Expected Return Method ("PWERM"), or Hybrid allocation framework. The methods are detailed as follows:

Allocation Method	Description
OPM	The OPM model treats preferred stock as call options on the enterprise's equity value, with exercise prices based on the liquidation preferences of the preferred stock.
PWERM	Under a PWERM, share value is based upon the probability-weighted present value of expected future investment returns, considering each of the possible future outcomes available to the enterprise, as well as the rights of each share class.
Hybrid	The hybrid method ("HM") is a combination of the PWERM and OPM. Under the hybrid method, multiple liquidity scenarios are weighted based on the probability of the scenarios occurrence, similar to the PWERM, while also utilizing the OPM to estimate the allocation of value in one or more of the scenarios.

Valuation policies and procedures are regularly monitored by the Company's finance group. Fair value measurements, including those categorized within Level 3, are prepared and reviewed on their issuance date and then on an annual basis for reasonableness and compliance with the fair value measurements guidance under IFRS. The Group measures fair values using the following fair value hierarchy that reflects the significance of the inputs used in making the measurements:

Fair Value Hierarchy Level	Description
Level 1	Inputs that are quoted market prices (unadjusted) in active markets for identical instruments.
Level 2	Inputs other than quoted prices included within Level 1 that are observable either directly (i.e. as prices) or indirectly (i.e. derived from prices).
Level 3	Inputs that are unobservable. This category includes all instruments for which the valuation technique includes inputs not based on observable data and the unobservable inputs have a significant effect on the instrument's valuation.

Whilst the Group considers the methodologies and assumptions adopted in fair value measurements as supportable, reasonable and robust, because of the inherent uncertainty of valuation, those estimated values may differ significantly from the values that would have been used had a ready market for the investment existed.

16. Financial Instruments — continued

Subsidiary Preferred Shares Liability and Subsidiary Convertible Notes

The following table summarizes the changes in the Group's subsidiary preferred shares and convertible note liabilities measured at fair value, which were categorized as Level 3 in the fair value hierarchy:

	Subsidiary Preferred Shares $000s	Subsidiary Convertible Notes $000s
Balance at January 1, 2020	100,989	—
Value at issuance	13,750	25,000
Change in fair value	4,233	—
Balance at December 31, 2020 and January 1, 2021	118,972	25,000
Value at issuance	37,610	2,215
Conversion to subsidiary preferred shares	25,797	(25,797)
Accrued interest – contractual	—	867
Change in fair value	(8,362)	175
Balance at December 31, 2021 and January 1, 2022	174,017	2,461
Value at issuance	—	393
Accrued interest – contractual	—	48
Change in fair value	(130,825)	502
Deconsolidation – Sonde	(15,853)	(3,403)
Balance at December 31, 2022	**27,339**	**—**

The change in fair value of preferred shares and convertible notes are recorded in Finance income/(costs) – fair value accounting in the Consolidated Statements of Comprehensive Income/(Loss).

The table below sets out information about the significant unobservable inputs used at December 31, 2022, in the fair value measurement of the Group's material subsidiary preferred shares liabilities categorized as Level 3 in the fair value hierarchy:

Fair Value at December 31, 2022	Valuation Technique	Unobservable Inputs	Weighted Average	Sensitivity to Decrease in Input
26,820	PWERM based on pro forma backsolve approach that leverages a Monte Carlo simulation	Estimated Time to Exit	2.14	Fair value decrease
		Equity Discount Rate	30%	Fair value increase
		Debt Discount Rate	15%	Fair value decrease
		Volatility	95%	Fair value decrease

Subsidiary Preferred Shares Sensitivity

The following summarizes the sensitivity from the assumptions made by the Company with respect to the significant unobservable inputs which are categorized as Level 3 in the fair value hierarchy and used in the fair value measurement of the Group's subsidiary preferred shares liabilities (Please refer to Note 15):

Input	Subsidiary Preferred Share Liability	
As of December 31, 2022	Sensitivity Range	Financial Liability Increase/(Decrease) $000s
Time to Liquidity	- 6 Months	(1,322)
	+ 6 Months	856
Volatility	(10)%	(1,133)
	+10%	1,200
Discount Rate	(5)%	(2,035)
	+5%	1,922

16. Financial Instruments — continued

Financial Assets Held at Fair Value

Karuna, Vor and Akili Valuation

Karuna (Nasdaq: KRTX), Vor (Nasdaq: VOR), Akili (Nasdaq: AKLI) and additional immaterial investments are listed entities on an active exchange and as such the fair value as of December 31, 2022, was calculated utilizing the quoted common share price. Please refer to Note 5 for further details.

Akili, Gelesis and Sonde

In accordance with IFRS 9, the Company accounted for its preferred share investments in Akili (until the exchange of such shares to common stock traded on Nasdaq) and Gelesis (until the exchange of such shares to common stock) and accounts for its investment in Sonde (investment in Preferred A-2 and B shares, subsequent to the date of deconsolidation) as financial assets held at fair value through the profit and loss. In addition, the Company accounts for its investment in Gelesis Earn-out shares and Akili Earn-out shares (see Note 5) as investments held at fair value. All the valuations of the aforementioned investments are categorized as Level 3 in the fair value hierarchy due to the use of significant unobservable inputs to value such assets. During the year ended December 31, 2022, the Company recorded such investments at fair value and recognized the change in fair value of the investments as a loss of $30.0 million that was recorded to the Consolidated Statements of Comprehensive Income/(Loss) in the line item Gain/(loss) on investments held at fair value.

The following table summarizes the changes in all the Group's investments held at fair value, which were categorized as Level 3 in the fair value hierarchy:

	$'000s
Balance at January 1, 2020	154,445
Cash purchase of Gelesis preferred shares (please refer to Note 6)	10,000
Cash purchase of Vor preferred shares	1,150
Gain/(Loss) on changes in fair value	41,297
Balance at December 31, 2020 and January 1, 2021	206,892
Cash purchase of Vor preferred shares	500
Reclassification of Vor from level 3 to level 1	(33,365)
Gain/(Loss) on changes in fair value	65,505
Balance at January 1, 2022 before allocation of associate loss to long-term interest	239,533
Deconsolidation of Sonde	11,168
Gelesis – New Investment – Earn out Shares	14,214
Exchange of Gelesis preferred shares to Gelesis common shares	(92,303)
Reclassification of Akili to level 1 investment	(128,764)
Change in fair value	(31,253)
Balance as of December 31, 2022	**12,593**

The change in fair value of investments held at fair value are recorded in Gain/(loss) on investments held at fair value in the Consolidated Statements of Comprehensive Income/(Loss).

The table below sets out information about the significant unobservable inputs used at December 31, 2022, in the fair value measurement of the Group's material preferred share investments held at fair value categorized as Level 3 in the fair value hierarchy:

Fair Value at December 31, 2022	Valuation Technique	Unobservable Inputs	Weighted Average	Sensitivity to Decrease in Input
	Market Backsolve &	Estimated time to exit	2.00	Fair value decrease
11,403	OPM	Volatility	55%	Fair value decrease

As the material investments held at fair value categorized as level 3 in the fair value hierarchy are based on a market backsolve approach using a recent arm's length transaction the change in unobservable inputs in reasonably possible scenarios has an immaterial impact on the financial statements.

16. Financial Instruments — continued

Warrants

Warrants issued by subsidiaries within the Group are classified as liabilities, as they will be settled in a variable number of preferred shares. The following table summarizes the changes in the Group's subsidiary warrant liabilities, which were categorized as Level 3 in the fair value hierarchy:

	Subsidiary Warrant Liability $000s
Balance at January 1, 2020	7,997
Warrant Issuance	92
Change in fair value – finance costs (income)	117
Balance at December 31, 2020 and January 1, 2021	8,206
Change in fair value – finance costs (income)	(1,419)
Balance at December 31, 2021 and January 1, 2022	6,787
Change in fair value – finance costs (income)	(6,740)
Balance at December 31, 2022	**47**

The change in fair value of warrants are recorded in Finance income/(costs) – fair value accounting in the Consolidated Statements of Comprehensive Income/(Loss).

In connection with various amendments to its 2010 Loan and Security Agreement, Follica issued Series A-1 preferred share warrants at various dates in 2013 and 2014. In 2017, in conjunction with the issuance of convertible notes, the exercise price of the warrants was adjusted to $0.07 per share.

In connection with the September 2, 2021 Oxford Finance LLC loan issuance, Vedanta also issued Oxford Finance LLC 12,886 Series C-2 preferred share warrants with an exercise price of $23.28 per share, expiring September 2030.

The fair value of the warrant liabilities was immaterial as of December 31, 2022 due to the decline in the fair value of the underlying preferred shares in the Follica warrant. See also Note 15 for the fair value of Follica preferred share liabilities.

Short-term Note from Associate

On December 7, 2021, Gelesis issued PureTech a $15.0 million note to be repaid the earlier of three business days after the closing of the business combination of Gelesis with Capstar Special Acquisition Corp ("Capstar"), or 30 days following the termination of such business combination. In the event of the business combination termination, the Company, who represented the majority of the note holders, could have elected to convert the note at the next equity financing at a discount of 25% from the financing price. The note bore interest at a rate of 10% per annum.

The note was repaid by Gelesis in January 2022 due to the closing of the business combination between Gelesis and Capstar on January 13, 2022.

Note from Associate

On July 27, 2022, PureTech, as a lender, entered into an unsecured Short Term Promissory Note ("Note") with Gelesis (GLS), as a borrower, in the amount of $15.0 million. The Note bears an annual interest rate of 15% per annum and accrues until the note is repaid. The term of the Note is the earlier of December 31, 2023 or five business days following the consummation of a qualified financing by Gelesis.

In case of default, PureTech will be issued a warrant which shall entitle PureTech to purchase at an exercise price per share of $0.01 a number of shares of Gelesis common Stock equal to (i) (A) 0.2 multiplied by (B) the amount of outstanding principal and accrued interest under the Note as of the date of conversion described below, divided by (ii) the volume weighted average price of each share of Common Stock, as reported by the New York Stock Exchange, for the last five (5) trading days ("the "Common Stock VWAP") occurring immediately prior to the date of exercise. In addition, PureTech will have the option to convert the amount of outstanding principal and accrued interest under the Note into a number of shares of Gelesis Common Stock (the "Conversion Securities") equal to (i) the amount of outstanding principal and accrued interest under the Note as of the date of such conversion, divided by (ii) the lesser of the price per share of (A) the Gelesis common Stock, as reported by the New York Stock Exchange, as of 4:00 P.M. Eastern Time on the date of the conversion notice or (B) the Common Stock VWAP as of the day prior to the date of the conversion notice.

16. Financial Instruments — continued

Based on the terms of the note, the note is required to be measured at fair value with changes in fair value recorded through profit and loss. The fair value of the note as of December 31, 2022 was $16.5 million. During the year ended December 31, 2022 the Group recorded $963 thousand of interest income and a gain of $539 thousand for the change in the fair value of the note. The change in the fair value of the note was recorded in the line item Other Income/(expense) in the Consolidated Statements of Comprehensive Income/(Loss).

The note was valued using a discounted cash flow approach of the probability weighted future returns on the note, using a discount rate of 28.9%. Increasing or decreasing the discount rate by 5.0% will decrease or increase the value, respectively, by approximately $0.4 million. Also, increasing the estimated term to a qualified financing by 6 months (estimated as 3 months from December 31, 2022) will decrease the fair value by approximately $0.9 million.

Subsequent to balance sheet date, on April 10, 2023, the NYSE commenced proceedings to delist the common stock of Gelesis from the NYSE due to Gelesis ceasing to meet certain conditions to trade on such stock exchange. Trading in Gelesis's common stock was suspended immediately, and it was subsequently delisted from the NYSE. The common stock of Gelesis is currently available for trading in the over-the-counter ("OTC") market under the symbol GLSH. See Note 26 for additional details, including information related to an additional note issued by Gelesis to the Group after balance sheet date.

Fair Value Measurement and Classification

The fair value of financial instruments by category at December 31, 2022 and 2021:

	2022					
	Carrying Amount		Fair Value			
	Financial Assets $000s	Financial Liabilities $000s	Level 1 $000s	Level 2 $000s	Level 3 $000s	Total $000s
Financial assets:						
Money Markets[1,2]	**95,249**	**—**	**95,249**	**—**	**—**	**95,249**
Short-term investments[1]	**200,229**	**—**	**200,229**	**—**	**—**	**200,229**
Note from associate	**16,501**	**—**	**—**	**—**	**16,501**	**16,501**
Investments held at fair value	**251,892**	**—**	**239,299**	**—**	**12,593**	**251,892**
Trade and other receivables[3]	**11,867**	**—**	**—**	**11,867**	**—**	**11,867**
Total financial assets	**575,738**	**—**	**534,777**	**11,867**	**29,094**	**575,738**
Financial liabilities:						
Subsidiary warrant liability	**—**	**47**	**—**	**—**	**47**	**47**
Subsidiary preferred shares	**—**	**27,339**	**—**	**—**	**27,339**	**27,339**
Subsidiary notes payable	**—**	**2,345**	**—**	**2,097**	**248**	**2,345**
Share based liability awards	**—**	**5,932**	**4,396**	**—**	**1,537**	**5,932**
Total financial liabilities	**—**	**35,664**	**4,396**	**2,097**	**29,171**	**35,664**

1 Issued by a diverse group of corporations, largely consisting of financial institutions, virtually all of which are investment grade.
2 Included within Cash and cash equivalents
3 Outstanding receivables are owed primarily by government agencies and large corporations, virtually all of which are investment grade.

As of balance sheet date the long term loan book value (see Note 20) approximated its fair value due to its variable rate.

	2021					
	Carrying Amount		Fair Value			
	Financial Assets $000s	Financial Liabilities $000s	Level 1 $000s	Level 2 $000s	Level 3 $000s	Total $000s
Financial assets:						
Money Markets[1]	432,649	—	432,649	—	—	432,649
Short-term note from associate	15,120	—	—	—	15,120	15,120
Investments held at fair value[2]	493,888	—	254,355	—	239,533	493,888
Trade and other receivables[3]	3,174	—	—	3,174	—	3,174
Total financial assets	944,832	—	687,005	3,174	254,653	944,832
Financial liabilities:						
Subsidiary warrant liability	—	6,787	—	—	6,787	6,787
Subsidiary preferred shares	—	174,017	—	—	174,017	174,017
Subsidiary notes payable	—	4,641	—	1,945	2,696	4,641
Share based liability awards	—	7,362	6,081	—	1,281	7,362
Total financial liabilities	—	192,808	6,081	1,945	184,781	192,808

1 Issued by a diverse group of corporations, largely consisting of financial institutions, virtually all of which are investment grade. Included within Cash and cash equivalents
2 Balance prior to share of associate loss allocated to long-term interest (please refer to Note 5).
3 Outstanding receivables are owed primarily by government agencies, virtually all of which are investment grade.

17. Subsidiary Notes Payable

The subsidiary notes payable are comprised of loans and convertible notes. As of December 31, 2022 and December 31, 2021, the loan in Follica and the financial instruments for Knode and Appeering did not contain embedded derivatives and therefore these instruments continue to be held at amortized cost. The notes payable consist of the following:

As of December 31,	**2022 $000s**	2021 $000s
Loans	**2,097**	1,945
Convertible notes	**248**	2,696
Total subsidiary notes payable	**2,345**	4,641

Loans

In October 2010, Follica entered into a loan and security agreement with Lighthouse Capital Partners VI, L.P. The loan is secured by Follica's assets, including Follica's intellectual property and bears interest at a rate of 12.0 percent. The outstanding loan balance totaled approximately $2.0 million and $1.9 million as of December 31, 2022 and December 31, 2021, respectively. The increase in 2022 is attributed to interest expense for the year ended December 31, 2022.

Convertible Notes

Convertible Notes outstanding were as follows:

	Vedanta $000s	Knode $000s	Appeering $000s	Sonde $000s	Total $000s
January 1, 2021	25,000	89	134	—	25,223
Gross principal – issuance of notes – financing activity	—	—	—	2,215	2,215
Accrued interest on convertible notes – finance costs	797	5	8	70	880
Conversion to subsidiary preferred shares	(25,797)	—	—	—	(25,797)
Change in fair value – finance costs	—	—	—	175	175
December 31, 2021 and January 1, 2022	—	94	141	2,461	2,696
Gross principal – issuance of notes – financing activity	—	—	—	393	393
Accrued interest on convertible notes – finance costs	—	5	8	48	60
Change in fair value – finance costs	—	—	—	502	502
Deconsolidation	—	—	—	(3,403)	(3,403)
December 31, 2022	**—**	**99**	**149**	**—**	**248**

On December 30, 2020, Vedanta issued a $25.0 million convertible promissory note to an investor. The note bore interest at an annual rate of 6.0 percent and its maturity date was the first anniversary of the note. Prepayment of the note was not allowed and there was no conversion discount feature on the note. The note was mandatorily convertible in a Qualified equity financing and a Qualified Public Offering at the current price of the financing or offering, all as defined in the note purchase agreement. In addition, the note allowed for optional conversion immediately prior to a Non Qualified public offering, Non Qualified Equity financing, or a Corporate transaction and for a pay-out in the case of a change of control transaction. On July 19, 2021, upon the occurrence of Vedanta's Series D preferred share issuance that was considered to be a Qualified Equity Financing, the entire outstanding amount of the note, principal and interest, was converted into Series D preferred shares of Vedanta at the current price of the financing. For further details, please see Note 15.

On April 6, 2021, and on November 24, 2021, Sonde issued unsecured convertible promissory notes to its existing shareholders for a combined total of $4.3 million, of which $2.2 million were issued to third party shareholders (and $2.1 million were issued to the Company and eliminated in consolidation). In addition, in March 2022 Sonde issued an additional amount of $0.9 million, of which $0.4 million were issued to third parties (and $0.5 million issued to PureTech and eliminated in consolidation). The notes bore interest at an annual rate of 6.0 percent and were to mature on the second anniversary of the issuance. The notes were to mandatorily convert in a Qualified Financing, as defined in the note purchase agreement, at a discount of 20.0 percent from the price per share in the Qualified Financing. In addition, the notes allowed for optional conversion concurrently with a discount of 20.0 percent from the price per share in the Non Qualified Equity Financing. Upon the completion of the Preferred B round of financing in Sonde on May 25, 2022, the Group lost control in Sonde and all convertible notes were derecognized as part of the deconsolidation – See Note 5.

For the Vedanta and Sonde convertible notes, since these Notes contained embedded derivatives, the Notes were assessed under IFRS 9 and the entire financial instruments were elected to be accounted for as FVTPL. The Vedanta convertible note was settled through its conversion in July 2021 and the Sonde notes were deconsolidated in May 2022. See above.

18. Non-Controlling Interest

During the year ended December 31, 2022, Sonde Health, Inc was deconsolidated and therefore transferred retroactively to the Non-Controlled Founded Entity segment. See Note 5. Investments Held at Fair Value.

The Company has revised in the 2022 financial statements the prior period financial information related to the segmentation of NCI, to conform to the presentation as of and for the year ending December 31, 2022. Please refer to Note 4 "Segment Information" for further details regarding reportable segments.

The following table summarizes the changes in the equity classified non-controlling ownership interest in subsidiaries by reportable segment:

	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Total $000s
Balance at January 1, 2020 *	(8,682)	1,465	(11,016)	593	(17,639)
Share of comprehensive loss	(191)	(905)	(306)	(15)	(1,417)
Equity settled share-based payments	305	2,395	122	—	2,822
Other	—	11	19	(6)	24
Balance at December 31, 2020 and January 1, 2021 *	(8,567)	2,966	(11,181)	574	(16,209)
Share of comprehensive loss	(96)	(1,634)	(436)	15	(2,151)
NCI exercise of share-based awards in subsidiaries – change in NCI interest	—	(5,922)	—	—	(5,922)
Equity settled share-based payments	(4)	6,224	32	—	6,252
Acquisition of a subsidiary non controlling interest	8,668	—	—	—	8,668
Other	—	—	—	(6)	(6)
Balance at December 31, 2021 and January 1, 2022	—	1,634	(11,585)	583	(9,368)
Share of comprehensive income (loss)	—	13,604	(330)	15	13,290
NCI exercise of share-based awards	—	(15,164)	—	—	(15,164)
Deconsolidation of subsidiaries	—	—	11,904	—	11,904
Equity settled share-based payments	—	4,703	8	—	4,711
Other	—	—	2	(6)	(4)
Balance as of December 31, 2022	**—**	**4,778**	**—**	**592**	**5,369**

* Revised to reclassify Sonde to the Non-controlled Founded Entities segment to comply with current period classification. See Note 4.

The following tables summarize the financial information related to the Group's subsidiaries with material non-controlling interests, aggregated for interests in similar entities, and before and after intra group eliminations.

	2022			
For the year ended December 31	**Internal $000s**	**Controlled Founded Entities $000s**	**Intra-group eliminations $000s**	**Total $000s**
Statement of Comprehensive Loss				
Total revenue	**—**	**12,202**	**—**	**12,202**
Income/(loss) for the year	**—**	**98,633**	**1,003**	**99,636**
Other comprehensive income/(loss)	**—**	**—**	**—**	**—**
Total comprehensive income/(loss) for the year	**—**	**98,633**	**1,003**	**99,636**
Statement of Financial Position				
Total assets	**—**	**35,341**	**(100)**	**35,241**
Total liabilities	**—**	**76,635**	**(11,057)**	**65,578**
Net assets/(liabilities)	**—**	**(41,294)**	**10,957**	**(30,336)**

As of December 31, 2022, Controlled Founded Entities with non-controlling interests primarily include Follica Incorporated, Entrega Inc., and Vedanta Biosciences, Inc. Ownership interests of the non-controlling interests in Follica Incorporated, Entrega Inc., and Vedanta Biosciences, Inc are 19.9 percent, 11.7 percent, and 12.2 percent, respectively. In addition, Non-controlling interests include the amounts recorded for subsidiary stock options, with the vast majority comprising of Vedanta stock options.

18. Non-Controlling Interest — continued

For the year ended December 31	Internal $000s	Controlled Founded Entities $000s	Intra-group eliminations $000s	Total $000s
	2021			
Statement of Comprehensive Loss				
Total revenue	—	7,771	—	7,771
Income/(loss) for the year	—	(50,436)	792	(49,644)
Other comprehensive income/(loss)	—	—	—	—
Total comprehensive income/(loss) for the year	—	(50,436)	792	(49,644)
Statement of Financial Position				
Total assets	—	66,279	(161)	66,118
Total liabilities	—	228,856	(10,755)	218,101
Net assets/(liabilities)	—	(162,576)	10,594	(151,982)

As of December 31, 2021, Controlled Founded Entities with non-controlling interests primarily include, Follica Incorporated, Sonde Health Inc., Entrega Inc. and Vedanta Biosciences, Inc. Ownership interests of the non-controlling interests in Follica Incorporated, Sonde Health Inc., and Vedanta Biosciences, Inc are 19.9 percent, 11.7 percent, 6.2 percent and 3.7 percent, respectively. In addition, Non-controlling interests include the amounts recorded for subsidiary stock options, with the vast majority comprising of Vedanta stock options.

For the year ended December 31	Internal $000s	Controlled Founded Entities $000s	Intra-group eliminations	Total
	2020			
Statement of Comprehensive Loss				
Total revenue	3,267	1,957	—	5,224
Income/(loss) for the year	(2,407)	(53,535)	1,073	(54,869)
Total comprehensive income/(loss) for the year	(2,407)	(53,535)	1,073	(54,869)

As of December 31, 2020, Internal segment with non-controlling interests includes Alivio, Controlled Founded Entities with non-controlling interests primarily include, Follica Incorporated, Sonde Health Inc., and Vedanta Biosciences, Inc. Ownership interests of the non-controlling interests in Alivio Therapeutics, Inc., Follica Incorporated, Sonde Health Inc., and Vedanta Biosciences, Inc are 8.1 percent, 19.9 percent, 4.5 percent and 0.4 percent, respectively. In addition, Non-controlling interests include the amounts recorded for subsidiary stock options, with the vast majority comprising of Vedanta stock options.

On June 11, 2021, PureTech acquired the remaining 17.1 percent of the minority non-controlling interests of Alivio (after exercise of all in the money stock options) increasing its ownership to 100.0 percent of Alivio. The consideration for such non controlling interests amounted to $1.2 million, to be paid in three equal installments, with the first installment of $0.4 million paid at the effective date of the transaction and two additional installment to be paid upon the occurrence of certain contingent events. The Group recorded a contingent consideration liability of $0.6 million at fair value for the two additional installments, resulting in a total acquisition cost of $1.0 million. The excess of the consideration paid over the book value of the non-controlling interest of approximately $9.6 million was recorded directly as a charge to shareholders' equity. The second installment of $0.4 million was paid in July 2021, upon the occurrence of the contingent event specified in the agreement. The contingent consideration liability is adjusted to fair value at the end of each reporting period with changes in fair value recorded in earnings. Changes in fair value of the aforementioned contingent consideration liability were not material. As of December 31, 2022, the remaining contingent liability was reduced to zero as the second contingent event did not occur.

On December 1, 2021, options holders in Entrega exercised options into shares of common stock, increasing the NCI interest held from 0.2 percent to 11.7 percent. During 2021 option holders in Vedanta exercised options and increased the NCI interest to 3.7 percent. The exercise of the options resulted in an increase in the NCI share in Entrega's and Vedanta's shareholder's deficit of $5.9 million. The consideration paid by NCI ($0.1 million) together with the increase in NCI share in Entrega's and Vedanta's shareholder deficit ($5.9 million) amounted to $6.0 million and was recorded as a gain directly in shareholders' equity.

On February 15, 2022, option holders in Vedanta exercised options into shares of common stock, increasing the NCI interest held from 3.7 percent to 12.2 percent. The exercise of the options resulted in an increase in the NCI share in Vedanta's shareholder's deficit of $15.2 million. The consideration paid by NCI ($7.2 thousand) together with the increase in NCI share in Vedanta's shareholder deficit ($15.2 million) amounted to $15.2 million and was recorded as a gain directly in shareholders' equity.

19. Trade and Other Payables

Information regarding Trade and other payables was as follows:

As of December 31,	**2022 $000s**	2021 $000s
Trade payables	**26,504**	11,346
Accrued expenses	**24,518**	17,309
Income tax payable	**57**	57
Liability settled share based awards	**1,805**	4,703
Other	**1,957**	2,403
Total trade and other payables	**54,840**	35,817

20. Long-term loan

In September 2020, Vedanta entered into a $15.0 million loan and security agreement with Oxford Finance LLC. The loan is secured by Vedanta's assets, including equipment, inventory and intellectual property. The loan bears a floating interest rate of 7.7 percent plus the greater of (i) 30 day U.S. Dollar LIBOR reported in the Wall Street Journal or (ii) 0.17 percent. The loan matures September 2025 and requires interest only payments prior to 2023. The loan also carries a final fee upon full repayment of 7.0 percent of the original principal, or $1.1 million. As part of the loan agreement, Vedanta also issued Oxford Finance LLC 12,886 Series C-2 preferred share warrants with an exercise price of $23.28 per share, expiring September 2030. The outstanding loan balance totaled approximately $15.4 million as of December 31, 2022.

The following table summarizes long-term loan activity for the years ended December 31, 2022 and 2021:

	Long-term loan	
	2022 $000s	2021 $000s
Balance at January 1,	**15,118**	14,818
Accrued interest	**1,755**	1,502
Interest paid	**(1,436)**	(1,201)
Other	**(38)**	—
Balance at December 31,	**15,400**	15,118

The following table summarizes Vedanta's future principal payments for the long-term loan as of December 31, 2022:

Balance Type	2023	2024	2025	Total
Principal	5,156	5,625	4,219	15,000
Balance of accreted premium net of unamortized issuance costs				400
Total				**15,400**

The long-term loan is presented as follows in the Statement of Financial Position as of December 31, 2022 and 2021:

	Long-term loan	
	2022 $000s	2021 $000s
Current portion of Long-term loan	**5,156**	857
Long-term loan	**10,244**	14,261
Total Long-term loan	**15,400**	15,118

21 Leases

The activity related to the Group's right of use asset and lease liability for the years ended December 31, 2022 and 2021 is as follows:

	Right of use asset, net	
	2022 $000s	2021 $000s
Balance at January 1,	**17,166**	20,098
Additions	**163**	739
Tenant improvement – lease incentive	**—**	(733)
Depreciation	**(3,047)**	(2,938)
Balance at December 31,	**14,281**	17,166

	Total lease liability	
	2022 $000s	2021 $000s
Balance at January 1,	**32,990**	35,348
Additions	**163**	1,016
Cash paid for rent – principal – financing cash flow	**(4,025)**	(3,375)
Cash paid for rent – interest	**(1,982)**	(2,181)
Interest expense	**1,982**	2,181
Balance at December 31,	**29,128**	32,990

Depreciation of the right-of-use assets, which virtually all consist of leased real estate, is included in the General and administrative expenses and Research and development expenses line items in the Consolidated Statements of Comprehensive Income/(Loss). The Company recorded depreciation expense of $3.0 million, $2.9 million and $2.7 million for the years ended December 31, 2022, 2021 and 2020 respectively.

The following details the short term and long-term portion of the lease liability as of December 31, 2022 and 2021:

	Total lease liability	
	2022 $000s	2021 $000s
Short-term Portion of Lease Liability	**4,972**	3,950
Long-term Portion of Lease Liability	**24,155**	29,040
Total Lease Liability	**29,128**	32,990

The following table details the future maturities of the lease liability, showing the undiscounted lease payments to be paid after the reporting date:

	2022 $000s
Less than one year	**6,673**
One to two years	**6,763**
Two to three years	**5,168**
Three to four years	**4,419**
Four to five years	**4,551**
More than five years	**7,483**
Total undiscounted lease maturities	**35,056**
Interest	**5,928**
Total lease liability	**29,128**

During the year ended December 31, 2019, PureTech entered into a lease agreement for certain premises consisting of approximately 50,858 rentable square feet of space located at 6 Tide Street. The lease commenced on April 26, 2019 ("Commencement Date") for an initial term consisting of ten years and three months and there is an option to extend for two consecutive periods of five years each. The Company assessed at lease commencement date whether it is reasonably certain to exercise the extension options and deemed such options not reasonably certain to be exercised. The Company will reassess whether it is reasonably certain to exercise the options only if there is a significant event or significant changes in circumstances within its control.

21. Leases — continued

On June 26, 2019, PureTech executed a sublease agreement with Gelesis. The lease is for the approximately 9,446 rentable square feet located on the sixth floor of the Company's former offices at the 501 Boylston Street building. The sublessee obtained possession of the premises on June 1, 2019 and the rent period term began on June 1, 2019 and expires on August 31, 2025. The sublease was determined to be a finance lease. As of December 31, 2022, the balances related to the sublease were as follows:

	Total lease receivable $000s
Short-term Portion of Lease Receivable	450
Long-term Portion of Lease Receivable	835
Total Lease Receivable	**1,285**

The following table details the future maturities of the lease receivable, showing the undiscounted lease payments to be received after the reporting date:

	2022 $000s
Less than one year	**513**
One to two years	**523**
Two to three years	**353**
Total undiscounted lease receivable	**1,389**
Unearned Finance income	**103**
Net investment in the lease	**1,285**

On August 6, 2019, PureTech executed a sublease agreement with Dewpoint Therapeutics, Inc. ("Dewpoint"). The sublease was for approximately 11,852 rentable square feet located on the third floor of the 6 Tide Street building, where the Company's offices are currently located. Dewpoint obtained possession of the premises on September 1, 2019 with a rent period term that began on September 1, 2019, and expired on August 31, 2021. The sublease was determined to be an operating lease.

Rental income recognized by the Company during the years ended December 31, 2021 and 2020 was $0.6 million and $1.1 million, respectively and is included in the Other income/(expense) line item in the Consolidated Statements of Comprehensive Income/(Loss).

22. Capital and Financial Risk Management

Capital Risk Management

The Group's capital and financial risk management policy is to maintain a strong capital base so as to support its strategic priorities, maintain investor, creditor and market confidence as well as sustain the future development of the business. The Group's objectives when managing capital are to safeguard its ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. To maintain or adjust the capital structure, the Group may issue new shares or incur new debt. The Group has some external debt and no material externally imposed capital requirements. The Group's share capital is clearly set out in Note 14.

Management continuously monitors the level of capital deployed and available for deployment in the Internal segment and at the corporate level as well as at Controlled Founded Entities. The Directors seek to maintain a balance between the higher returns that might be possible with higher levels of deployed capital and the advantages and security afforded by a sound capital position.

The Group's Directors have overall responsibility for establishment and oversight of the Group's capital and risk management framework. The Group is exposed to certain risks through its normal course of operations. The Group's main objective in using financial instruments is to promote the development and commercialization of intellectual property through the raising and investing of funds for this purpose. The Group's policies in calculating the nature, amount and timing of investments are determined by planned future investment activity. Due to the nature of activities and with the aim to maintain the investors' funds as secure and protected, the Group's policy is to hold any excess funds in highly liquid and readily available financial instruments and maintain insignificant exposure to other financial risks.

22. Capital and Financial Risk Management — continued

The Group has exposure to the following risks arising from financial instruments:

Credit Risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. Financial instruments that potentially subject the Group to concentrations of credit risk consist principally of cash and cash equivalents, short term investments, and trade and other receivables. The Group held the following balances (not including the income tax receivable resulting from overpayment of income taxes, see Note 25):

As of December 31	**2022 $000s**	2021 $000s
Cash and cash equivalents	**149,866**	465,708
Short-term investments	**200,229**	—
Trade and other receivables	**11,867**	3,174
Total	**361,961**	468,882

The Group invests its excess cash in U.S. Treasury Bills (presented as short-term investments), and money market accounts, which the Group believes are of high credit quality. Further the Group's cash and cash equivalents and short-term investments are held at diverse, investment-grade financial institutions.

The Group assesses the credit quality of customers on an ongoing basis. The credit quality of financial assets is assessed by historical and recent payment history, counterparty financial position, reference to credit ratings (if available) or to historical information about counterparty default rates. The Group does not have expected credit losses owing largely to a small number of counterparties and the high credit quality of most counterparties (primarily the US government and large funds with respect to grant income and large high credit quality corporations).

The aging of trade and other receivables that were not impaired at December 31 is as follows:

As of December 31	**2022 $000s**	2021 $000s
Not impaired	**11,867**	3,174
Total	**11,867**	3,174

With regard to the Note from associate, such note is presented at fair value which incorporates, among other factors, the credit risk of the counterparty. See Note 16 for details.

Liquidity Risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group actively manages its risk of a funds shortage by closely monitoring the maturity of its financial assets and liabilities and projected cash flows from operations, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation. Due to the nature of these financial liabilities, the funds are available on demand to provide optimal financial flexibility.

The table below summarizes the maturity profile of the Group's financial liabilities, including subsidiary preferred shares that have customary liquidation preferences, as of December 31, 2022 and 2021, based on contractual undiscounted payments:

	2022				
As of December 31	**Carrying Amount $000s**	**Within Three Months $000s**	**Three to Twelve Months $000s**	**One to Five Years $000s**	**Total $000s***
Long-term loan (non-current + current)	**15,400**	**1,838**	**5,281**	**11,413**	**18,531**
Subsidiary notes payable	**2,345**	**2,345**	**—**	**—**	**2,345**
Trade and other payables	**54,840**	**54,840**	**—**	**—**	**54,840**
Warrants[2]	**47**	**47**	**—**	**—**	**47**
Subsidiary preferred shares (Note 15)[1]	**27,339**	**27,339**	**—**	**—**	**27,339**
Total	**99,971**	**86,409**	**5,281**	**11,413**	**103,103**

	2021				
As of December 31	Carrying Amount $000s	Within Three Months $000s	Three to Twelve Months $000s	One to Five Years $000s	Total $000s*
Long-term loan	15,118	296	2,182	16,274	18,752
Subsidiary notes payable	4,641	4,641	—	—	4,641
Trade and other payables	35,817	35,817	—	—	35,817
Warrants[2]	6,787	6,787	—	—	6,787
Subsidiary preferred shares (Note 15)[1]	174,017	174,017	—	—	174,017
Total	236,381	221,559	2,182	16,274	240,015

1 Redeemable only upon a liquidation or Deemed liquidation event, as defined in the applicable shareholder documents.

2 Warrants issued by subsidiaries to third parties to purchase preferred shares.

* Does not include payments in respect of lease obligations. For the contractual future payments related to lease obligations, see Note 21.

22. Capital and Financial Risk Management — continued

Interest Rate Sensitivity

As of December 31, 2022, the Group had cash and cash equivalents of $149.9 million, and short term investments of $200.2 million. The Group's exposure to interest rate sensitivity is impacted by changes in the underlying U.K. and U.S. bank interest rates. The Group has not entered into investments for trading or speculative purposes. Due to the conservative nature of the Group's investment portfolio, which is predicated on capital preservation and investments in short duration, high-quality U.S. Treasury Bills and related money market accounts, a change in interest rates would not have a material effect on the fair market value of the Group's portfolio, and therefore the Group does not expect operating results or cash flows to be significantly affected by changes in market interest rates.

Controlled Founded Entity Investments

The Group maintains investments in certain Controlled Founded Entities. The Group's investments in Controlled Founded Entities are eliminated as intercompany transactions upon financial consolidation. The Group is however exposed to a preferred share liability owing to the terms of existing preferred shares and the ownership of Controlled Founded Entities preferred shares by third parties. As discussed in Note 15, certain of the Group's subsidiaries have issued preferred shares that include the right to receive a payment in the event of any voluntary or involuntary liquidation, dissolution or winding up of a subsidiary, including in the event of "deemed liquidation" as defined in the incorporation documents of the entities, which shall be paid out of the assets of the subsidiary available for distribution to shareholders and before any payment shall be made to holders of ordinary shares. The liability of preferred shares is maintained at fair value through the profit and loss. The Group's strong cash position, budgeting and forecasting processes, as well as decision making and risk mitigation framework enable the Group to robustly monitor and support the business activities of the Controlled Founded Entities to ensure no exposure to dissolution or liquidation. Accordingly, the Group views exposure to 3rd party preferred share liability as low.

Non-Controlled Founded Entity Investments

The Group maintains certain investments in Non-Controlled Founded Entities which are deemed either as investments and accounted for as investments held at fair value or associates and accounted for under the equity method (please refer to Note 1). The Group's exposure to investments held at fair value is $251.9 million as of December 31, 2022, and the Group may or may not be able to realize the value in the future. Accordingly, the Group views the risk as high. The Group's exposure to investments in associates is limited to the carrying amount of the investment in an Associate. The Group is not exposed to further contractual obligations or contingent liabilities beyond the value of the investments. Accordingly, the Group does not view this as a high risk. As of December 31, 2022, Gelesis and Sonde are the only associates. The carrying amount of the investment in Gelesis and Sonde as associates was $9.1 million. Please refer to Notes 5, 6 and 16 for further information regarding the Group's exposure to Non-Controlled Founded Entity Investments.

Equity Price Risk

As of December 31, 2022, the Group held 1,054,464 common shares of Karuna, 2,671,800 common shares of Vor and 12,527,477 common shares of Akili. The fair value of these investments in Karuna, Vor and Akili was $239.0 million.

The investments in Karuna, Vor and Akili are exposed to fluctuations in the market price of these common shares. The effect of a 10.0 percent adverse change in the market price of Karuna, Vor and Akili common shares as of December 31, 2022, would have been a loss of approximately $23.9 million, that would have been recognized as a component of Other income (expense) in the Consolidated Statements of Comprehensive Income/(Loss).

Foreign Exchange Risk

The Group maintains consolidated financial statements in the Group's functional currency, which is the U.S. dollar. Monetary assets and liabilities denominated in currencies other than the functional currency are translated into the functional currency at rates of exchange prevailing at the balance sheet dates. Non-monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the exchange rates prevailing at the date of the transaction. Exchange gains or losses arising from foreign currency transactions are included in the determination of net income (loss) for the respective periods. Such foreign currency gains or losses were not material for all reported periods. See Note 9.

The Group does not currently engage in currency hedging activities since its foreign currency risk is limited, but the Group may begin to do so in the future if and when its foreign currency risk exposure changes.

23 Commitments and Contingencies

The Group is party to certain licensing agreements where the Group is licensing IP from third parties. In consideration for such licenses the Group has made upfront payments and may be required to make additional contingent payments based on developmental and sales milestones and/or royalty on future sales. As of December 31, 2022, these milestone events have not yet occurred and therefore the Group does not have a present obligation to make the related payments in respect of the licenses. Such milestones are dependent on events that are outside of the control of the Group and many of these milestone events are remote of occurring. As of December 31, 2022, payments in respect of developmental milestones that are dependent on events that are outside the control of the Group but are reasonably possible to occur amounted to approximately $8.7 million. These milestone amounts represent an aggregate of multiple milestone payments depending on different milestone events in multiple agreements. The probability that all such milestone events will occur in the aggregate is remote. Payments made to license IP represent the acquisition cost of intangible assets. See Note 12.

The Group is party to certain sponsored research arrangements as well as arrangements with contract manufacturing and contract research organizations, whereby the counterparty provides the Company with research and/or manufacturing services. As of December 31, 2022, the noncancellable commitments in respect of such contracts amounted to approximately $11.3 million.

24. Related Parties Transactions

Related Party Subleases and royalties

During 2019, PureTech executed a sublease agreement with a related party, Gelesis. Please refer to Note 21 for further details regarding the sublease.

The Group receives royalties from Gelesis on its product sales. Such royalties amounted to $509 thousand and $231 thousand for the years ended December 31, 2022 and 2021, respectively and are presented in Contract revenue in the Consolidated Statements of Comprehensive Income/(Loss).

Key Management Personnel Compensation

Key management includes executive directors and members of the executive management team of the Group (not including compensation provided to non-executive directors). The key management personnel compensation of the Group was as follows for the years ended December 31:

As of December 31	**2022 $000s**	2021 $000s	2020 $000s
Short-term employee benefits	**4,369**	4,666	4,833
Share-based payment expense	**2,741**	4,045	5,822
Total	**7,109**	8,711	10,656

Short-term employee benefits include salaries, health care and other non-cash benefits. Share-based payments are generally subject to vesting terms over future periods.

For cash settlements of share based awards – see Note 8.

In addition the Company paid remuneration to non-executive directors in the amounts of $655 thousand, $605 thousand and $690 thousand for the years ended December 31, 2022, 2021, and 2020, respectively. Also, the Company incurred $365 thousand and $161 thousand of stock based compensation expense for such non-executive directors for the years ended December 31, 2022 and 2021, respectively. There is no stock based compensation expense for such non-executive directors for the year ended December 31, 2020.

During the years ended December 31, 2022 and 2021, the Company incurred $51 thousand, and $181 thousand, respectively of expenses paid to related parties.

Convertible Notes Issued to Directors

Certain related parties of the Group have invested in convertible notes issued by the Group's subsidiaries. As of December 31, 2022 and 2021, the outstanding related party notes payable totaled $99 thousand and $94 thousand respectively, including principal and interest.

The notes issued to related parties bear interest rates, maturity dates, discounts and other contractual terms that are the same as those issued to outside investors during the same issuances, as described in Note 17.

24. Related Parties Transactions — continued

Directors' and Senior Managers' Shareholdings and Share Incentive Awards

The Directors and senior managers hold beneficial interests in shares in the following businesses and sourcing companies as at December 31, 2022:

	Business Name (Share Class)	Number of shares held as of December 31, 2022	Number of options held as of December 31, 2022	Number of RSUs held as of December 31, 2022	Ownership Interest[1]
Directors:					
Ms Daphne Zohar[2]	Gelesis (Common)	**465,121**	**3,303,306**	**1,349,697**	**4.45%**
Dr Robert Langer	Entrega (Common)	**250,000**	**82,500**	**—**	**4.09%**
Dr Raju Kucherlapati	Enlight (Class B Common)	**—**	**30,000**	**—**	**3.00%**
	Gelesis (Common)	**139,625**	**—**	**50,639**	**0.12%**
Dr John LaMattina[3]	Akili (Common)	**56,554**	**—**	**—**	**0.07%**
	Gelesis (Common)[3]	**395,035**	**37,129**	**—**	**0.38%**
	Vedanta Biosciences (Common)	**25,000**	**—**	**—**	**0.17%**
Senior Managers:					
Dr Bharatt Chowrira	Karuna (Common)	**5,000**	**—**	**—**	**0.01%**
Dr Joseph Bolen	Vor (Common)	**—**	**9,191**	**—**	**0.01%**

1 Ownership interests as of December 31, 2022 are calculated on a diluted basis, including issued and outstanding shares, warrants and options (and written commitments to issue options) but excluding unallocated shares authorized to be issued pursuant to equity incentive plans and any shares issuable upon conversion of outstanding convertible promissory notes.

2 Common shares, RSUs and options held by Yishai Zohar, who is the husband of Ms. Zohar. Ms. Zohar does not have any direct interest in the share capital of Gelesis. Ms. Zohar recuses herself from any and all material decisions with regard to Gelesis.

3 Dr John and Ms Mary LaMattina hold 345,035 shares of common shares in Gelesis. Individually, Dr LaMattina holds 50,000 shares of Gelesis and convertible notes issued by Appeering in the aggregate principal amount o $50,000.

Directors and senior managers hold 25,371,839 ordinary shares and 9.1 percent voting rights of the Company as of December 31, 2022. This amount excludes options to purchase 2,350,000 ordinary shares. This amount also excludes 6,448,899 shares, which are issuable based on the terms of performance based RSU awards granted to certain senior managers covering the financial years 2022, 2021 and 2020, and 172,056 shares, which are issuable to directors immediately prior to the Company's 2023 Annual General Meeting of Stockholders based on the terms of the RSU awards granted to non-executive directors in 2022. Such shares will be issued to such senior managers and non executive directors in future periods provided that performance and/or service conditions are met and certain of the shares will be withheld for payment of customary withholding taxes.

Note from Associate

See Note 16 for details on the notes issued by Gelesis to the Company. The Company recognized finance income of 1.6 million with respect to interest and changes in fair value related to the notes.

As of December 31, 2022 the Group has a receivable from an associate in the amount of 1.1 million.

25. Taxation

Tax on the profit or loss for the year comprises current and deferred income tax. Tax is recognized in the Consolidated Statements of Comprehensive Income/(Loss) except to the extent that it relates to items recognized directly in equity.

For the years ended December 31, 2022, 2021 and 2020, the Group filed a consolidated U.S. federal income tax return which included all subsidiaries in which the Company owned greater than 80 percent of the vote and value. For the years ended December 31, 2022, 2021 and 2020, the Group filed certain consolidated state income tax returns which included all subsidiaries in which the Company owned greater than 50 percent of the vote and value. The remaining subsidiaries file separate U.S. tax returns.

Amounts recognized in Consolidated Statements of Comprehensive Income/(Loss):

As of December 31	**2022 $000s**	2021 $000s	2020 $000s
Income/(loss) for the year	**(37,065)**	(62,709)	4,568
Income tax expense/(benefit)	**(55,719)**	3,756	14,401
Income/(loss) before taxes	**(92,783)**	(58,953)	18,969

Recognized income tax expense/(benefit):

As of December 31	**2022 $000s**	2021 $000s	2020 $000s
Federal	**13,065**	22,138	21,796
Foreign	**—**	—	—
State	**1,336**	109	—
Total current income tax expense/(benefit)	**14,401**	22,247	21,796
Federal	**(48,240)**	(15,416)	(7,349)
Foreign	**—**	—	—
State	**(21,880)**	(3,075)	(46)
Total deferred income tax expense/(benefit)	**(70,120)**	(18,491)	(7,395)
Total income tax expense/(benefit), recognized	**(55,719)**	3,756	14,401

The tax expense/(benefit) was $(55.7) million, $3.8 million and $14.4 million in 2022, 2021 and 2020 respectively. The increase in tax benefit for the year ended December 31, 2022 is primarily the result of the loss before taxes in entities in the U.S. Federal and Massachusetts consolidated return groups of the Company.

Reconciliation of Effective Tax Rate

The Group is primarily subject to taxation in the U.S. A reconciliation of the U.S. federal statutory tax rate to the effective tax rate is as follows:

	2022		2021		2020	
As of December 31	**$000s**	**%**	$000s	%	$000s	%
US federal statutory rate	**(19,486)**	**21.00**	(12,380)	21.00	3,984	21.00
Effects of state tax rate in U.S.	**(8,043)**	**8.67**	(4,484)	7.61	1,844	9.72
R&D and orphan drug tax credits	**(6,876)**	**7.41**	(5,056)	8.58	(5,642)	(29.74)
Non deductible share based payment expenses	**788**	**(0.85)**	555	(0.94)	327	1.73
Finance income/(costs) – fair value accounting	**(28,783)**	**31.02**	(2,017)	3.42	919	4.84
Loss with respect to associate for which no deferred tax asset is recognized	**1,413**	**(1.52)**	11,542	(19.58)	—	—
Change in blended state rate impact due to state apportionment change	**(8,856)**	**9.54**	—	—	—	—
Transaction Costs	**—**	**—**	309	(0.52)	361	1.91
Interest Expense	**69**	**(0.07)**	217	(0.37)	(2,258)	(11.91)
Executive Compensation	**300**	**(0.32)**	746	(1.27)	827	4.36
Recognition of deferred tax assets and tax benefits not previously recognized	**(184)**	**0.20**	(414)	0.70	—	—
Current year losses for which no deferred tax asset is recognized	**17,287**	**(18.63)**	14,375	(24.38)	13,948	73.53
Sonde Deconsolidation	**(3,572)**	**3.85**	—	—	—	—
Other	**224**	**(0.25)**	363	(0.62)	91	0.48
	(55,719)	**60.05**	3,756	(6.37)	14,401	75.92

25. Taxation — continued

The Company is also subject to taxation in the UK but to date no taxable income has been generated in the UK. Changes in corporate tax rates can change both the current tax expense (benefit) as well as the deferred tax expense (benefit).

Deferred Tax Assets and Liabilities

Deferred tax assets have been recognized in the U.S. jurisdiction in respect of the following items:

As of December 31	**2022 $000s**	2021 $000s
Operating tax losses	**48,317**	46,982
Tax credits	**11,101**	10,673
Share-based payments	**8,423**	7,265
Capitalized Research & Experimental Expenditures	**36,084**	—
Investment in Associates	**13,036**	11,542
Lease Liability	**7,143**	8,969
Other temporary differences	**2,957**	2,665
Deferred tax assets	**127,061**	88,096
Investments held at fair value	**(47,877)**	(96,804)
ROU asset	**(3,519)**	(4,667)
Fixed assets	**(2,348)**	(3,547)
Deferred tax liabilities	**(53,744)**	(105,018)
Deferred tax assets (liabilities), net	**73,317**	(16,922)
Deferred tax liabilities, net, recognized	**(19,645)**	(89,765)
Deferred tax assets (liabilities), net, not recognized	**92,962**	72,843

We have recognized deferred tax assets related to entities in the U.S. Federal and Massachusetts consolidated return groups due to future reversals of existing taxable temporary differences that will be sufficient to recover the net deferred tax assets. Our unrecognized deferred tax assets of $93.0 million are primarily related to tax credit, loss carryforwards and deductible temporary differences in subsidiaries outside the U.S. Federal and Massachusetts consolidated return groups. Such deferred tax assets have not been recognized because it is not probable that future taxable profits will be available to support their realizability. The unrecognized deferred tax assets, to a lesser extent, also relate to unrecognized deferred tax assets with respect to a portion of Section 174 capitalized research & experimental expenditures which became effective in 2022 under the Tax Cuts and Jobs Act and an investment in an associate since the Group does not believe it is probable that such tax benefits will be realized in the foreseeable future.

There was movement in deferred tax recognized, which impacted income tax expense by approximately $70.1 million benefit, primarily related to changes in the value of investments and Section 174 capitalized research & experimental expenditures. The Company sold a portion of its stock in Karuna and VOR during 2022 resulting in net taxable income and current tax expense of $14.4 million.

Unrecognized Deferred Tax Assets

Deferred tax assets have not been recognized in respect of the following carryforward losses, credits and temporary differences, because it is not probable that future taxable profit will be available against which the Group can use the benefits therefrom.

	2022 $000s		2021 $000s	
As of December 31	**Gross Amount**	**Tax Effected**	Gross Amount	Tax Effected
Deductible Temporary Difference	**132,145**	**33,544**	59,925	16,224
Tax Losses	**219,466**	**48,317**	215,425	46,982
Tax Credits	**11,101**	**11,101**	9,636	9,636
Total	**362,712**	**92,962**	284,986	72,843

25. Taxation — continued

Tax Losses and tax credits carryforwards

Tax losses and tax credits for which no deferred tax asset was recognized

	2022 $000s		2021 $000s	
As of December 31	**Gross Amount**	**Tax Effected**	Gross Amount	Tax Effected
Tax losses expiring:				
Within 10 years	**23,930**	**5,387**	19,735	4,343
More than 10 years	**42,822**	**10,509**	47,937	11,611
Available Indefinitely	**152,714**	**32,421**	147,753	31,028
Total	**219,466**	**48,317**	215,425	46,982
Tax credits expiring:				
Within 10 years	**43**	**43**	4	4
More than 10 years	**11,058**	**11,058**	9,632	9,632
Available indefinitely	**—**	**—**	—	—
Total	**11,101**	**11,101**	9,636	9,636

The Group had U.S. federal net operating losses carry forwards ("NOLs") of approximately $219.5 million, $215.4 million and $169.7 million as of December 31, 2022, 2021 and 2020, respectively, which are available to offset future taxable income. These NOLs expire through 2037 with the exception of $152.7 million which is not subject to expiration. The Group had U.S. Federal research and development tax credits of approximately $4.5 million, $3.9 million and $3.9 million as of December 31, 2022, 2021 and 2020, respectively, which are available to offset future taxes that expire at various dates through 2042. The Group also had Federal Orphan Drug credits of approximately $6.1 million and $5.7 million as of December 31, 2022, and 2021, which are available to offset future taxes that expire at various dates through 2042. A portion of these Federal NOLs and credits can only be used to offset the profits from the Company's subsidiaries who file separate Federal tax returns. These NOLs and credits are subject to review and possible adjustment by the Internal Revenue Service.

The Group had state net operating losses carry forwards ("NOLs") of approximately $71.7 million, $27.9 million and $67.4 million for the years ended December 31, 2022, 2021 and 2020, respectively, which are available to offset future taxable income. These NOLs expire at various dates beginning in 2030. The Group had Massachusetts research and development tax credits of approximately $0.6 million, $1.3 million and $2.1 million for the years ended December 31, 2022, 2021 and 2020, respectively, which are available to offset future taxes and expire at various dates through 2037. These NOLs and credits are subject to review and possible adjustment by the Massachusetts Department of Revenue.

Utilization of the NOLs and research and development credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986 due to ownership change limitations that have occurred previously or that could occur in the future. These ownership changes may limit the amount of NOL and research and development credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. The Company notes that a 382 analysis was performed through December 31, 2022. The results of this analysis concluded that certain net operating losses were subject to limitation under Section 382 of the Internal Revenue Code. None of the Company's tax attributes which are subject to a restrictive Section 382 limitation have been recognized in the financial statements.

Tax Balances

The current tax related balances are presented in the Statement of Financial Position as follows:

As of December 31	2022 $000s	2021 $000s
Income tax receivable – current	**10,040**	4,514
Trade and Other Payables	**(57)**	(57)

Uncertain Tax Positions

The Company has no uncertain tax positions as of December 31, 2022. U.S. corporations are routinely subject to audit by federal and state tax authorities in the normal course of business.

26. Subsequent Events

The Company has evaluated subsequent events after December 31, 2022, the date of issuance of the Consolidated Financial Statements, and has not identified any recordable or disclosable events not otherwise reported in these Consolidated Financial Statements or notes thereto, except for the following:

On March 1, 2023 Vedanta issued convertible debt to a syndicate of investors. The initial close of the debt was for proceeds of approximately $88.5 million. The note carries an interest rate of 9 percent per annum. The debt has various conversion triggers and the conversion price is established at the lower of 80% of the equity price of the last financing round, or a certain pre-money valuation cap established in the agreement. As part of the issuance of the debt, the convertible debt holders were granted representation in Vedanta's Board of Directors and PureTech lost control over Vedanta. On April 24, 2023, Vedanta closed the second tranche of the convertible debt for additional proceeds of $18.0 million, of which $5.0 million were invested by the Company.

On March 22, 2023, the Company entered into an agreement with Royalty Pharma according to which Royalty Pharma acquired an interset in the Group's royalty from Karuna's KarXT, with $100.0 million in cash up-front, and up to $400.0 million in additional cash consideration, contingent on the achievement of certain regulatory and commercial milestones.

Gelesis

On February 21, 2023, the Company entered into a Note and Warrant Purchase agreement with Gelesis for $5.0 million cash consideration. As part of the agreement, the Company received a short term convertible senior secured note of $5.0 million and warrants to purchase additional shares of Gelesis' common stock. The note carries an interest rate of 12 percent per annum and holds an initial maturity date of July 31, 2023 unless the note is earlier converted or redeemed by the issuer.

On April 10, 2023, the NYSE commenced proceedings to delist the common stock of Gelesis from the NYSE due to Gelesis ceasing to meet certain conditions to trade on such stock exchange. Trading in the Gelesis's common stock was suspended immediately, and it was subsequently delisted from the NYSE. The common stock of Gelesis is currently available for trading in the over-the-counter ("OTC") market under the symbol GLSH.

In addition, in April 2023 PureTech submitted a non-binding proposal to acquire all of the outstanding equity of Gelesis. Negotiations related to the proposal and any potential deal remain ongoing and are subject to, among other things, approval of any definitive transaction by independent committees of the boards of both Gelesis and PureTech.

PureTech Health plc Statement of Financial Position

For the years ended December 31

	Note	2022 $000s	2021 $000s
Assets			
Non-current assets			
Investment in subsidiary	2	**452,374**	148,086
Intercompany long-term receivable	3	**—**	297,909
Total non-current assets		**452,374**	445,995
Current assets			
Other receivables		**57**	—
Cash and cash equivalents		**38,503**	—
Total current assets		**38,560**	—
Total assets		**490,934**	445,995
Equity and liabilities			
Equity			
Share capital	4	**5,455**	5,444
Share premium	4	**289,624**	289,304
Treasury stock		**(26,492)**	—
Merger reserve	4	**138,506**	138,506
Other reserve	4	**18,114**	7,730
Retained Earnings/(Accumulated deficit) – (Income for the year $59,198)	4	**45,175**	(14,022)
Total equity		**470,382**	426,961
Current liabilities			
Trade and other payables		**2,475**	1,856
Intercompany payables	5	**18,078**	17,179
Total current liabilities		**20,553**	19,034
Total equity and liabilities		**490,934**	445,995

Please refer to the accompanying Notes to the PureTech Health plc financial information. Registered number: 09582467.

The PureTech Health plc financial statements were approved by the Board of Directors and authorized for issuance on April 27, 2023 and signed on its behalf by:

Daphne Zohar
Chief Executive Officer

April 27, 2023

The accompanying Notes are an integral part of these financial statements.

PureTech Health plc Statements of Cash Flows

For the years ended December 31

	2022 $000s	2021 $000s
Cash flows from operating activities		
Net income (loss)	**59,198**	(3,401)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Non-cash items:		
Changes in operating assets and liabilities:		
Other receivables	**(57)**	—
Intercompany payable	**5,236**	2,167
Accounts payable and accrued expenses	**619**	1,235
Net cash provided by (used in) operating activities	**64,995**	—
Cash flows from investing activities:		
Net cash provided by (used in) investing activities	**—**	—
Cash flows from financing activities:		
Purchase of treasury stocks	**(26,492)**	—
Net cash provided by (used in) financing activities	**(26,492)**	—
Net increase in cash and cash equivalents	**38,503**	—
Cash and cash equivalents at beginning of year	**—**	—
Cash and cash equivalents at end of year	**38,503**	—
Supplemental disclosure of non-cash investing and financing activities:		
Increase (Decrease) in investment against share-based awards	**10,384**	(12,995)
Conversion of intercompany receivable (net of a portion of intercompany payable) into investment	**293,904**	—
Exercise of share-based awards against intercompany receivable	**332**	352

The accompanying Notes are an integral part of these financial statements.

PureTech Health plc Statements of Changes in Equity

For the years ended December 31

	Share Capital			Treasury Shares					
	Shares	Amount $000s	Share Premium $000s	Shares	Amount $000s	Merger Reserve $000s	Other Reserve $000s	Retained earnings/ (Accumulated deficit) $000s	Total equity $000s
Balance January 1, 2021	**285,885,025**	**5,417**	**288,978**	**—**	**—**	**138,506**	**20,725**	**(10,620)**	**443,005**
Total comprehensive loss for the year	—	—	—	—	—	—	—	—	—
Exercise of share-based awards	1,911,560	27	326	—	—	—	—	—	352
Equity settled share-based payments	—	—	—	—	—	—	7,109	—	7,109
Settlement of restricted stock units	—	—	—	—	—	—	(10,749)	—	(10,749)
Vesting of share-based awards and net share exercise	—	—	—	—	—	—	(2,582)	—	(2,582)
Reclassification of equity settled awards to liability awards in subsidiary	—	—	—	—	—	—	(6,773)	—	(6,773)
Net loss	—	—	—	—	—	—	—	(3,401)	(3,401)
Balance December 31, 2021	**287,796,585**	**5,444**	**289,303**	**—**	**—**	**138,506**	**7,730**	**(14,022)**	**426,961**
Total comprehensive loss for the year	—	—	—	—	—	—	—	—	—
Exercise of share-based awards	577,022	11	321	—	—	—	—	—	332
Equity settled share-based payments	—	—	—	—	—	—	8,856	—	8,856
Settlement of restricted stock units	788,046	—	—	—	—	—	1,528	—	1,528
Purchase of Treasury stock	—	—	—	(10,595,347)	(26,492)	—	—	—	(26,492)
Net income	—	—	—	—	—	—	—	59,198	59,198
Balance December 31, 2022	**289,161,653**	**5,455**	**289,624**	**(10,595,347)**	**(26,492)**	**138,506**	**18,114**	**45,176**	**470,382**

The accompanying Notes are an integral part of these financial statements.

Notes to the Financial Statements

1. Accounting policies

Basis of Preparation and Measurement
The financial statements of PureTech Health plc (the "Parent") are presented as of December 31, 2022 and 2021, and for the years ended December 31, 2022 and 2021, and have been prepared under the historical cost convention in accordance with international accounting standards in conformity with the requirements of UK-adopted International Financial Reporting Standards (IFRSs). The financial statements of PureTech Health plc also comply fully with IFRSs as issued by the International Accounting Standards Board (IASB). A summary of the significant accounting policies that have been applied consistently throughout the year are set out below.

Functional and Presentation Currency
The functional currency of the Parent is United States ("U.S.") Dollars and the financial statements are presented in U.S. Dollars.

Investments
Investments are stated at historic cost less any provision for impairment in value and are held for long-term investment purposes. Provisions are based upon an assessment of events or changes in circumstances that indicate that an impairment has occurred such as the performance and/or prospects (including the financial prospects) of the investee company being significantly below the expectations on which the investment was based, a significant adverse change in the markets in which the investee company operates or a deterioration in general market conditions.

Impairment
If there is an indication that an asset might be impaired, the Parent would perform an impairment review. An asset is impaired if the recoverable amount, being the higher of net realizable value and value in use, is less than its carrying amount. Value in use is measured based on future discounted cash flows attributable to the asset. In such cases, the carrying value of the asset is reduced to recoverable amount with a corresponding charge recognized in the profit and loss account.

Dividend Income
Dividend received from the Parent's subsidiary is recorded as dividend income in the profit and loss statement.

Financial Instruments
Currently the Parent does not enter into derivative financial instruments. Financial assets and financial liabilities are recognized and cease to be recognized on the basis of when the related titles pass to or from the Parent Company.

Equity Settled Share Based Payments
Share based payment awards granted in subsidiaries to employees and consultants to be settled in Parent's equity instruments are accounted for as equity-settled share-based payment transactions in accordance with IFRS 2. The grant date fair value of employee share-based payment awards granted in subsidiaries is recognized as an increase to the investment with a corresponding increase in equity over the requisite service period related to the awards. The fair value is measured using an option pricing model, which takes into account the terms and conditions of the options granted. When the subsidiary settles the equity awards other than by the Parent's equity the settlement is recorded as a decrease in equity against a corresponding decrease to the investment account.

2. Investment in subsidiary

	$000s
Balance at May 8, 2015	—
Investment in PureTech LLC as a result of the reverse acquisition	**141,348**
Increase due to equity settled share based payments granted to employees and service providers in subsidiaries	**19,734**
Balance at December 31, 2020	**161,082**
Decrease due to equity settled share based payments granted to employees and service providers in subsidiaries	**(12,996)**
Balance at December 31, 2021	**148,086**
Increase due to equity settled share based payments granted to employees and service providers in subsidiaries	**10,384**
Conversion of intercompany receivable (net of a portion of intercompany payable) into investment	**293,904**
Balance at December 31, 2022	**452,374**

PureTech consists of the Parent and its subsidiaries (together, the "Group"). Investment in subsidiary represents the Parent's investment in PureTech LLC as a result of the reverse acquisition of the Group's financial statements immediately prior to the Parent's initial public offering ("IPO") on the London Stock Exchange in June 2015. PureTech LLC operates in the U.S. as a US-focused scientifically driven research and development company that conceptualizes, sources, validates and commercializes different approaches to advance the needs of human health. For a summary of the Parent's indirect subsidiaries please refer to Note 1 of the Consolidated Financial Statements of PureTech Health plc.

In 2020, the Parent recognized a $19.7 million increase in its investment in its operating subsidiary PureTech LLC due to equity settled share based payments granted to employees and service providers in subsidiaries. $24.8 million out of such amount related to amounts which should have been recognized at December 31, 2019. The prior year balance sheet has not been adjusted since the Directors do not believe this item is qualitatively material to users of the financial statements, it has no impact on distributable reserves of the Parent and no impact on the Group consolidated financial statements. The disclosure

2. Investment in subsidiary — continued

relating to such share based payment awards is detailed in Note 8 of the accompanying Consolidated Financial Statements. The decrease in 2021 and increase in 2022 due to such share based payments results from the expense related to the grant of equity settled share based awards, as well as settlements and payments of these equity awards by the subsidiaries, or settlement of share based payments through equity by the Company.

3. Share capital and reserves

PureTech plc was incorporated with the Companies House under the Companies Act 2006 as a public company on May 8, 2015.

On March 12, 2018, the Company raised approximately $100.0 million, before issuance costs and other expenses, by way of a Placing of 45,000,000 placing shares.

On June 24, 2015, the Company authorized 227,248,008 of ordinary share capital at one pence apiece. These ordinary shares were admitted to the premium listing segment of the United Kingdom's Listing Authority and traded on the Main Market of the London Stock Exchange for listed securities. In conjunction with the authorization of the ordinary shares, the Parent completed an IPO on the London Stock Exchange, in which it issued 67,599,621 ordinary shares at a public offering price of 160 pence per ordinary share, in consideration for $159.3 million, net of issuance costs of $11.8 million.

Additionally, the IPO included an over-allotment option equivalent to 15 percent of the total number of new ordinary shares. The stabilization manager provided notice to exercise in full its over-allotment option on July 2, 2015. As a result, the Parent issued 10,139,943 ordinary shares at the offer price of 160 pence per ordinary share, which resulted in net proceeds of $24.2 million, net of issuance costs of $0.8 million.

During the years ended December 31, 2022 and 2021, Other reserves increased (decreased) by $10.4 million and $(13.0) million, respectively due to equity settled share based payments granted to employees and service providers in subsidiaries. See Note 2 above.

Treasury stock

On May 9, 2022, PureTech Health plc (the "Company") announced the commencement of a $50.0 million share repurchase program of its ordinary shares of one pence each ("Ordinary Shares"). The Company plans to execute the Program in two equal tranches. In respect of the two tranches, PureTech entered into an irrevocable (see below) non-discretionary instruction with Jefferies International Limited ("Jefferies") in relation to the purchase by Jefferies of Ordinary Shares for an aggregate consideration (excluding expenses) of no greater than $25.0 million for each tranche, and the simultaneous on-sale of such Ordinary Shares by Jefferies to PureTech. Jefferies makes its trading decisions in relation to the Ordinary Shares independently of, and uninfluenced by, the Company. Purchases may continue during any close period to which the Company is subject. The instruction to Jeffries may be amended or withdrawn so long as the Company is not in a close period or otherwise in possession of inside information.

Any purchases of Ordinary Shares under the Program were carried out on the London Stock Exchange and could be carried out on any other UK recognized investment exchange which may be agreed, in accordance with pre-set parameters and in accordance with, and subject to limits, including those limits related to daily volume and price, prescribed by the Company's general authority to repurchase Ordinary Shares granted by its shareholders at its annual general meeting on May 27, 2021, and relevant Rules and Regulations. All Ordinary Shares repurchased under the Program are held in treasury.

As of December 31, 2022, the Company repurchased an aggregate of 10,595,347 Ordinary Shares under the share repurchase program.

4. Intercompany payables

The Parent has a balance due to its operating subsidiary PureTech LLC of $18.1 million as of December 31, 2022, which is related to IPO costs and operating expenses. These intercompany payables do not bear any interest and are repayable upon demand.

5. Profit and loss account

As permitted by Section 408 of the Companies Act 2006, the Parent's profit and loss account has not been included in these financial statements. The Parent's income for the year was $59.2 million.

During the year ended December 31, 2022 the Parent recorded income of $65.0 million in respect of dividend received from its subsidiary.

6. Directors' remuneration, employee information and share-based payments

The remuneration of the executive Directors of the Parent Company is disclosed in Note 24, Related Parties Transactions, of the accompanying Consolidated Financial Statements. Full details for Directors' remuneration can be found in the Directors' Remuneration Report. Full detail of the share-based payment charge and the related disclosures can be found in Note 8, Share-based Payments, of the accompanying Consolidated Financial Statements.

The Parent had no employees during 2022 or 2021.

History and Development of the Company

We were incorporated and registered under the laws of England and Wales with the Registrar of Companies of England and Wales, United Kingdom in May 2015 as "PureTech Health plc." Our predecessor entity, PureTech Health LLC, or our Predecessor Entity, commenced formal operations and began engaging in initial sourcing activities in 2004, raising its first financing round greater than $5 million in the same year. The Predecessor Entity was acquired by PureTech Health plc on June 18, 2015 in a reorganization completed in connection with our initial public offering on the London Stock Exchange. The Predecessor Entity is now a wholly-owned subsidiary of PureTech Health plc. Our registered office is situated at 8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom, and our telephone number is +(1) 617 482 2333. Our U.S. operations are conducted by our wholly-owned subsidiary PureTech Health LLC, a Delaware limited liability company. Our ordinary shares have traded on the main market of the London Stock Exchange since June 2015 and our ADSs have traded on the Nasdaq Global Market since November 2020. Our agent for service of process in the United States is PureTech Health LLC located at 6 Tide Street, Suite 400, Boston, Massachusetts 02210 where our corporate headquarters and laboratories are located. Our website address is http://puretechhealth.com. The reference to our website is an inactive textual reference only and information contained in, or that can be accessed through, our website or any other website cited in this annual report is not part of hereof.

Risk Factor Annex

Our business faces significant risks. You should carefully consider all of the information set forth in this Annual Report and Accounts, including the following risk factors which we face and which are faced by our industry. These risks are not listed in any particular order of priority and are intended to supplement the risks identified elsewhere. Our business, financial condition or results of operations could be materially and adversely affected if any of these risks occur.

This Annual Report and Accounts and our associated Annual Report on Form 20-F also contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially and adversely from those anticipated in these forward-looking statements as a result of certain factors including the risks described below and elsewhere. All statements contained in this Annual Report and Accounts and our associated Annual Report on Form 20-F, other than statements of historical fact, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "would," "could," "should," "continue" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. The forward-looking statements in this Annual Report and Accounts and associated Annual Report on Form 20-F include, among other things, statements about:

- our ability to realize value from our Founded Entities, which may be impacted if we reduce our ownership to a minority interest or otherwise cede control to other investors through contractual agreements or otherwise;
- the success, cost and timing of our clinical development of our Wholly Owned Programs, including the progress of, and results from, our preclinical and clinical trials of LYT-100, LYT-200, LYT-300, LYT-310, LYT-503 /IMB-150, or our therapeutics candidates, and our technology platforms and other potential therapeutic candidates within our Wholly Owned Pipeline;
- our ability to obtain and maintain regulatory clearance, certification, authorization, or approval of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities, and any related restrictions, limitations or warnings in the label of any of the therapeutic candidates, if cleared, certified, authorized, or approved;
- our ability to compete with companies currently marketing or engaged in the development of treatments for indications within our Wholly Owned Pipeline or those of our Founded Entities are designed to target;
- our plans to pursue research and development of other future therapeutic candidates;
- the potential advantages of the therapeutic candidates within our Wholly Owned Pipeline and the therapeutic candidates being developed by our Founded Entities;
- the rate and degree of market acceptance and clinical utility of our therapeutic candidates;
- the success of our collaborations and partnerships with third parties;
- our estimates regarding the potential market opportunity for the therapeutic candidates within our Wholly Owned Pipeline and the therapeutic candidates being developed by our Founded Entities;
- our sales, marketing and distribution capabilities and strategy;
- our ability to establish and maintain arrangements for manufacture of the therapeutic candidates within our Wholly Owned Pipeline and therapeutic candidates being developed by our Founded Entities;
- our intellectual property position;
- our expectations related to the use of capital;
- the effect of the COVID-19 pandemic, including mitigation efforts and economic effects, on any of the foregoing or other aspects of our business operations;
- our estimates regarding expenses, future revenues, capital requirements and needs for additional financing;
- the impact of government laws and regulations; and
- our competitive position.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. You should refer to the below for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this Annual Report and Accounts, our associated Annual Report on Form 20-F and the documents that we have filed as exhibits to the Annual Report on 20-F completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

This Annual Report and Accounts and our associated Annual Report on Form 20-F include statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information

Risks Related to our Financial Position and Need for Additional Capital

We are a clinical-stage biotherapeutics company and have incurred significant operating losses since our inception. We may continue to incur significant operating losses for the foreseeable future.

Investment in biotechnology therapeutic development, as well as medical device development, is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential therapeutic candidate will be unable to demonstrate effectiveness or an acceptable safety profile, gain regulatory approval or certification (where applicable) and become commercially viable. To date, only two of our Founded Entities' therapeutics, Gelesis, Inc.'s Plenity® and Akili Interactive Labs, Inc.'s EndeavorRx®, have received marketing authorization from the U.S. Food and Drug Administration, or the FDA, and have been CE Marked in the European Union, or EU. All of the therapeutic candidates in our Wholly Owned Pipeline and the majority of our Founded Entities' therapeutic candidates may require substantial additional development time, including extensive clinical research, and resources before we would be able to apply for or receive regulatory clearances, certifications or approvals and begin generating revenue from therapeutic sales.

Since our inception, we have invested most of our resources in developing our technology and therapeutic candidates, building our intellectual property portfolio, developing our supply chain, conducting business planning, raising capital and providing general and administrative support for these operations, including with respect to our Founded Entities. We are not operationally profitable and have incurred operating losses in each year since our inception. Our operating losses for the years ended December 31, 2020, 2021 and 2022 were $119.6 million, $149.2 million and $197.8 million, respectively. We have no therapeutics developed in our Wholly Owned Pipeline approved for commercial sale and have not generated any revenues from therapeutic sales, and we and our Founded Entities have financed operations solely through the sale of equity securities, revenue from strategic alliances and government funding and, with respect to certain of our Founded Entities, debt financings. We continue to incur significant research and development, or R&D, and other expenses related to ongoing operations and expect to incur losses for the foreseeable future. We anticipate continued losses for the foreseeable future.

Due to risks and uncertainties associated with the development of drugs, biologics and medical devices, we are unable to predict the timing or amount of our expenses, or when we will be able to generate any meaningful revenue or achieve or maintain profitability, if ever. In addition, our expenses could increase beyond our current expectations if we are required by the FDA, the European Medicines Agency, or the EMA, or other comparable foreign regulatory authorities and notified bodies in the EU to perform preclinical studies or clinical trials in addition to those that we currently anticipate, or if there are any delays in any of our or our future collaborators' clinical trials or the development of our existing therapeutic candidates and any other therapeutic candidates that we may identify. Even if our existing therapeutic candidates or any future therapeutic candidates that we may identify are approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved therapeutic and ongoing compliance efforts.

As of December 31, 2022, we had never generated revenue from the therapeutic candidates within our Wholly Owned Pipeline, and we may never be operationally profitable.

While Gelesis, Inc., or Gelesis, and Akili Interactive Labs, Inc., or Akili, have received marketing authorization for Plenity and EndeavorRx, respectively, from the FDA and certification from notified bodies in the EU, we may never be able to develop or commercialize marketable therapeutics or achieve operational profitability. Revenue from the sale of any therapeutic candidate for which regulatory clearance, certification, authorization or approval is obtained will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory clearance, certification, authorization or approval, the accepted price for the therapeutic, the ability to obtain reimbursement at any price and whether we own the commercial rights for that territory. Our growth strategy depends on our ability to generate revenue. In addition, if the number

of addressable patients is not as anticipated, the indication or intended use cleared, certified, authorized or approved by regulatory authorities or notified bodies is narrower than expected, or the reasonably accepted population for treatment is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenue from sales of such therapeutics, even if cleared, certified, authorized or approved. Even if we are able to generate revenue from the sale of any cleared, certified, authorized or approved therapeutics, we may not become operationally profitable and may need to obtain additional funding to continue operations. Even if we achieve operational profitability in the future, we may not be able to sustain profitability in subsequent periods.

If we are unable to achieve sustained profitability, it would depress the value of our company and could impair our ability to raise capital, expand our business, diversify our R&D pipeline, market the therapeutic candidates within our Wholly Owned Pipeline, if cleared or approved, and pursue or continue our operations. Our prior losses, combined with expected future losses, have had and may continue to have an adverse effect on our shareholders' equity and working capital.

We may require substantial additional funding to achieve our business goals. If we are unable to obtain this funding when needed and on acceptable terms, we could be forced to delay, limit or terminate certain of our therapeutic development efforts. Certain of our Founded Entities will similarly require substantial additional funding to achieve their business goals.

Across our Wholly Owned Programs and our Founded Entities, we established the underlying programs and platforms that have resulted in the development of 27 therapeutics and therapeutic candidates, including two (Plenity and EndeavorRx) that have received both U.S. FDA clearance and European marketing authorization and a third (KarXT) that we expect will soon be filed for FDA approval. Developing biotherapeutics is expensive and time-consuming, and with respect to the therapeutic candidates within our Wholly Owned Pipeline, we expect to require substantial additional capital to conduct research, preclinical studies and clinical trials for our current and future programs, establish pilot scale and commercial scale manufacturing processes and facilities, seek regulatory approvals for the therapeutic candidates within our Wholly Owned Pipeline and launch and commercialize any therapeutics for which we receive regulatory approval, including building our own commercial sales, marketing and distribution organization. With respect to our Founded Entities' programs, we anticipate that we will continue to fund a small portion of development costs by strategically participating in such companies' financings when doing so would be in the interests of our shareholders. The form of any such participation may include investment in public or private financings, collaboration and partnership arrangements and licensing arrangements, among others. Our management and strategic decision makers have not made decisions regarding the future allocation of certain of our resources among our Founded Entities, but evaluate the needs and opportunities with respect to each of these Founded Entities routinely and on a case-by-case basis. In connection with any collaboration agreements relating to our Wholly Owned Programs, we are also responsible for the payments to third parties of expenses that may include milestone payments, license maintenance fees and royalties, including in the case of certain of our agreements with academic institutions or other companies from whom intellectual property rights underlying their respective programs have been in-licensed or acquired. Because the outcome of any preclinical or clinical development and regulatory approval process is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development, regulatory approval or certification process and potential commercialization of our Wholly Owned Programs and any future therapeutic candidates we may identify.

As of December 31, 2022, we had cash, cash equivalents and short term investments of $339.5 million at the PureTech Health plc level. However, our operating plan may change as a result of many factors currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings, sales of assets or programs, other sources, such as strategic collaborations or license and development agreements, or a combination of these approaches. Even if we believe we have sufficient funds for our current or future operating plans, we may opportunistically seek additional capital if market conditions are favorable or if we have specific strategic considerations. Our spending will vary based on new and ongoing therapeutic development and corporate activities. Any such additional fundraising efforts for us may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize therapeutic candidates that we may identify and pursue. Moreover, such financing may result in dilution to shareholders, imposition of debt covenants and repayment obligations, or other restrictions that may affect our business.

Our future funding requirements, both short-term and long-term, will depend on many factors, including, but not limited to:

- the time and cost necessary to complete ongoing, planned and future unplanned clinical trials (such term to include clinical studies in these Risk Factors where context requires and the item being studied or subject of a potential study may be regulated as a medical device in the EU), including our ongoing clinical trials for certain of our therapeutic candidates, and potential future clinical trials for certain of our therapeutic candidates;
- the outcome, timing and cost of meeting regulatory requirements established by the FDA, the EMA and other comparable foreign regulatory authorities;
- the progress, timing, scope and costs of our preclinical studies, clinical trials and other related activities for our ongoing and planned clinical trials, and potential future clinical trials;
- the costs of obtaining clinical and commercial supplies of raw materials and drug products for the therapeutic candidates within our Wholly Owned Pipeline, as applicable, and any other therapeutic candidates we may identify and develop;
- our ability to successfully identify and negotiate acceptable terms for third-party supply and contract manufacturing agreements with contract manufacturing organizations, or CMOs;
- the costs of commercialization activities for any of the therapeutic candidates within our Wholly Owned Pipeline that receive marketing approval, including the costs and timing of establishing therapeutic sales, marketing, distribution and manufacturing capabilities, or entering into strategic collaborations with third parties to leverage or access these capabilities;
- the amount and timing of sales and other revenues from the therapeutic candidates within our Wholly Owned Pipeline, if approved, including the sales price and the availability of coverage and adequate third-party reimbursement;
- the cash requirements of our Founded Entities and our ability and willingness to provide them with financing;
- the cash requirements of any future acquisitions or discovery of therapeutic candidates;
- the time and cost necessary to respond to technological and market developments, including other therapeutics that may compete with one or more of our Wholly Owned Programs;
- the costs of acquiring, licensing or investing in intellectual property rights, therapeutics, therapeutic candidates and businesses;
- our ability to attract, hire and retain qualified personnel as we expand R&D and establish a commercial infrastructure;
- the costs of maintaining, expanding and protecting our intellectual property portfolio;
- the costs of operating as a public company in the United Kingdom, or UK, and the United States and maintaining listings on both the London Stock Exchange, or the LSE, and The Nasdaq Global Market, or Nasdaq; and
- costs associated with any adverse market conditions or other macroeconomic factors.

We cannot be certain that additional funding will be available on acceptable terms, or at all. If adequate funds are not available to us on a timely basis, we may be required to delay, limit or terminate one or more research or development programs or the potential commercialization of any approved therapeutics or be unable to expand operations or otherwise capitalize on business opportunities, as desired, which could materially affect our business, prospects, financial condition and results of operations.

Raising additional capital may cause dilution to our existing shareholders, restrict our operations or require us to relinquish rights to current therapeutic candidates or to any future therapeutic candidates on unfavorable terms.

We expect our expenses to increase in connection with our planned operations. Unless and until we can generate a substantial amount of revenue from the therapeutic candidates within our Wholly Owned Pipeline or royalties and other monetization events related to our Founded Entities, we expect to finance our future cash needs through a combination of public and private equity offerings, debt financings, strategic partnerships, sales of assets and alliances and licensing arrangements. We, and indirectly, our shareholders, may bear the cost of issuing and servicing any such securities and of entering into and maintaining any such strategic partnerships or other arrangements. Because any decision by us to issue debt or equity securities in the future will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or

nature of any future financing transactions. To the extent that we or our Founded Entities raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a shareholder. The incurrence of additional indebtedness would result in increased fixed payment obligations and could involve additional restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. Additionally, any future collaborations we enter into with third parties may provide capital in the near term, but limit our potential cash flow and revenue in the future. If we raise additional funds through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or therapeutic candidates, or grant licenses or other rights on unfavorable terms.

In addition, if any of our Founded Entities raises funds through the issuance of equity securities, our shareholders' indirect equity interest in such Founded Entity could be substantially diminished. If any of our Founded Entities raises additional funds through collaboration and licensing arrangements, it may be necessary to relinquish some rights to our technologies or these therapeutic candidates or grant licenses on terms that are not favorable to us.

If we engage in acquisitions or strategic partnerships, this may increase our capital requirements, dilute our shareholders, cause us to incur debt or assume contingent liabilities and subject us to other risks.

We may engage in various acquisitions and strategic partnerships in the future, including licensing or acquiring complementary therapeutics, intellectual property rights, technologies or businesses. Any acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of indebtedness or contingent liabilities;
- the issuance of our equity securities which would result in dilution to our shareholders;
- assimilation of operations, intellectual property, therapeutics and therapeutic candidates of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing therapeutic programs and initiatives in pursuing such an acquisition or strategic partnership;
- retention of key employees, the loss of key personnel and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing therapeutics or therapeutic candidates and regulatory approvals; and
- our inability to generate revenue from acquired intellectual property, technology and/or therapeutics sufficient to meet our objectives or even to offset the associated transaction and maintenance costs.

In addition, if we undertake such a transaction, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense.

Risks Related to Our Founded Entities

Our ability to realize value from our Founded Entities may be impacted if we reduce our ownership or otherwise cede control to other investors through contractual agreements or otherwise.

We do not have a majority interest in our Non-Controlled Founded Entities. Our interests may be further reduced as such companies raise capital from third-party investors. In addition, we may agree to contractual arrangements for the funding of further developments by one or more of our Founded Entities. As a result, with respect to our Non-Controlled Founded Entities, we may not be able to exercise control over the affairs of such Founded Entity, including that Founded Entity's governance arrangements and access to management and financial information. We are also party to agreements with certain of our Founded Entities that contain provisions which could force us to exit from that Founded Entity at a time and/or price determined by other investor(s) (for example, by the exercise of drag-along rights). If we were forced to exit out of a Founded Entity, this could have a material adverse effect on our business, financial condition or results of operations and prospects. In addition, if the affairs of one or more Founded Entities in which we hold a minority stake were to be conducted in a manner detrimental to our interests or intentions, our business, reputation and prospects may be adversely affected.

As certain of our Founded Entities have completed equity financings, they have entered into certain agreements with the investors participating in such financings, including us. We are party to voting agreements with Entrega, Inc., or Entrega, Sonde Health, Inc., or Sonde and Follica, Incorporated, or Follica; investors' rights agreements with Akili, Follica, Vedanta, Entrega, Sonde and Vor Biopharma Inc., or Vor, and stockholders' agreements with Gelesis, Akili, Follica, Vedanta, Entrega, and Sonde, pursuant to which we are subject to certain restrictions on the transfer or sale of shares (e.g., pre-emptive rights or drag-along, tag-along rights or lock up agreements), and we may not be able freely to transfer our interest in such Founded Entities or procure the sale of the entire issued share capital of such Founded Entities, similar to other investors who are party to these agreements. In addition, many of our Founded Entities have employee share plans which further dilute our interest in such business. If the affairs of one or more of our Founded Entities were to be conducted in a manner detrimental to our interests or intentions or if we were unable to realize our interest in a Founded Entity or suffer dilution of our shareholding, this could have a material adverse effect on our business, financial condition or results of operation and prospects.

Our overall value may be dominated by a single or limited number of our Founded Entities.

A large proportion of our overall value may at any time reside in a small proportion of our Founded Entities. Accordingly, there is a risk that if one or more of the intellectual property or commercial rights relevant to a valuable business were impaired, this would have a material adverse impact on our overall value. Furthermore, a large proportion of our overall revenue may at any time be the subject of one, or a small number of, licensed technologies. Should the relevant licenses be terminated or expire this would be likely to have a material adverse effect on the revenue received by us. Any material adverse impact on the value of the business of a Founded Entity could, in the situations described above, or otherwise, have a material adverse effect on our business, financial condition, trading performance and/or prospects.

We have limited information about and limited control or influence over our Non-Controlled Founded Entities.

While we maintain ownership of equity interests in our Non-Controlled Founded Entities, we do not maintain voting control or direct management and development efforts for these entities. Each of these entities are independently managed, and we do not control the clinical and regulatory development of these Non-Controlled Founded Entities' therapeutic candidates. Any failure by our Non-Controlled Founded Entities to adhere to regulatory requirements, initiate preclinical studies and clinical trials on schedule or to obtain clearances or approvals for their therapeutic candidates could have an adverse effect on our business, financial condition, results of operation and prospects. The information included in this report about our Non-Controlled Founded Entities is based on (i) our knowledge, which may in some cases be limited, (ii) information that is publicly available, including the public filings of SEC reporting companies, such as Karuna, Vor, Akili and Gelesis, and (iii) information provided to us by our Non-Controlled Founded Entities. Where a date is provided, the information included in this report about our Non-Controlled Founded Entities is as of that date and you should not assume that it is accurate as of any other date. As such, there may be developments at our Non-Controlled Founded Entities of which we are unaware that could have an adverse effect on our business, financial condition, results of operation and prospects.

Our Founded Entities are difficult to value given that many of their therapeutic candidates are in the development stage.

Investments in early-stage companies, particularly privately held entities, are inherently difficult to value since sales, cash flow and tangible asset values are very limited, which makes the valuation highly dependent on expectations of future development, and any future significant revenues would only arise in the medium to longer terms and are uncertain. Equally, investments in companies just commencing the commercial stage are also difficult to value since sales, cash flow and tangible assets are limited, they have only commenced initial receipts of revenues and valuations are still dependent on expectations of future development. There can be no guarantee that our valuation of our Founded Entities will be considered to be correct in light of the early stage of development for many of these entities and their future performance. As a result, we may not realize the full value of our ownership in such Founded Entities which could adversely affect our business and results of operations. For example, on November 15, 2019, resTORbio, Inc., or resTORbio, announced that its lead therapeutic candidate, RTB101, did not meet its primary endpoint in its Phase 3 study and ceased further development leading to a decline in resTORbio's stock price from $9.27 to $1.09 and our sale of 7,680,700 common shares of resTORbio. As a result of the foregoing, we recognized a total cash loss of approximately $10 million from our initial investment through sale of shares.

Certain of our and our Founded Entities' therapeutics and therapeutic candidates represent novel therapeutic approaches and negative perception of any therapeutic or therapeutic candidate that we or they develop could adversely affect our ability to conduct our business, obtain and maintain regulatory clearance, authorization or approvals or identify alternate regulatory pathways to market for such therapeutic candidate.

Certain of our and our Founded Entities' therapeutic candidates are considered relatively new and novel therapeutic approaches. Our and their success will depend upon physicians who specialize in the treatment of diseases targeted by our and their therapeutic candidates, prescribing potential treatments that involve the use of our and their therapeutic candidates, if approved, in lieu of, or in addition to, existing treatments with which they are more familiar and for which greater clinical data may be available. Access will also depend on consumer acceptance and adoption of therapeutics that are commercialized. In addition, responses by the U.S., state or foreign governments to negative public perception or ethical concerns may result in new legislation or regulations that could limit our or our Founded Entities' ability to develop or commercialize any therapeutic candidates, obtain or maintain regulatory approval, identify alternate regulatory pathways to market or otherwise achieve profitability. More restrictive statutory regimes, government regulations or negative public opinion would have an adverse effect on our business, financial condition, results of operations and prospects and may delay or impair the development and commercialization of our or our Founded Entities' therapeutic candidates or demand for any therapeutics we or they may develop.

For example, in the United States and the European Union, no therapeutics to date have been approved specifically demonstrating an impact on the microbiome as part of their therapeutic effect. Vedanta is developing a pipeline of microbiome-derived modulators for immune and infectious disease. Microbiome therapies may not be successfully developed or commercialized or gain the acceptance of the public or the medical community. Additionally, adverse events, or AEs, in non-investigational new drug application, or IND, human clinical studies and clinical trials of Vedanta's therapeutic candidates or in clinical trials of other companies developing similar therapeutics and the resulting publicity, similarly to the AEs publicized with respect to Seres Therapeutics, Inc.'s SER-287 Phase 2 clinical trial, as well as any other AEs in the field of the microbiome, could result in a decrease in demand for any therapeutic that Vedanta may develop. Finally, the FDA, the EMA or other comparable foreign regulatory authorities may lack experience in evaluating the safety and efficacy of therapeutic candidates based on microbiome therapeutics, which could result in a longer than expected regulatory review process, increase expected development costs and delay or prevent potential commercialization of therapeutic candidates.

Risks Related to the Clinical Development, Regulatory Review and Approval of our and our Founded Entities' Therapeutic Candidates

Risks Related to Clinical Development

The therapeutic candidates within our Wholly Owned Pipeline and most of our Founded Entities' therapeutic candidates are in preclinical or clinical development, which is a lengthy and expensive process with uncertain outcomes and the potential for substantial delays. We cannot give any assurance that any of our and our Founded Entities' therapeutic candidates will receive regulatory clearance, authorization or approval, which is necessary before they can be commercialized.

Before obtaining marketing clearance, certification, authorization or approval from regulatory authorities or notified bodies for the sale of our or our Founded Entities' therapeutic candidates, we or our Founded Entities must conduct extensive clinical trials to demonstrate the safety and efficacy, or with respect to biologics, safety, purity and potency, of the therapeutic candidates in humans. To date, we have focused substantially all of our efforts and financial resources on identifying, acquiring, and developing therapeutic candidates, including conducting lead optimization, preclinical studies and clinical trials, and providing general and administrative support for these operations. To date, only two of our Founded Entities' therapeutic candidates, Gelesis' Plenity and Akili's EndeavorRx, have received marketing authorization from the FDA, and are CE marked in the EU, and we cannot be certain that any of our internal or our Founded Entities' other therapeutic candidates will receive regulatory clearance, certification, authorization or approval, the timing of such clearance, certification, authorization or approval, if received, or that clinical trials will progress as planned. Our or our Founded Entities' inability to successfully complete preclinical and clinical development could result in additional costs to us and negatively impact our ability to generate revenue. Our future success is dependent on our and our Founded Entities' ability to successfully develop, obtain regulatory clearance, certification, authorization or approval for, and then successfully commercialize therapeutic candidates. We and our Founded Entities, with the exceptions of Gelesis and Akili, currently have no drugs or biologics approved or devices cleared, certified, authorized or approved for sale and have not generated any revenue from sales of drugs, biologics or devices. We cannot guarantee that we or our Founded Entities will be able in the future to develop or successfully commercialize any of our or their therapeutic candidates. Additionally, the FDA has limited experience reviewing live biological therapeutics using a defined cocktail of microbes, which could result in regulatory complexity in Vedanta's pipeline. There is also no approved drug therapy for lymphedema, which will require us to engage in further discussions with the FDA on requirements for potential approval.

Other than Gelesis' Plenity and Akili's EndeavorRx, all of our Wholly Owned Programs and our Founded Entities' therapeutic candidates require additional development; management of preclinical, clinical, and manufacturing activities; and/or regulatory clearances, certification, authorization or approvals. In addition, we or our Founded Entities may need to obtain adequate manufacturing supply; build a commercial organization; commence marketing efforts; and obtain coverage and reimbursement before we generate any significant revenue from commercial therapeutic sales, if ever. Many of the therapeutic candidates in our Wholly Owned Pipeline and our Founded Entities' therapeutic candidates are in early-stage research or translational phases of development, and the risk of failure for these programs is high. We cannot be certain that any of the therapeutic candidates in our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates will be successful in clinical trials or receive regulatory approval, authorization or clearance. Further, our Wholly Owned Programs or our Founded Entities' therapeutic candidates may not receive regulatory clearance, certification, authorization or approval even if we believe they are successful in clinical trials. If we or our Founded Entities do not receive regulatory clearance, certification, authorization or approval for our or their therapeutic candidates, we may not be able to continue operations, which may result in dissolution, out-licensing the technology or pursuing an alternative strategy.

Preclinical development is uncertain. Our preclinical programs may experience delays or may never advance to clinical trials, which would adversely affect our ability to obtain regulatory clearance, authorization or approvals or commercialize these programs on a timely basis or at all, which would have an adverse effect on our business.

Certain of our Wholly Owned Programs are in the preclinical stage, and their risk of failure is high. Before we can commence clinical trials for a therapeutic candidate, we must complete extensive preclinical testing and studies that support our planned INDs, in the United States, or similar applications in other jurisdictions. We cannot be certain of the timely completion or outcome of our preclinical testing and studies and cannot predict if the FDA or other regulatory authorities will accept our proposed clinical programs or if the outcome of our preclinical testing and studies will ultimately support the further development of our programs. As a result, we cannot be sure that we will be able to submit INDs or similar applications for our preclinical programs on the timelines we expect, if at all, and we cannot be sure that submission of INDs or similar applications will result in the FDA or other regulatory authorities allowing clinical trials to begin.

Clinical trials of our or our Founded Entities' therapeutic candidates may be delayed, and certain programs may never advance in the clinic or may be more costly to conduct than we anticipate, any of which can affect our ability to fund our company and would have a material adverse impact on our platform or our business.

Clinical testing is expensive, time-consuming, and subject to uncertainty. We cannot guarantee that any of our ongoing and planned clinical trials will be conducted as planned or completed on schedule, if at all. Moreover, even if these trials are initiated or conducted on a timely basis, issues may arise that could result in the suspension or termination of such clinical trials. A failure of one or more clinical trials can occur at any stage of testing, and our clinical trials may not be successful. Events that may prevent successful or timely initiation or completion of clinical trials include:

- inability to generate sufficient preclinical, toxicology, or other in vivo or in vitro data to support the initiation or continuation of clinical trials;
- delays in confirming target engagement, patient selection or other relevant biomarkers to be utilized in preclinical and clinical therapeutic candidate development;
- delays in reaching a consensus with regulatory agencies as to the design or implementation of our clinical studies;
- delays in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- delays in identifying, recruiting and training suitable clinical investigators;

- delays in obtaining required Institutional Review Board, or IRB, or other reviewing bodies approval or positive opinion at each clinical trial site;
- imposition of a temporary or permanent clinical hold by regulatory agencies for a number of reasons, including after review of an IND or amendment, clinical trial application, or CTA, or amendment, investigational device exemption, or IDE, or supplement, or equivalent application or amendment; as a result of a new safety finding that presents unreasonable risk to clinical trial participants; or a negative finding from an inspection of our clinical trial operations or study sites;
- developments in trials for other therapeutic candidates with the same targets or related modalities as our or our Founded Entities' therapeutic candidates conducted by competitors that raise regulatory or safety concerns about risk to patients of the treatment, or if the FDA or similar foreign authorities find that the investigational protocol or plan is clearly deficient to meet its stated objectives;
- difficulties in securing access to materials for the comparator arm of certain of our clinical trials;
- delays in identifying, recruiting and enrolling suitable patients to participate in clinical trials, and delays caused by patients withdrawing from clinical trials or failing to return for post-treatment follow-up;
- difficulties in finding a sufficient number of trial sites, or trial sites deviating from trial protocol or dropping out of a trial;
- difficulty collaborating with patient groups and investigators;
- failure by CROs, other third parties, or us to adhere to clinical trial requirements;
- failure by CROs, other third parties, or us to perform in accordance with the FDA's or any other regulatory authority's current good clinical practices, or GCP, requirements, or regulatory guidelines in other countries;
- occurrence of AEs or undesirable side effects or other unexpected characteristics associated with the therapeutic candidate that are viewed to outweigh its potential benefits;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- changes in the standard of care on which a clinical development plan was based, which may require new or additional trials;
- the cost of clinical trials of any therapeutic candidates that we may identify and pursue being greater than we anticipate;
- clinical trials of any therapeutic candidates that we may identify and pursue producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical trials or abandon therapeutic development programs;
- transfer of manufacturing processes to larger-scale facilities operated by a CMO, or by us, and delays or failures by our CMOs or us to make any necessary changes to such manufacturing process;
- delays in manufacturing, testing, releasing, validating, or importing/exporting sufficient stable quantities of therapeutic candidates that we may identify for use in clinical trials or the inability to do any of the foregoing; and
- factors we may not be able to control, such as current or potential pandemics or other events that may limit patients, principal investigators or staff or clinical site availability, result in clinical trial protocol deviations, or impact supply of our or our Founded Entities' therapeutic candidates (e.g., the COVID-19 pandemic or the conflict between Russia and Ukraine).

Any inability to successfully initiate or complete clinical trials could result in additional costs to us or impair our ability to generate revenue. In addition, if we make manufacturing or formulation changes to our Wholly Owned Programs, we may be required to or we may elect to conduct additional preclinical studies or clinical trials to bridge data obtained from our modified therapeutic candidates to data obtained from preclinical and clinical research conducted using earlier versions. Clinical trial delays could also shorten any periods during which our therapeutics have patent protection and may allow our competitors to bring therapeutics to market before we do, which could impair our ability to successfully commercialize therapeutic candidates and may harm our business and results of operations.

We could also encounter delays if a clinical trial is suspended or terminated by us, by the data safety monitoring board, or DSMB, or by the FDA or other comparable foreign regulatory authorities, or if the IRBs of the institutions in which such trials are being conducted suspend or terminate the participation of their clinical investigators and sites subject to their review. Such authorities may suspend or terminate a clinical trial due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other comparable foreign regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a therapeutic candidate, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

Moreover, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of these relationships to the FDA or comparable foreign regulatory authorities. The FDA or comparable foreign regulatory authority may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected interpretation of the study. The FDA or comparable foreign regulatory authority may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, or rejection, of our marketing applications by the FDA or comparable foreign regulatory authority, as the case may be, and may ultimately lead to the denial of marketing approval of one or more of our Wholly Owned Programs or our Founded Entities' therapeutic candidates.

Delays in the initiation, conduct or completion of any clinical trial of the therapeutic candidates within our Wholly Owned Pipeline will increase our costs, slow down the therapeutic candidate development and approval process and delay or potentially jeopardize our ability to commence therapeutic sales and generate revenue. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates. In the event we identify any additional therapeutic candidates to pursue, we cannot be sure that submission of an IDE, IND, CTA, or equivalent application, as applicable, will result in the FDA, the EMA or comparable foreign regulatory authority allowing clinical trials to begin in a timely manner, if at all. Any of these events could have a material adverse effect on our business, prospects, financial condition and results of operations.

In addition, the FDA's and other regulatory authorities' policies with respect to clinical trials may change and additional government regulations may be enacted. For instance, the regulatory landscape related to clinical trials in the EU recently evolved. The EU Clinical Trials Regulation, or CTR, which was adopted in April 2014 and repeals the EU Clinical Trials Directive, became applicable on January 31, 2022. While the Clinical Trials Directive required a separate clinical trial application, or CTA, to be submitted in each member state in which the clinical trial takes place, to both the competent national health authority and an independent ethics committee, the CTR introduces a centralized process and only requires the submission of a single application for multi-center trials. The CTR allows sponsors to make a single submission to both the competent authority and an ethics committee in each member state, leading to a single decision per member state. The assessment procedure of the CTA has been harmonized as well, including a joint assessment by all member states concerned, and a separate assessment by each member state with respect to specific requirements related to its own territory, including ethics rules. Each member state's decision is communicated to the sponsor via the centralized EU portal. Once the CTA is approved, clinical study development may proceed. The CTR foresees a three-year transition period. The extent to which ongoing and new clinical trials will be governed by the CTR varies. Clinical trials for which an application was submitted (i) prior to January 31, 2022 under the EU Clinical Trials Directive, or (ii) between January 31, 2022 and January 31, 2023 and for which the sponsor has opted for the application of the EU Clinical Trials Directive remain governed by said Directive until January 31, 2025. After this date, all clinical trials (including those which are ongoing) will become subject to the provisions of the CTR. Compliance with the CTR requirements by us and our third-party service providers, such as CROs, may impact our developments plans.

It is currently unclear to what extent the UK will seek to align its regulations with the EU. The UK regulatory framework in relation to clinical trials is derived from existing EU legislation (as implemented into UK law, through secondary legislation). On January 17, 2022, the UK Medicines and Healthcare products Regulatory Agency, or MHRA, launched an eight-week consultation on reframing the UK legislation for clinical trials, with the aim to streamline clinical trials approvals, enable innovation, enhance clinical trials transparency, enable greater risk proportionality, and promote patient and public involvement in clinical trials. The resulting new legislation will determine how aligned the UK clinical trials regime is compared to the (EU) CTR. Under the terms of the Protocol on Ireland/Northern Ireland, provisions of the (EU) CTR which relate to the manufacture and import of investigational medicinal products and auxiliary medicinal products apply

in Northern Ireland. A decision by the UK Government not to closely align its regulations with the new approach that has been adopted in the EU may have an effect on the cost of conducting clinical trials in the UK as opposed to other countries.

The results of early-stage clinical trials and preclinical studies may not be predictive of future results. Initial data in clinical trials may not be indicative of results obtained when these trials are completed or in later stage trials.

The results of preclinical studies may not be predictive of the results of clinical trials, and the results of any early-stage clinical trials we commence may not be predictive of the results of the later-stage clinical trials. The results of preclinical studies and clinical trials in one set of patients or disease indications, or from preclinical studies or clinical trials that we did not lead, may not be predictive of those obtained in another. In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same therapeutic candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial participants. In addition, preclinical and clinical data are often susceptible to various interpretations and analyses, and many companies that have believed their therapeutic candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval. A number of companies in the pharmaceutical, biopharmaceutical and biotechnology industries have suffered significant setbacks in clinical development even after achieving promising results in earlier studies, and any such setbacks in our clinical development could have a material adverse effect on our business and operating results. Even if early-stage clinical trials are successful, we may need to conduct additional clinical trials of our Wholly Owned Programs in additional patient populations or under different treatment conditions before we are able to seek approvals or clearances from the FDA or other comparable foreign regulatory authorities to market and sell these therapeutic candidates. Our failure to obtain marketing authorization for the therapeutic candidates within our Wholly Owned Pipeline would substantially harm our business, prospects, financial condition and results of operations.

If we encounter difficulties enrolling patients in clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

Identifying and qualifying trial participants to participate in clinical studies is critical to our success. The timing of our clinical studies depends on the speed at which we can recruit trial participants to participate in testing the therapeutic candidates within our Wholly Owned Pipeline. Delays in enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of the therapeutic candidates within our Wholly Owned Pipeline. If trial participants are unwilling to participate in our studies because of negative publicity from AEs in our trials or other trials of similar therapeutics, or those related to specific therapeutic area, or for other reasons, including competitive clinical studies for similar patient populations, the timeline for recruiting trial participants, conducting studies, and obtaining regulatory approval of potential therapeutics may be delayed. We also may face delays as a result of unforeseen global circumstances, for example we have experienced temporary delays in certain of our clinical development activities, including enrolling participants in certain of our clinical trials, as a result of the COVID-19 pandemic or the conflict between Russia and Ukraine. Any delays could result in increased costs, delays in advancing our therapeutic candidate development, delays in testing the effectiveness of the therapeutic candidates within our Wholly Owned Pipeline, or termination of the clinical studies altogether.

We may not be able to identify, recruit and enroll a sufficient number of trial participants, or those with required or desired characteristics to achieve diversity in a study, to complete our clinical studies in a timely manner. Patient and subject enrollment is affected by factors including:

- the size and nature of a patient population;
- the patient eligibility criteria defined in the applicable clinical trial protocols, which may limit the patient populations eligible for clinical trials to a greater extent than competing clinical trials for the same indication;
- the size of the study population required for analysis of the trial's primary endpoints;
- the severity of the disease under investigation;
- the proximity of patients to a trial site;
- the inclusion and exclusion criteria for the trial in question;
- the design of the trial protocol;
- the ability to recruit clinical trial investigators with the appropriate competencies and experience;
- the availability and efficacy of approved medications or therapies for the disease or condition under investigation;
- clinicians' and patients' perceptions as to the potential advantages and side effects of the therapeutic candidate being studied in relation to other available therapies and therapeutic candidates;
- the ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will not complete such trials, for any reason.

Furthermore, our or our collaborators' ability to successfully initiate, enroll and conduct a clinical trial outside the United States is subject to numerous additional risks, including:

- difficulty in establishing or managing relationships with CROs and physicians;
- differing standards for the conduct of clinical trials;
- differing standards of care for patients with a particular disease;
- an inability to locate qualified local consultants, physicians and partners; and
- the potential burden of complying with a variety of foreign laws, medical standards and regulatory requirements, including the regulation of pharmaceutical and biotechnology therapeutics and treatments.

If we have difficulty enrolling sufficient numbers of patients to conduct clinical trials as planned, we may need to delay or terminate clinical trials, either of which would have an adverse effect on our business.

Use of the therapeutic candidates within our Wholly Owned Pipeline or the therapeutic candidates being developed by our Founded Entities could be associated with side effects, AEs or other properties or safety risks, which could delay or halt their clinical development, prevent their regulatory clearance, authorization or approval, cause us to suspend or discontinue clinical trials, abandon a therapeutic candidate, limit their commercial potential, if cleared, authorized or approved, or result in other significant negative consequences that could severely harm our business, prospects, operating results and financial condition.

As is the case with pharmaceuticals generally, it is likely that there may be side effects and AEs associated with our and our Founded Entities' drug or biologic therapeutic candidates' use. Similarly, investigational devices may also be subject to side effects and AEs. Results of our clinical trials or those being conducted by Founded Entities could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. Undesirable side effects caused by these therapeutic candidates could cause us, our Founded Entities or regulatory authorities to interrupt, delay or halt clinical trials and could result in more restrictive labeling or the delay or denial of regulatory clearance, certification, authorization or approval by the FDA, the EMA or other comparable foreign regulatory authorities, or notified bodies (when applicable). The side effects related to the therapeutic candidate could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

Moreover, if therapeutic candidates within our Wholly Owned Pipeline are associated with undesirable side effects in preclinical studies or clinical trials or have characteristics that are unexpected, we may elect to abandon their development or limit their development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective, which may limit the commercial expectations for the therapeutic candidate if approved. We may also be required to modify or terminate our study plans based on findings in our preclinical studies or clinical trials. Many therapeutic candidates that initially show promise in early-stage testing may later be found to cause side effects that prevent further development. As we work to advance existing therapeutic candidates and to identify new therapeutic candidates, we cannot be certain that later testing or trials of therapeutic candidates that initially showed promise in early testing will not be found to cause similar or different unacceptable side effects that prevent their further development.

It is possible that as we test the therapeutic candidates within our Wholly Owned Pipeline in larger, longer and more extensive clinical trials, or as the use of these therapeutic candidates becomes more widespread if they receive regulatory clearance or approval, illnesses, injuries, discomforts and other AEs that were observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, will be reported by subjects. If such side effects become known later in development or upon approval, if any, such findings may harm our business, financial condition and prospects significantly. Additionally, adverse developments in clinical trials of pharmaceutical, biopharmaceutical or biotechnology therapeutics conducted by others may cause the FDA or other regulatory oversight bodies to suspend or terminate our clinical trials or to change the requirements for approval of any of our Wholly Owned Programs.

In addition to side effects caused by the therapeutic candidate, the administration process or related procedures also can cause adverse side effects. If any such AEs occur, our clinical trials could be suspended or terminated. If we are unable to demonstrate that any AEs were not caused by therapeutic candidate, the FDA, the European Commission, the EMA, or other regulatory authorities or bodies could order us to cease further development of, or deny clearance, certification or approval of, a therapeutic candidate for any or all targeted indications. Even if we can demonstrate that all future serious adverse events, or SAEs, are not therapeutic-related, such occurrences could affect patient recruitment or the ability of enrolled patients to complete the trial. Moreover, if we elect, or are required, to not initiate, delay, suspend or terminate any future clinical trial of any of our Wholly Owned Programs, the commercial prospects of such therapeutic candidates may be harmed and our ability to generate therapeutic revenues from any of these therapeutic candidates may be delayed or eliminated. Any of these occurrences may harm our ability to develop other therapeutic candidates, and may harm our business, financial condition and prospects significantly.

Additionally, if any of the therapeutic candidates within our Wholly Owned Pipeline receives marketing authorization, the FDA could impose contraindications or a boxed warning in the labeling of our therapeutic. For any of our drug or biologic therapeutic candidates receiving marketing authorization, the FDA could require us to adopt a risk evaluation and mitigation strategy, or REMS, and could apply elements to assure safe use to ensure that the benefits of the therapeutic outweigh its risks, which may include, among other things, a Medication Guide outlining the risks of the therapeutic for distribution to patients, a requirement that clinicians or health care settings to become certified prior to prescribing and to participate in additional REMS activities, such as training, patient counseling, and monitoring, and a communication plan to health care practitioners. Furthermore, if we or others later identify undesirable side effects caused by the therapeutic candidates within our Wholly Owned Pipeline once approved, several potentially significant negative consequences could result, including:

- regulatory authorities may suspend or withdraw approvals of such therapeutic candidate, or seek an injunction against its manufacture or distribution;
- regulatory authorities may require additional warnings in the labeling, including boxed warnings, or issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the therapeutic;
- we may be required by the FDA to implement a REMS for a marketed drug or biologic or similar risk mitigation measures by foreign regulatory authorities;
- we may be required to change the way a therapeutic candidate is administered or conduct additional clinical trials;
- we may be subject to fines, injunctions or the imposition of civil or criminal penalties;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these occurrences could prevent us from achieving or maintaining market acceptance of the particular therapeutic candidate, if approved, and may harm our business, financial condition and prospects significantly.

Risks Related to Regulatory Review and Approval

Our clinical trials may fail to demonstrate substantial evidence of the safety and effectiveness of therapeutic candidates that we may identify and pursue for their intended uses, which would prevent, delay or limit the scope of regulatory clearance, certification, authorization or approval and potential commercialization.

Before obtaining regulatory approvals for the commercial sale of any of our drug or biological therapeutic candidates, we must demonstrate through lengthy, complex and expensive preclinical studies and clinical trials that the applicable therapeutic candidate is both safe and effective for use in each target indication, and in the case of our Wholly Owned Programs and Founded Entities' therapeutic candidates regulated as biological therapeutics, that the therapeutic candidate is safe, pure and potent for use in its targeted indication. Each therapeutic candidate must demonstrate an adequate risk versus benefit profile in its intended patient population and for its intended use. Similarly, before obtaining regulatory clearances, certifications, authorization or approvals for the commercial sale of any of the device therapeutic candidates of our Founded Entities, our Founded Entities may be required to demonstrate through lengthy, complex and expensive preclinical studies and clinical trials that the applicable therapeutic candidate meets the regulatory standard of clearance, certification, authorization or approval—for example, substantial equivalence or a reasonable assurance of safety or effectiveness, as applicable—for its intended use.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical development process. Most therapeutic candidates that begin clinical trials are never approved by regulatory authorities or notified bodies for commercialization. We may be unable to design and execute a clinical trial to support marketing authorization or certification.

We cannot be certain that our clinical trials will be successful. Additionally, any safety concerns observed in any one of our clinical trials in our targeted indications could limit the prospects for regulatory clearances, certification, authorization or approval of our therapeutic candidates in those and other indications, which could have a material adverse effect on our business, financial condition and results of operations. In addition, even if such clinical trials are successfully completed, we cannot guarantee that the FDA, the EMA or comparable foreign regulatory authorities or notified bodies (when applicable) will interpret the results as we do, and more trials could be required before we submit our therapeutic candidates for clearance, certification or approval. For example, the definition of clinical meaningfulness for outcome measures in lymphedema has not been firmly established by the FDA, introducing risk in evaluating and demonstrating the efficacy required to obtain FDA approval of LYT-100. Even if we believe that our and our Founded Entities' clinical trials and preclinical studies demonstrate the safety and efficacy of our and their therapeutic candidates, only the FDA and other comparable regulatory agencies may ultimately make such determination. No regulatory agency has made any such determination that any of our Wholly Owned Programs or those of our Founded Entities are safe or effective for use for any indication.

Additionally, we may utilize an "open-label" trial design for some of our future clinical trials. An open-label trial is one where both the patient and investigator know whether the patient is receiving the test article or either an existing approved drug or placebo. Open-label trials are subject to various limitations that may exaggerate any therapeutic effect as patients in open-label studies are aware that they are receiving treatment. Open-label trials may be subject to a "patient bias" where patients perceive their symptoms to have improved merely due to their awareness of receiving an experimental treatment. Patients selected for early clinical studies often include the most severe sufferers and their symptoms may have been bound to improve notwithstanding the new treatment. In addition, open-label trials may be subject to an "investigator bias" where those assessing and reviewing the physiological outcomes of the clinical trials are aware of which patients have received treatment and may interpret the information of the treated group more favorably given this knowledge. The opportunity for bias in clinical trials as a result of open-label design may not be adequately handled and may cause any of our trials that utilize such design to fail or to be considered inadequate and additional trials may be necessary to support future marketing applications. Moreover, results acceptable to support approval in one jurisdiction may be deemed inadequate by another regulatory authority to support regulatory approval in that other jurisdiction. To the extent that the results of the trials are not satisfactory to the FDA, the EMA or comparable foreign regulatory authorities for support of a marketing application, we may be required to expend significant resources, which may not be available to us, to conduct additional trials in support of potential approval of our Wholly Owned Programs. Even if regulatory approval is secured for a therapeutic candidate, the terms of such approval may limit the scope and use of the specific therapeutic candidate, which may also limit its commercial potential.

Even if we complete the necessary preclinical studies and clinical trials, the marketing approval and certification process is expensive, time-consuming and uncertain and may prevent us from obtaining clearance, certification, authorization or approvals for the potential commercialization of therapeutic candidates.

Any therapeutic candidate we may develop and the activities associated with their development and potential commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, certification, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA and other comparable foreign regulatory authorities. Failure to obtain marketing authorization or certification for a therapeutic candidate will prevent us from commercializing the therapeutic candidate in a given jurisdiction. For example, although Gelesis and Akili have received marketing authorization for Plenity and EndeavorRx, respectively, from the FDA, and are CE marked in the EU, we and our Founded Entities have not received clearance, certification, authorization or approval to market any of our or their other therapeutic candidates from regulatory authorities in any jurisdiction and it is possible that none of the other therapeutic candidates we and our Founded Entities may seek to develop in the future will ever obtain regulatory clearance, authorization or approval. We have no experience in filing and supporting the applications necessary to gain marketing clearance, certification, authorization or approval and expect

to rely on third-party CROs or regulatory consultants to assist us in this process. Securing regulatory clearance, certification, authorization or approval requires the submission of extensive preclinical and clinical data and supporting information to the various regulatory authorities for each therapeutic indication to establish the therapeutic candidate's safety, purity, efficacy and potency. Securing regulatory clearance, authorization or approval also requires the submission of information about the therapeutic manufacturing process to, and inspection of manufacturing facilities by, the relevant regulatory authority. Any therapeutic candidates we or our Founded Entities develop may not be effective, may be only moderately effective, or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing clearance, certification, authorization or approval or prevent or limit commercial use, if cleared, certified, authorized or approved.

The process of obtaining marketing clearance, certification, authorization or approval, both in the United States and abroad, is expensive, may take many years if additional clinical trials are required, if clearance, certification, authorization or approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the therapeutic candidates involved. Changes in marketing authorization policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted therapeutic application, may cause delays in the clearance, authorization, approval or rejection of an application. The FDA, comparable authorities and notified bodies in other countries have substantial discretion in the approval and certification process and may refuse to accept any application or may decide that our data are insufficient for clearance, authorization or approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit, or prevent marketing approval or certification of a therapeutic candidate. Any marketing approval or certification we ultimately obtain may be limited or subject to restrictions or post-market commitments that render the cleared, certified, authorized or approved therapeutic not commercially viable.

If we experience delays in obtaining clearance, certification, authorization or approval or if we fail to obtain clearance, certification, authorization or approval of any therapeutic candidates we may develop, the commercial prospects for those therapeutic candidates may be harmed, and our ability to generate revenues will be materially impaired.

We have conducted, and may continue to conduct in the future, clinical trials for therapeutic candidates outside the United States, and the FDA, the EMA and comparable foreign regulatory authorities may not accept data from such trials.

We have conducted clinical trials outside of the United States in the past, and may in the future choose to conduct one or more clinical trials outside the United States, including in Europe. For example, we have conducted clinical trials in Australia and are conducting or may conduct clinical trials in additional locations outside the United States, including without limitation the U.K., Australia, Malaysia, Thailand, South Africa, Greece, Georgia, India, Romania, Moldova, Ukraine, South Korea, Argentina, Brazil, Chile, Colombia, Mexico and the Philippines. The acceptance of study data from clinical trials conducted outside the United States or another jurisdiction by the FDA, the EMA or any comparable foreign regulatory authority may be subject to certain conditions or may not be accepted at all. For example, in cases where data from foreign clinical trials are intended to serve as the basis for approval of a drug or biologic in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the U.S. population and U.S. medical practice; (ii) the trials were performed by clinical investigators of recognized competence and pursuant to GCP regulations; and (iii) if necessary, the FDA is able to validate the data through an on-site inspection or other appropriate means. In addition, even where the foreign study data are not intended to serve as the sole basis for approval, if the study was not otherwise subject to an IND, the FDA will not accept the data as support for an application for marketing approval unless the study was conducted in accordance with GCP requirements and unless the FDA is able to validate the data from the study through an onsite inspection if deemed necessary. Many foreign regulatory authorities have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA, the EMA or any comparable foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction. If the FDA, the EMA or any comparable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in therapeutic candidates that we may develop not receiving approval, authorization or clearance for commercialization in the applicable jurisdiction.

If we are unable to obtain regulatory clearance, certification, authorization or approval in one or more jurisdictions for any therapeutic candidates that we may identify and develop, our business could be substantially harmed.

We cannot commercialize a therapeutic until the appropriate regulatory authorities or notified bodies have reviewed and cleared, certified, authorized or approved the therapeutic candidate. Clearance, certification, authorization or approval by the FDA, the EMA and comparable foreign regulatory authorities and notified bodies is lengthy and unpredictable, and depends upon numerous factors, including substantial discretion of the regulatory authorities and notified bodies. Clearance, certification, authorization or approval policies, regulations, or the type and amount of preclinical or clinical data necessary to gain clearance, authorization or approval may change during the course of a therapeutic candidate's development and may vary among jurisdictions, which may cause delays in the clearance, certification, authorization or approval or the decision not to clear, certify, authorize or approve an application. Gelesis and Akili have obtained marketing authorization from the FDA for Plenity and EndeavorRx, and are CE marked, respectively, but we and our Founded Entities have not obtained regulatory clearance, authorization or approval for any other therapeutic candidates, and it is possible that our current therapeutic candidates and any other therapeutic candidates which we and our Founded Entities may seek to develop in the future will not ever obtain regulatory clearance, certification, authorization or approval. We cannot be certain that any of our Wholly Owned Programs or our Founded Entities' therapeutic candidates will receive regulatory clearance, certification, authorization or approval or be successfully commercialized even if we or our Founded Entities receive regulatory clearance, certification, authorization or approval.

Obtaining marketing clearance, certification, authorization or approval is an extensive, lengthy, expensive and inherently uncertain process, and regulatory authorities and notified bodies may delay, limit or deny clearance or clearance, certification, authorization or approval of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates for many reasons, including but not limited to:

- the inability to demonstrate to the satisfaction of the FDA, the EMA or comparable foreign regulatory authorities that the applicable therapeutic candidate is safe, pure, potent or effective as a treatment for our targeted indications or otherwise meets the applicable regulatory standards for clearance, authorization or approval;
- the FDA, the EMA or comparable foreign regulatory authorities may disagree with the design, endpoints or implementation of our or our Founded Entities' clinical trials;
- the population studied in the clinical program may not be sufficiently broad or representative to assure safety or efficacy in the full population for which we or our Founded Entities seek clearance, authorization or approval;
- the FDA, the EMA or comparable foreign regulatory authorities may require additional preclinical studies or clinical trials beyond those that we or our Founded Entities currently anticipate;
- the FDA, the EMA or comparable foreign regulatory authorities may disagree with our or our Founded Entities' interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of therapeutic candidates that we may identify and pursue may not be sufficient to support the submission of an NDA, biologics license application, or BLA, or other submission for regulatory clearance, authorization or approval in the United States or elsewhere;
- as applicable, we or our Founded Entities may be unable to demonstrate to the FDA, the EMA or comparable foreign regulatory authorities that a therapeutic candidate's risk-benefit ratio for its proposed indication is acceptable;
- the FDA, the EMA or comparable foreign regulatory authorities may identify deficiencies in the manufacturing processes, test procedures and specifications, or facilities of third-party manufacturers with which we or our Founded Entities contract for clinical and commercial supplies; and
- the clearance, certification, authorization or approval policies or regulations of the FDA, the EMA or comparable foreign regulatory authorities may change in a manner that renders the clinical trial design or data insufficient for clearance or approval.

The lengthy approval process, as well as the unpredictability of the results of clinical trials and evolving regulatory requirements, may result in our or our Founded Entities' failure to obtain regulatory clearance, certification, authorization or approval to market therapeutic candidates that we or our Founded Entities may pursue in the United States or elsewhere, which would significantly harm our or our Founded Entities' business, prospects, financial condition and results of operations.

Furthermore, clearance, authorization or approval by the FDA in the United States, if obtained, does not ensure approval or certification by regulatory authorities or notified bodies in other countries or jurisdictions. In order to market any therapeutics outside of the United States, we or our Founded Entities must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and effectiveness. Clinical trials conducted in one country may not be accepted by regulatory authorities or notified bodies in other countries, and regulatory approval or certification in one country does not mean that regulatory approval or certification will be obtained in any other country. Approval and certification processes vary among countries and can involve additional therapeutic testing and validation and additional or different administrative review periods from those in the United States, including additional preclinical studies or clinical trials, as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities or notified bodies in other jurisdictions. In many jurisdictions outside the United States, a therapeutic candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our therapeutics is also subject to approval. Seeking foreign regulatory approval or certification could result in difficulties and costs for us or our Founded Entities and require additional preclinical studies or clinical trials which could be costly and time-consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our or our Founded Entities' therapeutics in those countries. The foreign regulatory approval and certification process involves all of the risks associated with FDA approval. We do not have any therapeutic candidates approved for sale in international markets, though two of our Founded Entities, Akili and Gelesis, do. If we or our Founded Entities fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approvals or certifications in international markets are delayed, our target market will be reduced and our ability to realize the full market potential of our therapeutics will be harmed.

If the FDA does not conclude that our product candidates satisfy the requirements for the Section 505(b)(2) regulatory approval pathway, or if the requirements for such product candidates under Section 505(b)(2) are not as we expect, the approval pathway for those product candidates will likely take significantly longer, cost significantly more and entail significantly greater complications and risks than anticipated, and in either case may not be successful.

We plan to develop one or more product candidates, including potentially LYT-100 and LYT-300 in certain indications, for which we may plan to seek approval under the 505(b)(2) regulatory pathway. The Drug Price Competition and Patent Term Restoration Act of 1984, also known as the Hatch-Waxman Act, added Section 505(b)(2) to the FDCA. Section 505(b)(2) permits the filing of an NDA where at least some of the information required for approval comes from studies that were not conducted by or for the applicant and for which the applicant has not obtained a right of reference. Section 505(b)(2), if applicable to us under the FDCA, would allow an NDA we submit to the FDA to rely in part on data in the public domain or the FDA's prior conclusions regarding the safety and effectiveness of approved compounds, which could expedite the development program for our future product candidates by potentially decreasing the amount of nonclinical and/or clinical data that we would need to generate in order to obtain FDA approval.

If the FDA does not allow us to pursue the Section 505(b)(2) regulatory pathway as anticipated, we may need to conduct additional nonclinical studies and/or clinical trials, provide additional data and information, and meet additional standards for regulatory approval. If this were to occur, the time and financial resources required to obtain FDA approval for such product candidates, and complications and risks associated with such product candidates, would likely substantially increase. Moreover, inability to pursue the Section 505(b)(2) regulatory pathway could result in new competitive products reaching the market more quickly than any product candidates we developed, which could adversely impact our competitive position and prospects. Even if we are allowed to pursue the Section 505(b)(2) regulatory pathway, we cannot assure you that any product candidates we develop will receive the requisite approval for commercialization.

In addition, notwithstanding the approval of a number of products by the FDA under Section 505(b)(2), certain pharmaceutical companies and others have objected to the FDA's interpretation of Section 505(b)(2). If the FDA's interpretation of Section 505(b)(2) is successfully challenged, the FDA may change its 505(b)(2) policies and practices, which could delay or even prevent the FDA from approving any NDA that we submit under Section 505(b)(2). In addition, the pharmaceutical industry is highly competitive, and Section 505(b)(2) NDAs are subject to certain requirements designed to protect the patent rights of sponsors of previously approved drugs that are referenced in a Section 505(b)(2) NDA. These requirements may give rise to patent litigation and mandatory delays in approval of our NDAs for up to 30 months or longer depending on the outcome of any litigation. It is not uncommon for a manufacturer of an approved product to file a citizen petition with the FDA seeking to delay approval of, or impose additional approval requirements for, pending. competing products. If successful, such petitions can significantly delay, or even prevent, the approval of a new product. Even if the FDA ultimately denies such a petition, the FDA may substantially delay approval while it considers and responds to the petition. In addition, even if we are able to utilize the Section 505(b)(2) regulatory pathway, there is no guarantee this would ultimately lead to streamlined product development or earlier approval.

Interim, "top-line," and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available or as additional analyses are conducted, and as the data are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publish interim, "top-line," or preliminary data from our clinical studies, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the interim, top-line, or preliminary results that we report may differ from future results of the same studies or trials, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Data from interim analyses of clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Preliminary or "top-line" data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, interim, "top-line," and preliminary data should be viewed with caution until the final data are available. Material adverse changes between preliminary, "top-line," or interim data and final data could significantly harm our business prospects.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular therapeutic candidate or therapeutic and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure. Any information we determine not to disclose may ultimately be deemed significant by you or others with respect to future decisions, conclusions, views, activities or otherwise regarding a particular therapeutic candidate or our business.

The complexity of a combination therapeutic that includes a drug or biologic and a medical device presents additional, unique development and regulatory challenges, which may adversely impact our or our Founded Entities' development plans and our or our Founded Entities' ability to obtain regulatory clearance, authorization or approval of our Wholly Owned Programs or our Founded Entities' therapeutic candidates.

We or our Founded Entities, such as Follica, may decide to pursue marketing authorization of a combination therapeutic. A combination therapeutic may include, amongst other possibilities, any investigational drug, device, or biologic packaged separately that according to its proposed labeling is for use only with another individually specified investigational drug, device, or biologic where both are required to achieve the intended use, indication, or effect.

Developing and obtaining regulatory clearance, authorization or approval for combination therapeutics pose unique challenges because they involve components that are regulated by the FDA under different types of regulatory requirements, and by different FDA centers. As a result, such therapeutics raise regulatory, policy and review management challenges. For example, because divisions from both FDA's Center for Drug Evaluation and Research or Center for Biologics Evaluation and Research and FDA's Center for Devices and Radiological Health must review submissions concerning therapeutic candidates that are combination therapeutics comprised of drug or biologics and devices, respectively, the regulatory review and clearance, authorization or approval process for these therapeutics may be lengthened. In addition, differences in regulatory pathways for each component of a combination therapeutic can impact the regulatory processes for all aspects of therapeutic development and management, including clinical investigation, marketing applications, manufacturing and quality control, adverse event reporting, promotion and advertising, user fees and post-clearance, authorization or approval modifications. Similarly, if applicable, the device components of a combination therapeutic candidate will require any necessary clearances, certifications or approvals or other marketing authorizations in other jurisdictions, which may prove challenging to obtain.

The EU regulates medical devices and medicinal products separately, through different legislative instruments, and the applicable requirements will vary depending on the type of drug-device combination product. For instance, drug-delivery products intended to administer a medicinal product where the medicinal product and the device form a single integral product are regulated as medicinal products in the EU. In such a case, the marketing authorization application must include – where available – the results of the assessment of the conformity of the device part with the EU Medical Devices Regulation contained in the manufacturer's EU declaration of conformity of the device or the relevant certificate issued by a notified body. If the marketing authorization application does not include the results of the conformity assessment and where for the conformity assessment of the device, if used separately, the involvement of a notified body is required, the EMA or the EU member state competent authority must require the applicant to provide a notified body opinion on the conformity of the device. By contrast, in case of drug-delivery products intended to administer a medicinal product where the device and the medicinal product do not form a single integral product (but are e.g., co-packaged), the medicinal product is regulated in accordance with the rules for medicinal products described above while the device part is regulated as a medical device and will have to comply with all the requirements set forth by the Medical Devices Regulation.

Certain modifications to our Founded Entities' device therapeutics may require new 510(k) clearance or other marketing authorizations or certifications and may require our Founded Entities to recall or cease marketing their therapeutics.

Akili and Gelesis received de novo classification for EndeavorRx and Plenity, respectively, from the FDA. Once a medical device is permitted to be legally marketed in the United States pursuant to a 510(k) clearance, de novo classification, or a premarket approval, or PMA, a manufacturer may be required to notify the FDA of certain modifications to the device. Manufacturers determine in the first instance whether a change to a medical device requires a new premarket submission, but the FDA may review any manufacturer's decision. The FDA may not agree with our Founded Entities' decisions regarding whether new clearances, authorizations or approvals are necessary. They may make modifications or add additional features in the future that they believe do not require a new 510(k) clearance, de novo marketing authorization, or approval of a PMA or PMA amendments or supplements. If the FDA disagrees with their determinations and requires them to submit new 510(k) notifications, requests for de novo classification, or PMAs (or PMA supplements or amendments) for modifications to their previously cleared or authorized therapeutics for which they have concluded that new clearances, authorization or approvals are unnecessary, they may be required to cease marketing or to recall the modified therapeutic until they obtain clearance, authorization or approval, and they may be subject to significant regulatory fines or penalties.

In the EU, devices lawfully placed on the market pursuant to the EU Medical Devices Directive prior to May 26, 2021 may generally continue to be made available on the market or put into service until May 26, 2025, provided that the requirements of the transitional provisions are fulfilled. In particular, the certificate in question must still be valid and no substantial change must be made to the device as such a modification would trigger the obligation to obtain a new certification under the EU Medical Devices Regulation and therefore to have a notified body conducting a new conformity assessment of the devices. Once our devices will be certified under the EU Medical Devices Regulation, we must inform the notified body that carried out the conformity assessment of the medical devices that we market or sell in the EU and the EEA of any planned substantial changes to our quality system or substantial changes to our medical devices that could affect compliance with the general safety and performance requirements laid down in Annex I to the EU Medical Devices Regulation or cause a substantial change to the intended use for which the device has been CE marked. The notified body will then assess the planned changes and verify whether they affect the products' ongoing conformity with the EU Medical Devices Regulation. If the assessment is favorable, the notified body will issue a new certificate of conformity or an addendum to the existing certificate attesting compliance with the general safety and performance requirements and quality system requirements laid down in the Annexes to the EU Medical Devices Regulation. The notified body may disagree with our proposed changes and product introductions or modifications could be delayed or canceled, which could adversely affect our ability to grow our business.

We may not elect or be able to take advantage of any expedited development or regulatory review and approval processes available to drug therapeutic candidates granted breakthrough therapy or fast track designation by the FDA.

We intend to evaluate and continue ongoing discussions with the FDA on regulatory strategies that could enable us or our Founded Entities to take advantage of expedited development pathways for certain of our Wholly Owned Programs or our Founded Entities' therapeutic candidates in the future, although we cannot be certain that our Wholly Owned Programs or our Founded Entities' therapeutic candidates will qualify for any expedited development pathways or that regulatory authorities will grant, or allow us or our Founded Entities to maintain, the relevant qualifying designations. Potential expedited development pathways that we could pursue include breakthrough therapy and fast track designation.

The fast track program is intended to expedite or facilitate the process for reviewing new product candidates that meet certain criteria. Specifically, drugs and biologic are eligible for fast track designation if they are intended, alone or in combination with one or more drugs or biologics, to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. Fast track designation applies to the combination of the product candidate and the specific indication for which it is being studied. The sponsor of a fast track product candidate has opportunities for more frequent interactions with the applicable FDA review team during product development and, once a BLA or NDA is submitted, the application may be eligible for priority review. An NDA or BLA submitted for a Fast Track product candidate may also be eligible for rolling review, where the FDA may consider for review sections of the NDA or BLA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA or BLA, the FDA agrees to accept sections of the application and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the application.

A "breakthrough therapy" is defined as a drug or biologic that is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening disease or condition, where preliminary clinical evidence indicates that the drug or biologic may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For product candidates that have been designated as breakthrough therapies, increased interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Drugs and biologics designated as breakthrough therapies also receive the same benefits associated with fast track designation, including eligibility for rolling review of a submitted NDA or BLA, if the relevant criteria are met.

Even if we believe a particular therapeutic candidate is eligible for breakthrough therapy or fast track designation, we cannot assure you that the FDA would decide to grant it. Breakthrough therapy designation and fast track designation do not change the standards for approval, and there is no assurance that such designation or eligibility will result in expedited review or approval. Thus, even if we or our Founded Entities do receive breakthrough therapy, fast track designation, or other comparable designation, we or our Founded Entities may not experience a faster development process, review or approval compared to conventional FDA procedures. In addition, the FDA may withdraw either breakthrough therapy or fast track designation if it believes that the therapeutic no longer meets the qualifying criteria. Our business may be harmed if we are unable to avail ourselves of these or any other expedited development and regulatory pathways.

We may not be able to obtain or maintain orphan drug designation or exclusivity for our therapeutic candidates.

Regulatory authorities in some jurisdictions, including the United States, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a drug as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals in the United States, or if the disease or condition affects more than 200,000 individuals in the United States and there is no reasonable expectation that the cost of developing the drug for the type of disease or condition will be recovered from sales of the product in the United States. The criteria for designating an "orphan medicinal product" in the EU are similar in principle to those in the United States. A medicinal product can be designated as an orphan if its sponsor can establish that: (1) the product is intended for the diagnosis, prevention or treatment of a life threatening or chronically debilitating condition (2) either (a) such condition affects not more than five in 10,000 persons in the EU when the application is made, or (b) the product, without the benefits derived from the orphan status, would not generate sufficient return in the EU to justify the necessary investment; and (3) there exists no satisfactory method of diagnosis, prevention or treatment of the condition in question that has been authorized for marketing in the EU or, if such method exists, the product will be of significant benefit to those affected by that condition.

Orphan drug designation entitles a party to financial incentives, such as tax advantages and user fee waivers. Additionally, if a product that has orphan designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve

any other applications to market the same drug for the same disease or condition for seven years, except in certain circumstances, such as a showing of clinical superiority (i.e., another product is safer, more effective or makes a major contribution to patient care) over the product with orphan exclusivity or where the manufacturer is unable to assure sufficient product quantity. Competitors, however, may receive approval of different products for the same disease or condition for which the orphan product has exclusivity, or obtain approval for the same product but for a different disease or condition than that for which the orphan product has exclusivity. In the EU, orphan designation must be requested before submitting an MAA. An EU orphan drug designation entitles a party to incentives such as reduction of fees or fee waivers, protocol assistance, and access to the centralized procedure. Upon grant of a marketing authorization, orphan medicinal products are entitled to ten years of market exclusivity for the approved indication, which means that the competent authorities cannot accept another MAA, or grant a marketing authorization, or accept an application to extend a marketing authorization for a similar medicinal product for the same indication for a period of ten years. The period of market exclusivity is extended by two years for orphan medicinal products that have also complied with an agreed pediatric investigation plan, or PIP. No extension to any supplementary protection certificate can be granted on the basis of pediatric studies for orphan indications.

We have obtained orphan drug designation in the United States for LYT-200 for the treatment of pancreatic cancer, and we may also seek orphan drug designation for other of our therapeutic candidates in the future. We may not be the first to obtain regulatory approval of any therapeutic candidate for its orphan-designated disease or condition and may therefore not obtain orphan drug exclusivity. In addition, exclusive marketing rights in the United States may be limited if we seek approval for an disease or condition broader than the orphan-designated disease or condition or may be lost if the FDA later determines that the request for orphan designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. In the EU, the orphan exclusivity period may be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for which it received orphan drug destination, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity or where the prevalence of the condition has increased above the threshold. Additionally, a marketing authorization may be granted to a similar product for the same indication at any time if (i) the second applicant can establish that its product, although similar, is safer, more effective or otherwise clinically superior; (ii) the applicant consents to a second orphan medicinal product application; or (iii) the applicant cannot supply enough orphan medicinal product.

Orphan drug designation does not ensure that we will receive marketing exclusivity in a particular market, and we cannot assure you that any future application for orphan drug designation with respect to any other therapeutic candidate will be granted. Orphan drug designation neither shortens the development time or regulatory review time of a drug, nor gives the drug any advantage in the regulatory review or approval process.

If we or our Founded Entities are unable to successfully validate, develop and obtain regulatory clearance, certification, authorization or approval for companion diagnostic tests for any future drug candidates that require or would commercially benefit from such tests, or experience significant delays in doing so, we or our Founded Entities may not realize the full commercial potential of these drug candidates.

In connection with the clinical development of the therapeutic candidates within our Wholly Owned Pipeline or Founded Entities' therapeutic candidates for certain indications, we or our Founded Entities may work with collaborators to develop or obtain access to in vitro companion diagnostic tests to identify patient subsets within a disease category who may derive selective and meaningful benefit from our drug candidates. For example, we may elect to develop companion diagnostics for LYT-200. To be successful, we, our Founded Entities or our collaborators will need to address a number of scientific, technical, regulatory and logistical challenges. The FDA and comparable foreign regulatory authorities regulate in vitro companion diagnostics as medical devices and, under that regulatory framework, will likely require the conduct of clinical trials to demonstrate the safety and effectiveness of any diagnostics we or our Founded Entities may develop, which we expect will require separate regulatory clearance, certification, authorization or approval prior to commercialization. In addition, if safe and effective use of a therapeutic product depends on an in vitro companion diagnostic, the FDA generally will require approval, authorization or clearance of that diagnostic, known as a companion diagnostic, before or at the same time that the FDA approves the therapeutic product.

We or our Founded Entities may rely on third parties for the design, development and manufacture of companion diagnostic tests for our Wholly Owned Programs or our Founded Entities' therapeutic candidates that may require such tests. If we or our Founded Entities enter into such collaborative agreements, we will be dependent on the sustained cooperation and effort of our future collaborators in developing and obtaining approval for these companion diagnostics. It may be necessary to resolve issues such as selectivity/specificity, analytical validation, reproducibility, or clinical validation of companion diagnostics during the development and regulatory clearance, certification, authorization or approval processes. Moreover, even if data from preclinical studies and early clinical trials appear to support development of a companion diagnostic for a therapeutic candidate, data generated in later clinical trials may fail to support the analytical and clinical validation of the companion diagnostic. We, our Founded Entities and our future collaborators may encounter difficulties in developing, obtaining regulatory clearance, certification, authorization or approval for, manufacturing and commercializing companion diagnostics similar to those we face with respect to the therapeutic candidates within our Wholly Owned Pipeline themselves, including issues with achieving regulatory clearance, certification, authorization or approval, production of sufficient quantities at commercial scale and with appropriate quality standards, and in gaining market acceptance. If we or our Founded Entities are unable to successfully develop companion diagnostics for these therapeutic candidates, or experience delays in doing so, the development of these therapeutic candidates may be adversely affected, these therapeutic candidates may not obtain marketing approval, and we may not realize the full commercial potential of any of these therapeutic candidates that obtain marketing approval. As a result, our business, results of operations and financial condition could be materially harmed. In addition, a diagnostic company with whom we or our Founded Entities contract may decide to discontinue selling or manufacturing the companion diagnostic test that we anticipate using in connection with development and commercialization of our Wholly Owned Programs or our Founded Entities' therapeutic candidates or our relationship with such diagnostic company may otherwise terminate. We or our Founded Entities may not be able to enter into arrangements with another diagnostic company to obtain supplies of an alternative diagnostic test for use in connection with the development and commercialization of our Wholly Owned Programs or our Founded Entities' therapeutic candidates or do so on commercially reasonable terms, which could adversely affect and/or delay the development or commercialization of our or our Founded Entities' therapeutic candidates.

For any cleared, certified, authorized or approved therapeutic, we or our Founded Entities will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we or our Founded Entities may be subject to penalties if we or our Founded Entities fail to comply with regulatory requirements or experience unanticipated problems with the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates.

Gelesis' Plenity and Akili's EndeavorRx are, and any of the therapeutic candidates within our Wholly Owned Programs or our Founded Entities' therapeutic candidates that are cleared, certified, authorized or approved will be, subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies, and submission of safety, efficacy and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities.

Manufacturers and manufacturers' facilities are required to comply with extensive requirements imposed by the FDA, the EMA and other comparable foreign regulatory authorities, including ensuring that quality control and manufacturing procedures conform to current good manufacturing practices, or cGMP, or similar foreign regulations. As such, we and our CMOs are subject to continual review and inspections to assess compliance with cGMP, or similar foreign requirements and adherence to commitments made in any marketing authorization, and any future 510(k), de novo classification, certification, PMA, NDA, BLA or marketing authorization application, or MAA, or equivalent application. We and our CMOs are also subject to requirements pertaining to the registration of our manufacturing facilities and the listing of our and our Founded Entities' therapeutics and therapeutic candidates with the FDA; continued complaint, adverse event and malfunction reporting; corrections and removals reporting; and labeling and promotional requirements. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production and quality control. Gelesis' and Akili's marketing authorizations and certifications for Plenity and EndeavorRx, respectively, are and any regulatory clearances, certification, authorization or approvals that we may receive for the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates will be, subject to limitations on the cleared, certified, authorized or approved indicated uses for which the therapeutic may be marketed and promoted

or to the conditions of approval. Any regulatory clearances, certifications, authorizations or approvals that we may receive for the therapeutic candidates within our Wholly Owned Pipeline may contain requirements for potentially costly post-marketing testing, such as Phase 4 clinical trials and surveillance to monitor the safety and efficacy of a drug therapeutic. We are required to report certain adverse reactions and production problems, if any, to the FDA and other comparable foreign regulatory authorities. Any new legislation addressing drug or medical safety issues could result in delays in therapeutic development or commercialization, or increased costs to assure compliance.

The FDA and other agencies, including the U.S. Department of Justice, and for certain therapeutics, the Federal Trade Commission, closely regulate and monitor the marketing, labeling, advertising and promotion of therapeutics to ensure that they are manufactured, marketed and distributed only for the cleared, certified, authorized or approved indications and in accordance with the provisions of the cleared, certified, authorized or approved labeling. We are, and will be, required to comply with requirements concerning advertising and promotion for the therapeutic candidates within our Wholly Owned Pipeline, if cleared, certified, authorized or approved. For example, promotional communications with respect to prescription drugs and medical devices are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the therapeutic's label or labeling. We may not promote our therapeutics for indications or uses for which they do not have approval, certification, authorization or clearance.

The holder of a cleared 510(k), de novo classification, certification or an approved NDA, BLA, PMA, MAA or equivalent marketing authorization must submit new or supplemental applications and obtain clearance, authorization or approval for certain changes to the approved therapeutic, therapeutic labeling, or manufacturing process. For example, any modification to Plenity or EndeavorRx that could significantly affect its safety or effectiveness or that would constitute a major change in its intended use could require a new 510(k) clearance, de novo classification, certification or approval of PMA application. Delays in obtaining required clearances, certifications or approvals would harm our ability to introduce new or enhanced therapeutic in a timely manner, which in turn would harm our or our Founded Entities' future growth. Failure to submit a new or supplemental application and to obtain approval or certification for certain changes prior to marketing the modified therapeutic may require a recall or to stop selling or distributing the marketed therapeutic as modified, and may lead to significant enforcement actions.

Subject to the transitional provisions and in order to sell our products in EU member states, our products must comply with the general safety and performance requirements set forth in the new EU Medical Device Regulation (EU) 2017/745, which repeals and replaces the Medical Devices Directive. Compliance with these requirements is a prerequisite to be able to affix the European Conformity ("CE") mark to our products, without which they cannot be marketed or sold in the EU. All medical devices placed on the market in the EU must meet the general safety and performance requirements laid down in Annex I to the EU Medical Devices Regulation (EU) 2017/745 including the requirement that a medical device must be designed and manufactured in such a way that, during normal conditions of use, it is suitable for its intended purpose. Medical devices must be safe and effective and must not compromise the clinical condition or safety of patients, or the safety and health of users and – where applicable – other persons, provided that any risks which may be associated with their use constitute acceptable risks when weighed against the benefits to the patient and are compatible with a high level of protection of health and safety, taking into account the generally acknowledged state of the art. To demonstrate compliance with the general safety and performance requirements, we or our Founded Entities must undergo a conformity assessment procedure, which varies according to the type of medical device and its (risk) classification. Except for low risk medical devices (Class I), where the manufacturer can self-assess the conformity of its products with the general safety and performance requirements (except for any parts which relate to sterility, metrology or reuse aspects), a conformity assessment procedure requires the intervention of a notified body. The notified body would typically audit and examine the technical file and the quality system for the manufacture, design and final inspection of our devices. If satisfied that the relevant product conforms to the relevant general safety and performance requirements, the notified body issues a certificate of conformity, which the manufacturer uses as a basis for its own declaration of conformity. The manufacturer may then apply the CE mark to the device, which allows the device to be placed on the market throughout the EU. If we fail to comply with applicable laws and regulations, we would be unable to affix the CE mark to our products, which would prevent us from selling them within the EU. In June 2020, Gelesis received a certification for Plenity as a class III medical device indicated for weight loss in overweight and obese adults with a Body Mass Index of 25-40 kg/m2, when used in conjunction with diet and exercise. Also in June 2020, Akili received a certification for EndeavorRx as a prescription-only digital therapeutic software intended for the treatment of attention and inhibitory control deficits in paediatric patients with ADHD.

We or our Founded Entities could also be required to conduct post-marketing clinical trials to verify the safety and efficacy of our or our Founded Entities' therapeutics in general or in specific patient subsets. If original marketing approval of a drug or biologic was obtained via an accelerated approval pathway, we or our Founded Entities could be required to conduct a successful post-marketing clinical trial to confirm clinical benefit for our or our Founded Entities' therapeutics. An unsuccessful post-marketing study or failure to complete such a study could result in the withdrawal of marketing clearance, certification, authorization or approval.

If a regulatory agency discovers previously unknown problems with a therapeutic, such as AEs of unanticipated severity or frequency, or problems with the facility where the therapeutic is manufactured, or disagrees with the promotion, marketing or labeling of a therapeutic, such regulatory agency may impose restrictions on that therapeutic or us, including requiring withdrawal of the therapeutic from the market. If we or our Founded Entities fail to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may, among other things:

- issue warning letters that would result in adverse publicity;
- impose civil or criminal penalties;
- suspend or withdraw regulatory approvals or certifications;
- suspend any of our or our Founded Entities' ongoing clinical trials;
- refuse to approve pending applications or supplements to approved applications submitted by us or our Founded Entities;
- impose restrictions on our operations, including closing our CMOs' facilities;
- seize or detain therapeutics; or
- require a recall.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from our therapeutics. If regulatory sanctions are applied or if regulatory clearance, authorization or approval is withdrawn, the value of our company and our operating results will be adversely affected.

The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory clearance, certification, authorization or approval of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates. For example, on February 23, 2022, the FDA issued a proposed rule to amend the Quality System Regulation, or QSR, which establishes cGMP requirements for medical device manufacturers, to align more closely with the International Organization for Standardization standards. This proposal has not yet been finalized or adopted. Accordingly, it is unclear the extent to which this or any other proposals, if adopted, could impose additional or different regulatory requirements on us or our Founded Entities that could increase the costs of compliance or otherwise create competition that may negatively affect our business.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If these legislative or administrative actions impose constraints on the FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted. Outside of the United States, for instance, the EU pharmaceutical legislation is currently undergoing a complete review process, in the context of the Pharmaceutical Strategy for Europe initiative, launched by the European Commission in November 2020. The European Commission's proposal for revision of several legislative instruments related to medicinal products (potentially revising the duration of regulatory exclusivity, eligibility for expedited pathways, etc.) is currently expected during the first quarter of 2023. The proposed revisions, once they are agreed and adopted by the European Parliament and European Council (not expected before the end of 2024 or early 2025) may have a significant impact on the biopharmaceutical industry in the long term.

The FDA and other regulatory agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses.

If, for any of our Wholly Owned Programs that are cleared or approved, we are found to have improperly promoted off-label uses of those therapeutics, we may become subject to significant liability. The FDA and other regulatory agencies strictly regulate the promotional claims

that may be made about prescription therapeutics, if cleared, authorized or approved. In particular, while the FDA permits the dissemination of truthful and non-misleading information about a cleared, authorized or approved therapeutic, a manufacturer may not promote a therapeutic for uses that are not cleared, authorized or approved by the FDA or such other regulatory agencies as reflected in the therapeutic's cleared, authorized or approved labeling. If we are found to have promoted such off-label uses, we may become subject to significant liability. The federal government has levied large civil and criminal fines against companies for alleged improper promotion of off-label use and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees, corporate integrity agreements or permanent injunctions under which specified promotional conduct must be changed or curtailed. If we cannot successfully manage the promotion of the therapeutic candidates within our Wholly Owned Pipeline, if cleared, authorized or approved, we could become subject to significant liability, which would materially adversely affect our business and financial condition.

Certain of our product candidates may be regulated as controlled substances, the making, use, sale, importation, exportation, and distribution of which are subject to significant regulation by the U.S. Drug Enforcement Administration, or DEA, and other regulatory agencies.

We expect that certain of our product candidates, if approved, will be regulated as controlled substances, which are subject to state, federal, and foreign laws and regulations regarding their manufacture, use, sale, importation, exportation, and distribution. Among other things, controlled substances are regulated under the federal Controlled Substances Act of 1970, or CSA, and regulations of the DEA.

The DEA regulates controlled substances as Schedule I, II, III, IV or V substances. Schedule I substances by definition have no established medicinal use and may not be marketed or sold in the United States. A pharmaceutical product may be listed as Schedule II, III, IV or V, with Schedule II substances considered to present the highest risk of abuse and Schedule V substances the lowest relative risk of abuse among such substances. Certain of our other product candidates contain Schedule IV substances, which subjects such product candidates to additional restrictions regarding their manufacture, shipment, storage, sale and use, depending on the scheduling of the active ingredients, and may limit the commercial potential of any of our product candidates, if approved.

Various states also independently regulate controlled substances. Though state controlled substances laws often mirror federal law, because the states are separate jurisdictions, they may separately schedule drugs as well. While some states automatically schedule a drug when the DEA does so, in other states there must be rulemaking or a legislative action. State scheduling may delay commercial sale of any controlled substance drug product for which we obtain federal regulatory approval and adverse scheduling could impair the commercial attractiveness of such product. We or our collaborators must also obtain separate state registrations in order to be able to obtain, handle and distribute controlled substances for clinical trials or commercial sale, and failure to meet applicable regulatory requirements could lead to enforcement and sanctions from the states in addition to those from the DEA or otherwise arising under federal law.

For any of our products or product candidates classified as controlled substances, we and our suppliers, manufacturers, contractors, customers and distributors are required to obtain and maintain applicable registrations from state, federal and foreign law enforcement and regulatory agencies and comply with state, federal and foreign laws and regulations regarding the manufacture, use, sale, importation, exportation and distribution of controlled substances. There is a risk that DEA regulations may limit the supply of the compounds used in clinical trials for our product candidates, and, in the future, the ability to produce and distribute our products in the volume needed to meet commercial demand. Regulations associated with controlled substances govern manufacturing, labeling, packaging, testing, dispensing, production and procurement quotas, recordkeeping, reporting, handling, shipment and disposal. These regulations increase the personnel needs and the expense associated with development and commercialization of product candidates including controlled substances. The DEA, and some states, conduct periodic inspections of registered establishments that handle controlled substances. Failure to obtain and maintain required registrations or comply with any applicable regulations could delay or preclude us from developing and commercializing our product candidates containing controlled substances and subject us to enforcement action. The DEA may seek civil penalties, refuse to renew necessary registrations or initiate proceedings to revoke those registrations. In some circumstances, violations could lead to criminal proceedings. Because of their restrictive nature, these regulations could limit commercialization of any of our products or product candidates that are classified as controlled substances.

The EU legislation does not establish different classes of narcotic or psychotropic substances. However, the United Nations, or UN, Single Convention on Narcotic Drugs of 1961 and the UN Convention on Psychotropic Substances of 1971, or the UN Conventions, codify internationally applicable control measures to ensure the availability of narcotic drugs and psychotropic substances for medical and scientific purposes. The individual EU member states are all signatories to these UN Conventions. All signatories have a dual obligation to ensure that these substances are available for medical purposes and to protect populations against abuse and dependence. The UN Conventions regulate narcotic drugs and psychotropic substances as Schedule I, II, III, IV substances with Schedule II substances presenting the lowest relative risk of abuse among such substances and Schedule I and IV substances considered to present the highest risk of abuse.

The UN Conventions require signatories to require all persons manufacturing, trading (including exporting and importing) or distributing controlled substances to obtain a license from the relevant authority. Each individual export or import of a controlled substance must also be subject to an authorization. The obligations provided in the UN Conventions and additional requirements are implemented at national level and requirements may vary from one member state to another. In order to develop and commercialize our products in the EU, we need to comply with the national requirements related to controlled substances which is costly and may affect our development plans in the EU.

Risks Related to Manufacturing our Therapeutic Candidates or Those of our Founded Entities

Certain of the therapeutic candidates being developed by us or our Founded Entities are novel, complex and difficult to manufacture. We could experience manufacturing problems that result in delays in our development or commercialization programs or otherwise harm our business.

The manufacturing processes our CMOs use to produce our and our Founded Entities' therapeutic candidates are complex and in certain cases novel. Several factors could cause production interruptions, including inability to develop novel manufacturing processes, equipment malfunctions, facility contamination, raw material shortages or contamination, natural disasters, disruption in utility services, human error or disruptions in the operations of our suppliers, including acquisition of the supplier by a third party or declaration of bankruptcy. For example, Vedanta has its own proprietary cGMP manufacturing facilities for certain therapeutic candidates, including VE202, VE303, VE800 and VE416. Creating defined consortia of live microbial therapeutics for these therapeutic candidates is inherently complex, and therefore can be vulnerable to delays. The expertise required to manufacture these therapeutic candidates is unique to Vedanta, and as a result, it would be difficult and time consuming to find an alternative CMO. In addition, manufacturing of clinical supply for certain of our therapeutic candidates is dependent on third party CMOs, and manufacturing such therapeutic candidates is inherently complex.

Some of our and our Founded Entities' therapeutic candidates include biologics, some of which have physical and chemical properties that cannot be fully characterized. As a result, assays of the finished product may not be sufficient to ensure that the therapeutic candidate is consistent from lot-to-lot or will perform in the intended manner. Accordingly, our CMOs must employ multiple steps to control the manufacturing process to assure that the process is reproducible and the therapeutic candidate is made strictly and consistently in compliance with the process. Problems with the manufacturing process, even minor deviations from the normal process, could result in therapeutic defects or manufacturing failures that result in lot failures, therapeutic recalls, product liability claims or insufficient inventory to conduct clinical trials or supply commercial markets. We or our Founded Entities may encounter problems achieving adequate quantities and quality of clinical-grade materials that meet the FDA, the EMA or other applicable standards or specifications with consistent and acceptable production yields and costs.

In addition, the FDA and other foreign regulatory authorities may require us or our Founded Entities to submit samples of any lot of any approved therapeutic together with the protocols showing the results of applicable tests at any time. Under some circumstances, the FDA or other foreign regulatory authorities may require that we or our Founded Entities not distribute a lot until the agency authorizes its release. Slight deviations in the manufacturing process, including those affecting quality attributes and stability, may result in unacceptable changes in the therapeutic that could result in lot failures or therapeutic recalls. Lot failures or therapeutic recalls could cause us or our Founded Entities to delay therapeutic launches or clinical trials, which could be costly to us and otherwise harm our business, financial condition, results of operations and prospects.

Our CMOs also may encounter problems hiring and retaining the experienced scientific, quality assurance, quality-control and manufacturing personnel needed to operate our manufacturing processes, which could result in delays in production or difficulties in maintaining compliance with applicable regulatory requirements.

Any problems in our CMOs' manufacturing process or facilities could result in delays in planned clinical trials and increased costs, and could make us a less attractive collaborator for potential partners, including larger biotechnology companies and academic research institutions, which could limit access to additional attractive development programs. Problems in our manufacturing process could restrict our ability to meet potential future market demand for therapeutics.

We do not currently have nor do we plan to acquire the infrastructure or capability internally to manufacture our clinical drug supplies for use in the conduct of our clinical trials, and we lack the resources and the capability to manufacture the therapeutic candidates within our Wholly Owned Pipeline on a clinical or commercial scale. Instead, we rely on our third-party manufacturing partners for the production of the active pharmaceutical ingredient, or API, and drug formulation. The facilities used by our third-party manufacturers to manufacture our therapeutic candidates that we may develop must be successfully inspected by the applicable regulatory authorities, including the FDA, after we submit any NDA or BLA to the FDA.

We are currently completely dependent on our third-party manufacturers for the production of certain of our therapeutic candidates in accordance with cGMPs or similar foreign requirements, which include, among other things, quality control, quality assurance and the maintenance of records and documentation.

Although we have entered into agreements for the manufacture of clinical supplies for such therapeutic candidates, our third-party manufacturers may not perform as agreed, may be unable to comply with these cGMP or similar foreign requirements and with FDA, state and foreign regulatory requirements or may terminate its agreement with us. If any of our third-party manufacturers cannot successfully manufacture material that conforms to our specifications and the applicable regulatory authorities' strict regulatory requirements, pass regulatory inspection or maintain a compliance status acceptable to the FDA or state or foreign regulatory authorities, our NDAs, BLAs or MAAs will not be approved. In addition, although we are ultimately responsible for ensuring therapeutic quality, we have no direct day-to-day control over our third-party manufacturers' ability to maintain adequate quality control, quality assurance and qualified personnel. If our third-party manufacturers are unable to satisfy the regulatory requirements for the manufacture of our therapeutics, if approved, or if our suppliers or third-party manufacturers decide they no longer want to manufacture our therapeutics, we will need to find alternative manufacturing facilities, which would be time-consuming and significantly impact our ability to develop, obtain regulatory approval for or market our therapeutics, if approved. If we are required to change contract manufacturers for any reason, we will be required to show that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations. We will also need to verify, such as through a manufacturing comparability study, that any new manufacturing process or procedure will produce our therapeutic candidate according to specifications previously submitted to the FDA or another regulatory authority. We might be unable to identify manufacturers for long-term clinical and commercial supply on acceptable terms or at all. Manufacturers are subject to ongoing periodic announced and unannounced inspection by the FDA and other governmental authorities to ensure compliance with government regulations. As a result, our third-party manufacturers may be subject to increased scrutiny.

If we were to experience an unexpected loss of supply for clinical development or commercialization, we could experience delays in our ongoing or planned clinical trials as our third-party manufacturers would need to manufacture additional quantities of our clinical and commercial supply and we may not be able to provide sufficient lead time to enable our third-party manufacturers to schedule a manufacturing slot, or to produce the necessary replacement quantities. This could result in delays in progressing our clinical development activities and achieving regulatory approval for our therapeutics, which could materially harm our business.

The manufacture of pharmaceutical therapeutics is complex and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. We and our contract manufacturers must comply with cGMP or similar foreign regulations and guidelines. Manufacturers of pharmaceutical therapeutics often encounter difficulties in production, particularly in scaling up and validating initial production. These problems include difficulties with production costs and yields, quality control, including stability of the product, quality assurance testing, operator error, shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. Furthermore, if microbial, viral or other contaminations are discovered in our therapeutics or in the manufacturing facilities in which our therapeutics, if approved, are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. We cannot assure you that any stability or other issues relating to the manufacture of any of our therapeutics will not occur in the future. Additionally, our manufacturers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or unstable political environments. If our manufacturers were to encounter any of these difficulties, or otherwise fail to comply with their contractual obligations, our ability to provide any therapeutic candidates to patients in clinical trials would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to commence new clinical trials at additional expense or terminate clinical trials completely.

Any adverse developments affecting clinical or commercial manufacturing of our therapeutics may result in shipment delays, inventory shortages, lot failures, therapeutic withdrawals or recalls, or other interruptions in the supply of our therapeutics or therapeutic candidates. We may also have to take inventory write-offs and incur other charges and expenses for therapeutics or therapeutic candidates that fail to meet specifications, undertake costly remediation efforts or seek more costly manufacturing alternatives. Accordingly, failures or difficulties faced at any level of our supply chain could materially adversely affect our business and delay or impede the development and commercialization of any of our therapeutics or therapeutic candidates and could have a material adverse effect on our business, prospects, financial condition and results of operations.

Our or our Founded Entities' therapeutics must be manufactured in accordance with federal, state and international regulations, and we or our Founded Entities could be forced to recall our or our Founded Entities' medical devices or terminate production if we or our Founded Entities fail to comply with these regulations.

The methods used in, and the facilities used for, the manufacture of medical device therapeutics of our Founded Entities, including Gelesis, Akili, Follica and Sonde, must comply with the FDA's cGMPs for medical devices, known as the QSR, which is a complex regulatory scheme that covers the procedures and documentation of, among other requirements, the design, testing, validation, verification, complaint handling, production, process controls, quality assurance, labeling, supplier evaluation, packaging, handling, storage, distribution, installation, servicing and shipping of medical devices. Furthermore, we and our Founded Entities are required to verify that our suppliers maintain facilities, procedures and operations that comply with our quality standards and applicable regulatory requirements. The FDA enforces the QSR through, among other oversight methods, periodic announced or unannounced inspections of medical device manufacturing facilities, which may include the facilities of subcontractors, suppliers or CMOs. Our and our Founded Entities' therapeutics are also subject to similar state regulations and various laws and regulations of foreign countries governing manufacturing.

Our or our Founded Entities' third-party manufacturers may not take the necessary steps to comply with applicable regulations or our or our Founded Entities' specifications, which could cause delays in the delivery of our therapeutics. In addition, failure to comply with applicable FDA or comparable foreign requirements or later discovery of previously unknown problems with our or our Founded Entities' therapeutics or manufacturing processes could result in, among other things: warning letters or untitled letters; civil penalties; suspension or withdrawal of approvals or clearances; seizures or recalls of our or our Founded Entities' therapeutics; total or partial suspension of production or distribution; administrative or judicially imposed sanctions; the FDA's or foreign regulatory authorities' refusal to grant pending or future clearances or approvals for our or our Founded Entities' therapeutics; clinical holds; refusal to permit the import or export of our or our Founded Entities' therapeutics; and criminal prosecution of us or our employees. Any of these actions could significantly and negatively impact supply of our or our Founded Entities' therapeutics. If any of these events occurs, our reputation could be harmed, we could be exposed to product liability claims and we or our Founded Entities could lose customers and suffer reduced revenue and increased costs.

Risks Related to Commercialization

If, in the future, we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market any therapeutic candidates we may develop, we may not be successful in commercializing those therapeutic candidates if and when they are approved.

We do not have a sales or marketing infrastructure or the capabilities for sale, marketing, or distribution of pharmaceutical therapeutics. To achieve commercial success for any approved therapeutic for which we retain

sales and marketing responsibilities, we must either develop a sales and marketing organization or outsource these functions to third parties. In the future, we may choose to build a focused sales, marketing, and commercial support infrastructure to market and sell the therapeutic candidates within our Wholly Owned Pipeline, if and when they are approved. We may also elect to enter into collaborations or strategic partnerships with third parties to engage in commercialization activities with respect to selected therapeutic candidates, indications or geographic territories, including territories outside the United States, although there is no guarantee we will be able to enter into these arrangements even if the intent is to do so.

There are risks involved with both establishing our own commercial capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force or reimbursement specialists is expensive and time consuming and could delay any therapeutic launch. If the commercial launch of a therapeutic candidate for which we recruit a sales force and establish marketing and other commercialization capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition commercialization personnel.

Factors that may inhibit our efforts to commercialize any approved therapeutic on our own include:

- the inability to recruit and retain adequate numbers of effective sales, marketing, reimbursement, customer service, medical affairs, and other support personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future approved therapeutics;
- the inability of reimbursement professionals to negotiate arrangements for formulary access, reimbursement, and other acceptance by payors;
- the inability to price therapeutics at a sufficient price point to ensure an adequate and attractive level of profitability;
- restricted or closed distribution channels that make it difficult to distribute our therapeutics to segments of the patient population;
- the lack of complementary therapeutics to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive therapeutic lines; and
- unforeseen costs and expenses associated with creating an independent commercialization organization.

If we enter into arrangements with third parties to perform sales, marketing, commercial support, and distribution services, our therapeutic revenue or the profitability of therapeutic revenue may be lower than if we were to market and sell any therapeutics we may develop internally. In addition, we may not be successful in entering into arrangements with third parties to commercialize the therapeutic candidates within our Wholly Owned Pipeline or may be unable to do so on terms that are favorable to us or them. We may have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our therapeutics effectively or may expose us to legal and regulatory risk by not adhering to regulatory requirements and restrictions governing the sale and promotion of prescription drug therapeutics, including those restricting off-label promotion. If we do not establish commercialization capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing the therapeutic candidates within our Wholly Owned Pipeline, if approved.

Even if any current or future therapeutic candidate of ours receives regulatory clearance or approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success, in which case we may not generate significant revenues or become profitable.

We have never commercialized a therapeutic, and even if any current or future therapeutic candidate of ours is approved by the appropriate regulatory authorities for marketing and sale, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. Physicians may be reluctant to take their patients off their current medications and switch their treatment regimen. Further, patients often acclimate to the treatment regime that they are currently taking and do not want to switch unless their physicians recommend switching therapeutics or they are required to switch due to lack of coverage and adequate reimbursement. In addition, even if we are able to demonstrate our Wholly Owned Programs' safety and efficacy to the FDA and other regulators, safety or efficacy concerns in the medical community may hinder market acceptance.

Efforts to educate the medical community and third-party payors on the benefits of the therapeutic candidates within our Wholly Owned Pipeline may require significant resources, including management time and financial resources, and may not be successful. The degree of market acceptance of the therapeutic candidates within our Wholly Owned Pipeline, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety of the therapeutic;
- the potential advantages of the therapeutic compared to competitive therapies;
- the prevalence and severity of any side effects;
- whether the therapeutic is designated under physician treatment guidelines as a first-, second- or third-line therapy;
- our ability, or the ability of any future collaborators, to offer the therapeutic for sale at competitive prices;
- the therapeutic's convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try, and of physicians to prescribe, the therapeutic;
- limitations or warnings, including distribution or use restrictions contained in the therapeutic's approved labelling;
- the strength of sales, marketing and distribution support;
- changes in the standard of care for the targeted indications for the therapeutic; and
- availability and adequacy of coverage and reimbursement from government payors, managed care plans and other third-party payors.

Sales of medical therapeutics also depend on the willingness of physicians to prescribe the treatment, which is likely to be based on a determination by these physicians that the therapeutics are safe, therapeutically effective and cost effective. In addition, the inclusion or exclusion of therapeutics from treatment guidelines established by various physician groups and the viewpoints of influential physicians can affect the willingness of other physicians to prescribe the treatment. We cannot predict whether physicians, physicians' organizations, hospitals, other healthcare providers, government agencies or private insurers will determine that our therapeutic is safe, therapeutically effective and cost effective as compared with competing treatments. If any therapeutic candidates we develop do not achieve an adequate level of acceptance, we may not generate significant therapeutic revenue, and we may not become profitable.

Any failure by any current or future therapeutic candidate of ours that obtains regulatory approval to achieve market acceptance or commercial success would adversely affect our business prospects. In addition, any negative perception of one of our Founded Entities or any therapeutic candidates marketed or commercialized by them may adversely affect our reputation in the marketplace or among industry participants and our business prospects.

The incidence and prevalence for target patient populations of our therapeutic candidates have not been established with precision. If the market opportunities for our therapeutic candidates are smaller than we estimate, or if any approval that we obtain is based on a narrower definition of the patient population, our revenue and ability to achieve profitability may be materially adversely affected.

The precise incidence and prevalence for all the conditions we aim to address with our therapeutic candidates are unknown and cannot be precisely determined. Our projections of both the number of people who have these diseases, as well as the subset of people with these diseases who have the potential to benefit from treatment with our therapeutic candidates, are based on beliefs and estimates. These estimates have been derived from a variety of sources, including the scientific literature, surveys of clinics, patient foundations or market research, and may prove to be incorrect. Further, new trials may change the estimated incidence or prevalence of these diseases.

The total addressable market across all of our therapeutic candidates will ultimately depend upon, among other things, the diagnosis criteria included in the final label for each of our therapeutic candidates approved for sale for these indications, acceptance by the medical community and patient access, drug pricing and reimbursement. The number of patients in the United States and other major markets and elsewhere may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our products or new patients may become increasingly difficult to identify or gain access to, all of which would adversely affect our results of operations and our business. Further, even if we obtain significant market share for our therapeutic candidates, if the potential target populations are very small, we may never achieve profitability despite obtaining such significant market share.

The insurance coverage and reimbursement status of newly-approved therapeutics is uncertain. The therapeutic candidates within our Wholly Owned Pipeline may become subject to unfavorable pricing regulations, third-party coverage and reimbursement practices, or healthcare reform initiatives, which would harm our business. Failure to obtain or maintain coverage and adequate reimbursement for new or current therapeutics could limit our ability to market those therapeutics and decrease our ability to generate revenue.

The regulations that govern marketing approvals, pricing, coverage, and reimbursement for new drugs and other medical therapeutics vary widely from country to country. In the United States, healthcare reform legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a therapeutic before it can be marketed. In many countries, the pricing review period begins after marketing or therapeutic licensing approval is granted. In some foreign markets, pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a therapeutic in a particular country, but then be subject to price regulations that delay our commercial launch of the therapeutic, possibly for lengthy time periods, and negatively impact the revenue we are able to generate from the sale of the therapeutic in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more therapeutics or therapeutic candidates, even if any therapeutic candidates we may develop obtain marketing approval.

Our ability to successfully commercialize our therapeutics and therapeutic candidates also will depend in part on the extent to which coverage and adequate reimbursement for these therapeutics and related treatments will be available from government health administration authorities, private health insurers, and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. The availability of coverage and extent of reimbursement by governmental and private payors is essential for most patients to be able to afford treatments such as gene therapy therapeutics. Sales of these or other therapeutic candidates that we may identify will depend substantially, both domestically and abroad, on the extent to which the costs of the therapeutic candidates within our Wholly Owned Pipeline will be paid by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or reimbursed by government health administration authorities, private health coverage insurers and other third-party payors. If coverage and adequate reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize our therapeutics or therapeutic candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize a sufficient return on our investment. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. In many countries, the prices of medical therapeutics are subject to varying price control mechanisms as part of national health systems. In general, the prices of medicines under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for medicines, but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for the therapeutic candidates within our Wholly Owned Pipeline. Accordingly, in markets outside the United States, the reimbursement for therapeutics may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenues and profits.

There is also significant uncertainty related to the insurance coverage and reimbursement of newly approved therapeutics and coverage may be more limited than the purposes for which the medicine is approved by the FDA or comparable foreign regulatory authorities. In the United States, the principal decisions about reimbursement for new medicines are typically made by the Centers for Medicare & Medicaid Services, or CMS, an agency within the U.S. Department of Health and Human Services. CMS decides whether and to what extent a new medicine will be covered and reimbursed under Medicare and private payors tend to follow CMS to a substantial degree. No uniform policy of coverage and reimbursement for therapeutics exists among third-party payors and coverage and reimbursement levels for therapeutics can differ significantly from payor to payor. As a result, the coverage determination process is often a time consuming and costly process that may require us to provide scientific and clinical support for the use of our therapeutics to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. It is difficult to predict what CMS will decide with respect to reimbursement for fundamentally novel therapeutics such as ours, as there is no body of established practices and precedents for these new therapeutics. Reimbursement agencies in Europe may be more conservative than CMS. For example, a number of cancer drugs have been approved for reimbursement in the United States and have not been approved for reimbursement in certain European countries. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale, and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Our inability to promptly obtain coverage and profitable payment rates from both government-funded and private payors for any approved therapeutics we may develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize therapeutic candidates, and our overall financial condition. As noted above, in the United States we plan to have various programs to help patients afford our therapeutics, including patient assistance programs and co-pay coupon programs for eligible patients.

Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Our inability to promptly obtain coverage and profitable reimbursement rates third-party payors for any approved therapeutics that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize therapeutics and our overall financial condition.

Increasingly, third-party payors are requiring that pharmaceutical companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical therapeutics. We cannot be sure that reimbursement will be available for any therapeutic candidate that we commercialize and, if reimbursement is available, the level of reimbursement. Reimbursement may impact the demand for, or the price of, any therapeutic or therapeutic candidate for which we obtain marketing approval. In order to obtain reimbursement, physicians may need to show that patients have superior treatment outcomes with our therapeutics compared to standard of care drugs, including lower-priced generic versions of standard of care drugs. We expect to experience pricing pressures in connection with the sale of any of the therapeutic candidates within our Wholly Owned Pipeline, due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the entry of new therapeutics. Additionally, we may develop companion diagnostic tests for use with our Wholly Owned Programs or our Founded Entities' therapeutic candidates. We, or our Founded Entities or our collaborators may be required to obtain coverage and reimbursement for these tests separate and apart from the coverage and reimbursement we seek for our Wholly Owned Programs or our Founded Entities' therapeutic candidates, once approved. Even if we or our Founded Entities obtain regulatory approval or clearance for such companion diagnostics, there is significant uncertainty regarding our ability to obtain coverage and adequate reimbursement for the same reasons applicable to our Wholly Owned Programs or our Founded Entities' therapeutic candidates. Medicare reimbursement methodologies, whether under Part A, Part B, or clinical laboratory fee schedule may be amended from time to time, and we cannot predict what effect any change to these methodologies would have on any therapeutic candidate or companion diagnostic for which we receive approval.

We have no sales, distribution, or marketing capabilities, and may invest significant financial and management resources to establish these capabilities. If we are unable to establish such capabilities or enter into agreements with third parties to market and sell our future therapeutics, if approved, we may be unable to generate any revenues.

Given our stage of development, we have no sales, distribution, or marketing capabilities. To successfully commercialize any therapeutics that may result from our development programs, we will need to develop sales and marketing capabilities in the United States, Europe, and other regions, either on our own or with others. We may enter into strategic alliances with other entities to utilize their mature marketing and distribution capabilities, but we may be unable to enter into marketing agreements on favorable terms, if at all. If our future strategic collaborators do not commit sufficient resources to commercialize our future therapeutics, if any, and we are unable to develop the necessary marketing capabilities on our own, we may be unable to generate sufficient therapeutic revenue to sustain our business. We will be competing with many companies that currently have extensive and well-funded marketing and sales operations. Without a significant internal team or the support of a third party to perform marketing and sales functions, we may be unable to compete successfully against these more established companies.

Risks Related to Compliance with Healthcare Laws

If we fail to comply with healthcare laws, we could face substantial penalties and our business, operations and financial conditions could be adversely affected.

Healthcare providers, physicians and third-party payors in the United States and elsewhere play a primary role in the recommendation and prescription of pharmaceutical therapeutics. Arrangements with healthcare providers, third-party payors and customers can expose pharmaceutical manufacturers to broadly applicable fraud and abuse and other healthcare laws and regulations, including, without limitation, the federal Anti-Kickback Statute and the federal False Claims Act, or the FCA, which may constrain the business or financial arrangements and relationships through which such companies sell, market and distribute pharmaceutical therapeutics. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of ownership, pricing, discounting, marketing and promotion, structuring and commission(s), certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials. The applicable federal and state healthcare laws and regulations laws that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease, order or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. Violations are subject to civil and criminal fines and penalties for each violation, plus up to three times the remuneration involved, imprisonment of up to ten years, and exclusion from government healthcare programs. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers, on the one hand, and prescribers, purchasers and formulary managers, on the other;
- federal civil and criminal false claims laws and civil monetary penalty laws, including the False Claims Act, which impose criminal and civil penalties, including through civil "qui tam" or "whistleblower" actions, against individuals or entities for, among other things, knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other federal health care programs that are false or fraudulent; knowingly making or causing a false statement material to a false or fraudulent claim or an obligation to pay money to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing such an obligation. Manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims. The government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA. The FCA also permits a private individual acting as a "whistleblower" to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity can be found guilty of violating HIPAA without actual knowledge of the statute or specific intent to violate it;
- the federal civil monetary penalties laws, which impose civil fines for, among other things, the offering or transfer or remuneration to a Medicare or state healthcare program beneficiary if the person knows or should know it is likely to influence the beneficiary's selection of a particular provider, practitioner, or supplier of services reimbursable by Medicare or a state healthcare program, unless an exception applies;
- the federal Physician Payments Sunshine Act, created under the ACA, and its implementing regulations, which require manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to the U.S. Department of Health and Human Services, or HHS, under the Open Payments Program, information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician providers (physician assistants, nurse practitioners, clinical nurse specialists, certified nurse anesthetists, anesthesiologist assistants and certified nurse midwives), and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers;
- federal price reporting laws, which require manufacturers to calculate and report complex pricing metrics to government programs, where such reported prices may be used in the calculation of reimbursement and/or discounts on approved therapeutics; and
- analogous state and foreign laws and regulations, such as state and foreign anti-kickback, false claims, consumer protection and unfair competition laws which may apply to pharmaceutical business practices, including but not limited to, research, distribution, sales and marketing arrangements as well as submitting claims involving healthcare items or services reimbursed by any third-party payer, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government that otherwise restricts payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to file reports with states regarding pricing and marketing information, such as the tracking and reporting of gifts, compensations and other remuneration and items of value provided to healthcare professionals and entities; and state and local laws requiring the registration of pharmaceutical sales representatives.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available, it is possible that some of our business activities, including compensation of physicians with stock or stock options, could, despite efforts to comply, be subject to challenge under one or more of such laws. Additionally, FDA or foreign regulators may not agree that we have mitigated any risk of bias in our clinical trials due to payments or equity interests provided to investigators or institutions which could limit a regulator's acceptance of those clinical trial data in support of a marketing application. Moreover, efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, damages, disgorgement, monetary fines, exclusion from participation in Medicare, Medicaid and other federal healthcare programs, integrity and oversight agreements to resolve allegations of non-compliance, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of the therapeutic candidates within our Wholly Owned Pipeline outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

Failure to comply with data protection laws and regulations could lead to government enforcement actions (which could include civil or criminal penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business.

We and any potential collaborators may be subject to federal, state, and foreign data protection laws and regulations (i.e., laws and regulations that address privacy and data security). In the United States, numerous federal and state laws and regulations, including federal health information privacy laws, state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act), that govern the collection, use, disclosure and protection of health-related and other personal information could apply to our operations or the operations of our collaborators. In addition,

we may obtain health information from third parties (including research institutions from which we obtain clinical trial data) that are subject to privacy and security requirements under HIPAA, as amended. Depending on the facts and circumstances, we could be subject to civil, criminal, and administrative penalties if we knowingly obtain, use, or disclose individually identifiable health information maintained by a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA.

As our operations and business grow, we may become subject to or affected by new or additional data protection laws and regulations and face increased scrutiny or attention from regulatory authorities. In the United States, certain states have adopted data privacy and security laws and regulations, which govern the privacy, processing and protection of health-related and other personal information. Such laws and regulations will be subject to interpretation by various courts and other governmental authorities, thus creating potentially complex compliance issues for us and our future customers and strategic partners. For example, the California Consumer Privacy Act of 2018, or CCPA, went into effect on January 1, 2020. The CCPA creates individual privacy rights for California consumers and increases the privacy and security obligations of entities handling certain personal information. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that has increased the likelihood of, and risks associated with data breach litigation. Further, the California Privacy Rights Act, or CPRA, generally went into effect on January 1, 2023, and significantly amends the CCPA. It imposes additional data protection obligations on covered businesses, including additional consumer rights processes, limitations on data uses, new audit requirements for higher risk data, and opt outs for certain uses of sensitive data. It also creates a new California data protection agency authorized to issue substantive regulations and could result in increased privacy and information security enforcement. Additional compliance investment and potential business process changes may also be required. Similar laws have passed in Virginia, Colorado, Connecticut and Utah, and have been proposed in other states and at the federal level, reflecting a trend toward more stringent privacy legislation in the United States. The enactment of such laws could have potentially conflicting requirements that would make compliance challenging. In the event that we are subject to or affected by HIPAA, the CCPA, the CPRA or other domestic privacy and data protection laws, any liability from failure to comply with the requirements of these laws could adversely affect our financial condition.

Further, in the event we decide to conduct clinical trials or continue to enroll subjects in our ongoing or future clinical trials in the European Economic Area, or EEA, or the United Kingdom, UK, we may be subject to additional privacy restrictions. More specifically, the EU General Data Protection Regulation 2016/679, or GDPR, and the UK general Data Protection Regulation and the Data Protection Act 2018, or the UK GDPR, could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, or in some cases, impact our ability to operate in certain jurisdictions. The collection and use of personal health data in the EEA and the UK is governed by the provisions of the GDPR and UK GDPR, respectively. The GDPR and UK GDPR impose certain requirements relating to the consent of the individuals to whom the personal data relates, the information provided to the individuals, notification of data processing obligations to the competent national data protection authorities and the security and confidentiality of the personal data. The GDPR/UK GDPR also impose strict rules on the transfer of personal data out of the EEA/UK to the United States. Among other requirements, the GDPR regulates transfers of personal data subject to the GDPR to third countries that have not been found to provide adequate protection to such personal data, including the United States; in July 2020, the Court of Justice of the EU, or CJEU, limited how organizations could lawfully transfer personal data from the EEA and UK to the United States by invalidating the Privacy Shield for purposes of international transfers and imposing further restrictions on the use of standard contractual clauses, or SCCs. In March 2022, the US and EU announced a new regulatory regime intended to replace the invalidated regulations; however, this new EU-US Data Privacy Framework has not been implemented beyond an executive order signed by President Biden on October 7, 2022 on Enhancing Safeguards for United States Signals Intelligence Activities. European court and regulatory decisions subsequent to the CJEU decision of July 2020 have taken a restrictive approach to international data transfers. Companies that must comply with the GDPR and UK GDPR face increased compliance obligations and risk, including more robust regulatory enforcement of data protection requirements and potential fines for noncompliance of up to €20 million under the GDPR and £17.5 million under the UK GDPR or 4% of the annual global revenues of the noncompliant company, whichever is greater. The existence of parallel regimes under the GDPR and UK GDPR, and divergence in respect of implementing or supplementary laws across the EEA and UK in certain areas, means that we could be subject to potentially overlapping or divergent enforcement actions for certain actual or perceived violations.

Failure to comply with these laws and regulations could result in government enforcement actions (which could include civil, criminal and administrative penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects, employees and other individuals about whom we or our potential collaborators obtain personal information, as well as the providers who share this information with us, may limit our ability to collect, use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

Healthcare legislative measures aimed at reducing healthcare costs may have a material adverse effect on our business and results of operations.

The United States and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system that could prevent or delay marketing approval of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates or any future therapeutic candidates, restrict or regulate post-approval activities and affect our or our Founded Entities' ability to profitably sell any therapeutic for which we or our Founded Entities obtain marketing approval. Changes in regulations, statutes or the interpretation of existing regulations could impact our or our Founded Entities' business in the future by requiring, for example: (i) changes to our manufacturing arrangements; (ii) additions or modifications to therapeutic labeling; (iii) the recall or discontinuation of our therapeutics; or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

In the United States, there have been and continue to be a number of legislative initiatives and judicial challenges to contain healthcare costs. For example, in March 2010, the Affordable Care Act, or the ACA, was passed, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacted the U.S. pharmaceutical industry. The ACA, among other things, subjects biological therapeutics to potential competition by lower-cost biosimilars, addresses a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, increases the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations, establishes annual fees and taxes on manufacturers of certain branded prescription drugs, and creates a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 70 percent point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D.

Payment methodologies may be subject to changes in healthcare legislation and regulatory challenges. For example, in order for a drug therapeutic to receive federal reimbursement under the Medicaid or Medicare Part B programs or to be sold directly to U.S. government agencies, the manufacturer must extend discounts to entities eligible to participate in the 340B drug pricing program. In December 2018, the CMS published a final rule permitting further collections and payments to and from certain ACA qualified health plans and health insurance issuers under the ACA risk adjustment program in response to the outcome of the federal district court litigation regarding the method CMS uses to determine this risk adjustment. Since then, the ACA risk adjustment program payment parameters have been updated annually.

Since the enactment of the ACA, there have been numerous judicial, administrative, executive, and legislative challenges to certain aspects of the ACA. On June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. Prior to the Supreme Court's decision, President Biden issued an executive order to initiate a special enrollment period for purposes of obtaining health insurance coverage through the ACA marketplace, which began on February 15, 2021 and remained open through August 15, 2021. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, resulted in aggregate reductions of Medicare payments to providers, which went into effect in

2013, and, due to subsequent legislative amendments, will remain in effect through 2032, with the exception of a temporary suspension from May 1, 2020 through March 31, 2022, unless additional Congressional action is taken. The American Taxpayer Relief Act of 2012 further reduced Medicare payments to several types of providers, including hospitals and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. In addition, in March 2021, Congress enacted the American Rescue Plan Act of 2021, which, among other things, eliminated the statutory cap on drug manufacturers' Medicaid Drug Rebate Program rebate liability, effective January 1, 2024.

There has been increasing legislative and enforcement interest in the United States with respect to drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. On August 16, 2022, the Inflation Reduction Act of 2022, or IRA, was into law. Among other things, the IRA requires manufacturers of certain drugs to engage in price negotiations with Medicare (beginning in 2026), imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation (first due in 2023), and replaces the Part D coverage gap discount program with a new discounting program (beginning in 2025). The IRA permits the Secretary of the Department of Health and Human Services to implement many of these provisions through guidance, as opposed to regulation, for the initial years. For that and other reasons, it is currently unclear how the IRA will be effectuated.

At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological therapeutic pricing, including price or patient reimbursement constraints, discounts, restrictions on certain therapeutic access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical therapeutics and which suppliers will be included in their prescription drug and other healthcare programs. Furthermore, there has been increased interest by third-party payors and governmental authorities in reference pricing systems and publication of discounts and list prices.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at containing or lowering the cost of healthcare. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our therapeutic. Such reforms could have an adverse effect on anticipated revenue from therapeutic candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop therapeutic candidates. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

- the demand for the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates, if approved;
- our ability to receive or set a price that we believe is fair for our therapeutics;
- our ability to generate revenue and achieve or maintain profitability;
- the amount of taxes that we are required to pay; and
- the availability of capital.

Other healthcare reform measures may be adopted in the future, and may result in additional reductions in Medicare and other healthcare funding, more rigorous coverage criteria, lower reimbursement, and new payment methodologies. This could lower the price that we receive for any approved therapeutic. Any denial in coverage or reduction in reimbursement from Medicare or other government-funded programs may result in a similar denial or reduction in payments from private payors, which may prevent us from being able to generate sufficient revenue, attain profitability or commercialize the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates, if approved. Litigation and legislative efforts to change or repeal the ACA are likely to continue, with unpredictable and uncertain results.

In the EU, similar developments may affect our ability to profitably commercialize our product candidates, if approved. On December 13, 2021, Regulation No 2021/2282 on Health Technology Assessment, or HTA, amending Directive 2011/24/EU, was adopted. While the regulation entered into force in January 2022, it will only begin to apply from January 2025 onwards, with preparatory and implementation-related steps to take place in the interim. Once the regulation becomes applicable, it will have a phased implementation depending on the concerned products. This regulation intends to boost cooperation among EU member states in assessing health technologies, including new medicinal products as well as certain high-risk medical devices, and providing the basis for cooperation at the EU level for joint clinical assessments in these areas. The regulation will permit EU member states to use common HTA tools, methodologies, and procedures across the EU, working together in four main areas, including joint clinical assessment of the innovative health technologies with the most potential impact for patients, joint scientific consultations whereby developers can seek advice from HTA authorities, identification of emerging health technologies to identify promising technologies early, and continuing voluntary cooperation in other areas. Individual EU member states will continue to be responsible for assessing non-clinical (e.g., economic, social, ethical) aspects of health technology, and making decisions on pricing and reimbursement.

Risks Related to Competition

We face significant competition in an environment of rapid technological and scientific change, and there is a possibility that our competitors may achieve regulatory approval before us or develop therapies that are safer, more advanced or more effective than ours, which may negatively impact our ability to successfully market or commercialize any therapeutic candidates we may develop and ultimately harm our financial condition.

The development and commercialization of new drug therapeutics is highly competitive. We may face competition with respect to any therapeutic candidates that we seek to develop or commercialize in the future from major pharmaceutical companies, specialty pharmaceutical companies, and biotechnology companies worldwide. Potential competitors also include academic institutions, government agencies, and other public and private research organizations that conduct research, seek patent protection, and establish collaborative arrangements for research, development, manufacturing, and commercialization.

There are a number of major pharmaceutical and biotechnology companies that are currently pursuing the development and commercialization of potential medicines targeting similar treatment areas as we are. If any of our competitors receive FDA or foreign regulatory authorities approval before we do, the therapeutic candidates within our Wholly Owned Pipeline would not be the first treatment on the market, and our market share may be limited. In addition to competition from other companies targeting our target indications, any therapeutics we may develop may also face competition from other types of therapies.

Many of our current or potential competitors, either alone or with their strategic partners, have:

- greater financial, technical, and human resources than we have at every stage of the discovery, development, manufacture, and commercialization of therapeutics;
- more extensive resources for preclinical testing, conducting clinical trials, obtaining regulatory approvals, and in manufacturing, marketing, and selling drug therapeutics;
- therapeutics that have been approved or are in late stages of development; and
- collaborative arrangements in our target markets with leading companies and research institutions.

Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize therapeutics that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any therapeutics that we may develop. Furthermore, currently approved therapeutics could be discovered to have application for treatment of our targeted disease indications or similar indications, which could give such therapeutics significant regulatory and market timing advantages over the therapeutic candidates within our Wholly Owned Pipeline. Our competitors may also obtain FDA, EMA or other comparable foreign regulatory approval for their therapeutics more rapidly than we may obtain approval for ours and may obtain orphan therapeutic exclusivity from the FDA for indications that we are targeting, which could result in our competitors establishing a strong market position before we are able to enter the market. Additionally, therapeutics or technologies developed by our competitors may render our potential therapeutic candidates uneconomical or obsolete and we may not be successful in marketing any therapeutic candidates we may develop against competitors.

In addition, we could face litigation or other proceedings with respect to the scope, ownership, validity and/or enforceability of our patents relating to our competitors' therapeutics and our competitors may allege that our therapeutics infringe, misappropriate or otherwise violate their intellectual property. The availability of our competitors' therapeutics could limit the demand, and the price we are able to charge, for any therapeutics that we may develop and commercialize.

The therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates for which we or our Founded Entities intend to seek approval as biologic therapeutics may face competition sooner than anticipated.

If we or our Founded Entities are successful in achieving regulatory approval to commercialize any biologic therapeutic candidate we or our Founded Entities develop alone or with collaborators, it may face competition from biosimilar therapeutics. In the United States, certain of the therapeutic candidates within our Wholly Owned Pipeline and our Founded Entities' therapeutic candidates are regulated by the FDA as biologic therapeutics subject to approval under the BLA pathway. The Biologics Price Competition and Innovation Act of 2009, or BPCIA, created an abbreviated pathway for the approval of biosimilar and interchangeable biologic therapeutics following the approval of an original BLA. The abbreviated regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as "interchangeable" based on its similarity to an existing brand therapeutic. Under the BPCIA, an application for a biosimilar therapeutic may not be submitted until four years following the date that the reference therapeutic was first licensed by the FDA. In addition, the approval of a biosimilar therapeutic may not be made effective by the FDA until 12 years after the reference therapeutic was first licensed by the FDA. During this 12-year period of exclusivity, another company may still market a competing version of the reference therapeutic if the FDA approves a full BLA for the competing therapeutic containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their therapeutic. In the EU, upon receiving a marketing authorization, new biological entities generally receive eight years of data exclusivity and an additional two years of market exclusivity. If granted, data exclusivity prevents regulatory authorities in the EU from referencing the innovator's data to assess a biosimilar application. During the additional two-year period of market exclusivity, a biosimilar marketing authorization can be submitted, and the innovator's data may be referenced, but no biosimilar product can be marketed until the expiration of the market exclusivity.

We believe that any of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates that are approved as a biological therapeutic under a BLA should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider such therapeutic candidates to be reference therapeutics for competing therapeutics, potentially creating the opportunity for generic competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. Moreover, the extent to which a biosimilar therapeutic, once approved, will be substituted for any one of our, our Founded Entities' or our collaborators' reference therapeutics in a way that is similar to traditional generic substitution for non-biologic therapeutics is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing. If competitors are able to obtain marketing approval for biosimilars referencing any therapeutics that we or our Founded Entities develop alone or with collaborators that may be approved, such therapeutics may become subject to competition from such biosimilars, with the attendant competitive pressure and potential adverse consequences.

Risks Related to Reliance on Third Parties

We are currently party to and may seek to enter into additional collaborations, licenses and other similar arrangements and may not be successful in maintaining existing arrangements or entering into new ones, and even if we are, we may not realize the benefits of such relationships.

We are currently parties to license and collaboration agreements with a number of universities and pharmaceutical companies and expect to enter into additional agreements as part of our business strategy. The success of our current and any future collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborations are subject to numerous risks, which may include risks that:

- collaborators may have significant discretion in determining the efforts and resources that they will apply to collaborations;
- collaborators may not pursue development and commercialization of the therapeutic candidates within our Wholly Owned Pipeline or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in their strategic focus due to their acquisition of competitive therapeutics or their internal development of competitive therapeutics, availability of funding or other external factors, such as a business combination that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial, abandon a therapeutic candidate, repeat or conduct new clinical trials or require a new formulation of a therapeutic candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, therapeutics that compete directly or indirectly with our therapeutics or therapeutic candidates;
- a collaborator with marketing, manufacturing and distribution rights to one or more therapeutics may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out these activities;
- we could grant exclusive rights to our collaborators that would prevent us from collaborating with others;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that cause the delay or termination of the research, development or commercialization of our current or future therapeutic candidates or that results in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated, which may result in a need for additional capital to pursue further development or commercialization of the applicable current or future therapeutic candidates;
- collaborators may own or co-own intellectual property covering therapeutics that result from our collaboration with them, and in such cases, we would not have the exclusive right to develop or commercialize such intellectual property;
- disputes may arise with respect to the ownership of any intellectual property developed pursuant to our collaborations; and
- a collaborator's sales and marketing activities or other operations may not be in compliance with applicable laws resulting in civil or criminal proceedings.

Additionally, we may seek to enter into additional collaborations, joint ventures, licenses and other similar arrangements for the development or commercialization of the therapeutic candidates within our Wholly Owned Pipeline, due to capital costs required to develop or commercialize the therapeutic candidate or manufacturing constraints. We may not be successful in our efforts to establish such collaborations for the therapeutic candidates within our Wholly Owned Pipeline because our R&D pipeline may be insufficient, the therapeutic candidates within our Wholly Owned Pipeline may be deemed to be at too early of a stage of development for collaborative effort or third parties may not view the therapeutic candidates within our Wholly Owned Pipeline as having the requisite potential to demonstrate safety and efficacy or significant commercial opportunity. In addition, we face significant competition in seeking appropriate strategic partners, and the negotiation process can be time consuming and complex. Further, any future collaboration agreements may restrict us from entering into additional agreements with potential collaborators. We cannot be certain that, following a strategic transaction or license, we will achieve an economic benefit that justifies such transaction.

Even if we are successful in our efforts to establish such collaborations, the terms that we agree upon may not be favorable to us, and we may not be able to maintain such collaborations if, for example, development or approval of a therapeutic candidate is delayed, the safety of a therapeutic candidate is questioned or sales of an approved therapeutic candidate are unsatisfactory.

In addition, any potential future collaborations may be terminable by our strategic partners, and we may not be able to adequately protect our rights under these agreements. Furthermore, strategic partners may negotiate for certain rights to control decisions regarding the development and commercialization of the therapeutic candidates within our Wholly Owned Pipeline, if approved, and may not conduct those activities in the same manner as we do. Any termination of collaborations we enter into in the future, or any delay in entering into collaborations related to the therapeutic candidates within our Wholly Owned Pipeline, could delay the development and commercialization of the therapeutic candidates within our Wholly Owned Pipeline and reduce their competitiveness if they reach the market, which could have a material adverse effect on our business, financial condition and results of operations.

Collaborative relationships with third parties could cause us to expend significant resources and give rise to substantial business risk with no assurance of financial return.

We anticipate relying upon strategic collaborations for marketing and commercializing our existing therapeutic candidates, and we may rely even more on strategic collaborations for R&D of other therapeutic candidates or discoveries. We may sell therapeutic offerings through strategic partnerships with pharmaceutical and biotechnology companies. If we are unable to establish or manage such strategic collaborations on terms favorable to us in the future, our R&D efforts and potential to generate revenue may be limited.

If we enter into R&D collaborations during the early phases of therapeutic development, success will in part depend on the performance of research collaborators. We will not directly control the amount or timing of resources devoted by research collaborators to activities related to therapeutic candidates. Research collaborators may not commit sufficient resources to our R&D programs. If any research collaborator fails to commit sufficient resources, the preclinical or clinical development programs related to the collaboration could be delayed or terminated. Also, collaborators may pursue existing or other development-stage therapeutics or alternative technologies in preference to those being developed in collaboration with us. Finally, if we fail to make required milestone or royalty payments to collaborators or to observe other obligations in agreements with them, the collaborators may have the right to terminate or stop performance of those agreements.

Establishing strategic collaborations is difficult and time-consuming. Our discussions with potential collaborators may not lead to the establishment of collaborations on favorable terms, if at all. Potential collaborators may reject collaborations based upon their assessment of our financial, regulatory or intellectual property position. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. Even if we successfully establish new collaborations, these relationships may never result in the successful development or commercialization of therapeutic candidates or the generation of sales revenue. To the extent that we enter into collaborative arrangements, the related therapeutic revenues are likely to be lower than if we directly marketed and sold therapeutics. Such collaborators may also consider alternative therapeutic candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for any future therapeutic candidate.

Management of our relationships with collaborators will require:

- significant time and effort from our management team;
- coordination of our marketing and R&D programs with the marketing and R&D priorities of our collaborators; and
- effective allocation of our resources to multiple projects.

We rely on third parties to assist in conducting our clinical trials and some aspects of our research and preclinical testing, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials, research, or testing.

We currently rely and expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions, and clinical investigators, to conduct some aspects of research and preclinical testing and clinical trials. Any of these third parties may terminate their engagements with us or be unable to fulfill their contractual obligations. If any of our relationships with these third parties terminate, we may not be able to enter into arrangements with alternative third parties on commercially reasonable terms, or at all. If we need to enter into alternative arrangements, it would delay therapeutic development activities.

Further, although our reliance on these third parties for clinical development activities limits our control over these activities, we remain responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards. For example, notwithstanding the obligations of a CRO for a trial of one of the therapeutic candidates within our Wholly Owned Pipeline, we remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA and comparable foreign regulatory authorities require us to comply with requirements, commonly referred to as GCPs, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. The FDA and comparable foreign regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators, clinical trial sites and IRBs. If we or our third-party contractors fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving the therapeutic candidates within our Wholly Owned Pipeline, which would delay the regulatory approval process. We cannot be certain that, upon inspection, the FDA or comparable foreign regulatory authorities will determine that any of our clinical trials comply with GCPs. We are also required to register certain clinical trials and post the results of completed clinical trials on databases including a government-sponsored database, ClinicalTrials.gov, within certain timeframes. NIH and FDA recently signaled the government's willingness to begin enforcing those requirements against non-compliant clinical trial sponsors. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Furthermore, the third parties conducting clinical trials on our behalf are not our employees, and except for remedies available to us under our agreements with such contractors, we cannot control whether or not they devote sufficient time, skill and resources to our ongoing development programs. These contractors may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other drug or medical device development activities, which could impede their ability to devote appropriate time to our clinical programs. If these third parties, including clinical investigators, do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we may not be able to obtain, or may be delayed in obtaining, regulatory approvals for the therapeutic candidates within our Wholly Owned Pipeline. If that occurs, we will not be able to, or may be delayed in our efforts to, successfully commercialize the therapeutic candidates within our Wholly Owned Pipeline. In such an event, our financial results and the commercial prospects for any therapeutic candidates that we seek to develop could be harmed, our costs could increase and our ability to generate revenues could be delayed, impaired or foreclosed.

Our or our Founded Entities' use of third parties to manufacture the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates and other therapeutic candidates that we or our Founded Entities may develop for preclinical studies and clinical trials may increase the risk that we or our Founded Entities will not have sufficient quantities of our or our Founded Entities' therapeutic candidates, therapeutics, or necessary quantities of such materials on time or at an acceptable cost.

With respect to certain of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates, we and certain of our Founded Entities do not currently have, nor do we plan to acquire, the infrastructure or capability internally to manufacture drug supplies for our ongoing clinical trials or any future clinical trials that we or our Founded Entities may conduct, and we and our Funded Entities lack the resources to manufacture any therapeutic candidates on a commercial scale. We rely, and expect to continue to rely, on third-party manufacturers to produce our and certain of our Founded Entities' therapeutic candidates or other therapeutic candidates that we or our Founded Entities may identify for clinical trials, as well as for commercial manufacture if any therapeutic candidates receive marketing authorization. Although we and our Founded Entities generally do not begin a clinical trial unless we or our Founded Entities believe we have a sufficient supply of a therapeutic candidate to complete the trial, any significant delay or discontinuity in the supply of a therapeutic candidate, or the raw material components thereof, for an ongoing clinical trial due to the need to replace a third-party manufacturer could considerably delay the clinical development and potential regulatory authorization of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates, which could harm our business and results of operations.

We or our Founded Entities may be unable to identify and appropriately qualify third-party manufacturers or establish agreements with third-party manufacturers or do so on acceptable terms. Even if we or our Founded Entities are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- reliance on the third party for sourcing of raw materials, components, and such other goods as may be required for execution of its manufacturing processes and the oversight by the third party of its suppliers;
- reliance on the third party for regulatory compliance and quality assurance for the manufacturing activities each performs;
- the possible breach of the manufacturing agreement by the third party;
- the possible misappropriation of proprietary information, including trade secrets and know-how; and
- the possible termination or non-renewal of the agreement by the third party at a time that is costly or inconvenient for us or our Founded Entities.

Furthermore, all of our CMOs are engaged with other companies to supply and/or manufacture materials or therapeutics for such companies, which exposes our manufacturers to regulatory risks for the production of such materials and therapeutics. The facilities used by our contract manufacturers to manufacture our drug, or medical device therapeutic candidates are subject to review by the FDA pursuant to inspections that will be conducted after we submit an NDA, BLA, PMA application or other marketing application to the FDA. We do not control the manufacturing process of, and are to some extent dependent on, our contract manufacturing partners for compliance with the regulatory requirements, known as cGMP requirements for manufacture of drug, biologic and device therapeutics. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, we will not be able to secure or maintain regulatory authorization for the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates manufactured at these manufacturing facilities. We are subject to similar requirements in foreign jurisdictions. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or another comparable foreign regulatory agency does not approve these facilities for the manufacture of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates or if any agency withdraws its approval in the future, we or our Founded Entities may need to find alternative manufacturing facilities, which would negatively impact our or our Founded Entities' ability to develop, obtain regulatory authorization or certification for or market the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates, if cleared, certified or approved.

The therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates may compete with other therapeutic candidates and marketed therapeutics for access to manufacturing facilities. Any performance failure on the part of our or our Founded Entities' existing or future manufacturers could delay clinical development, marketing approval, certification or commercialization. Our and certain of our Founded Entities' current and anticipated future dependence upon others for the manufacturing of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates may adversely affect our future profit margins and our ability to commercialize any therapeutic candidates that receive marketing clearance or approval on a timely and competitive basis.

If the contract manufacturing facilities on which we and certain of our Founded Entities' rely do not continue to meet regulatory requirements or are unable to meet our or our Founded Entities' supply demands, our business will be harmed.

All entities involved in the preparation of therapeutic candidates for clinical trials or commercial sale, including our and certain of our Founded Entities' existing CMOs for the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates, are subject to extensive regulation. Components of a finished drug or biologic therapeutic approved for commercial sale or used in late-stage clinical trials must be manufactured in accordance with cGMP, or similar regulatory requirements outside the United States. These regulations govern manufacturing processes and procedures, including recordkeeping, and the implementation and operation of quality systems to control and assure the quality of investigational therapeutics and therapeutics approved for sale. Similarly, medical devices must be manufactured in accordance with QSR and similar foreign requirements. Poor control of production processes can lead to the introduction of contaminants or to inadvertent changes in the properties or stability of Gelesis' Plenity, Akili's EndeavorRx, our Founded Entities' other therapeutic candidates or the therapeutic candidates within our Wholly Owned Pipeline. Our or our Founded Entities' failure, or the failure of third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us or our Founded Entities, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals or certification, license revocation, suspension of production, seizures or recalls of therapeutic candidates or marketed drugs or devices, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect clinical or commercial supplies of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates.

We and/or our CMOs must supply all necessary documentation, as applicable, in support of a marketing application, such as an NDA, BLA, PMA or MAA, on a timely basis and must adhere to regulations enforced by the FDA and other regulatory agencies through their facilities inspection program. Some of our CMOs have never produced a commercially approved pharmaceutical therapeutic and therefore have not obtained the requisite regulatory authority approvals to do so. The facilities and quality systems of some or all of our third-party contractors must pass a pre-approval inspection for compliance with the applicable regulations as a condition of regulatory approval of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates or any of our other potential therapeutics. In addition, the regulatory authorities may, at any time, audit or inspect a manufacturing facility involved with the preparation of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates or our other potential therapeutics or the associated quality systems for compliance with the regulations applicable to the activities being conducted. Although we oversee the CMOs, we cannot control the manufacturing process of, and are completely dependent on, our CMO partners for compliance with the regulatory requirements. If these facilities do not pass a pre-approval plant inspection, regulatory approval of the therapeutics may not be granted or may be substantially delayed until any violations are corrected to the satisfaction of the regulatory authority, if ever.

The regulatory authorities or notified bodies (when applicable) also may, at any time following clearance, certification or approval of a therapeutic for sale, audit the manufacturing facilities of our third-party contractors. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our therapeutic specifications or applicable regulations occurs independent of such an inspection or audit, we or the relevant regulatory authority may require remedial measures that may be costly and/or time consuming for us or a third party to implement, and that may include the temporary or permanent suspension of a clinical study or commercial sales or the temporary or permanent closure of a facility. Any such remedial measures imposed upon us or third parties with whom we contract could materially harm our business.

Additionally, if supply from one approved manufacturer is interrupted, an alternative manufacturer would need to be qualified. For drug and biologic therapeutics, as applicable, an NDA, BLA supplement or MAA variation, or equivalent foreign regulatory filing, is also required, which could result in further delay. Similarly, for medical devices, a new marketing application or supplement may be required. The regulatory agencies may also require additional studies if a new manufacturer is relied upon for commercial production. Switching manufacturers may involve substantial costs and is likely to result in a delay in our desired clinical and commercial timelines.

These factors could cause us or our Founded Entities to incur higher costs and could cause the delay or termination of clinical trials, regulatory submissions, required approvals, or commercialization of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates. Furthermore, if our or our Founded Entities' suppliers fail to meet contractual requirements and we or our Founded Entities are unable to secure one or more replacement suppliers capable of production at a substantially equivalent cost, our or our Founded Entities' clinical trials may be delayed or we or our Founded Entities could lose potential revenue.

Risks Related to Our Intellectual Property

Risks Related to Our Intellectual Property Protection

If we or our Founded Entities are unable to obtain and maintain sufficient intellectual property protection for our or our Founded Entities' existing therapeutic candidates or any other therapeutic candidates that we or they may identify, or if the scope of the intellectual property protection we or they currently have or obtain in the future is not sufficiently broad, our competitors could develop and commercialize therapeutic candidates similar or identical to ours, and our ability to successfully commercialize our existing therapeutic candidates and any other therapeutic candidates that we or they may pursue may be impaired.

As is the case with other pharmaceutical and biopharmaceutical companies, our success depends in large part on our ability to obtain and maintain protection of the intellectual property we may own solely and jointly with others, particularly patents, in the United States and other countries with respect to our Wholly Owned Programs or our Founded Entities' therapeutic candidates and technology. We and our Founded Entities seek to protect our proprietary position by filing patent applications in the United States and abroad related to our and our Founded Entities' existing therapeutic candidates, our various proprietary technologies, and any other therapeutic candidates or technologies that we or they may identify.

Obtaining, maintaining and enforcing pharmaceutical and biopharmaceutical patents is costly, time consuming and complex, and we may not be able to file or prosecute all necessary or desirable patent applications, or maintain, enforce or license patents that may issue from such patent applications, at a reasonable cost or in a timely manner. It is also possible that we could fail to identify patentable aspects of our R&D

output before it is too late to obtain patent protection. Although we take reasonable measures, we have systems in place to remind us of filing and prosecution deadlines, and we employ outside firms and rely on outside counsel to monitor patent deadlines, we may miss or fail to meet a patent deadline, including in a foreign country, which could negatively impact our patent rights and harm our competitive position, business, and prospects. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed to third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal, technological and factual questions and has in recent years been the subject of much litigation. The standards that the U.S. Patent and Trademark Office, or the USPTO, and its foreign counterparts use to grant patents are not always applied predictably or uniformly. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States, or vice versa. There is no assurance that all potentially relevant prior art relating to our patents and patent applications has been found, which can prevent a patent from issuing from a pending application or later invalidate or narrow the scope of an issued patent. For example, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing or, in some cases, not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our patents or pending patent applications, or that we were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued that protect our Wholly Owned Programs or our Founded Entities' therapeutic candidates, in whole or in part, or which effectively prevent others from commercializing competitive therapeutic candidates. Even if our patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our patents by developing similar or alternative therapeutic candidates in a non-infringing manner.

In addition, the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical therapeutic candidates to ours, or limit the duration of the patent protection of our Wholly Owned Programs or our Founded Entities' therapeutic candidates. For example, we may be subject to a third-party preissuance submission of prior art to the USPTO, or become involved in opposition, derivation, reexamination, inter partes review, post-grant review or interference proceedings challenging our owned or licensed patent rights. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our Wholly Owned Programs or our Founded Entities' therapeutic candidates and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize drugs without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop or commercialize current or future therapeutic candidates.

Furthermore, our and our Founded Entities' intellectual property rights may be subject to a reservation of rights by one or more third parties. We are party to a license agreement with New York University related to certain intellectual property underlying our LYT-200 therapeutic candidate which is subject to certain rights of the government, including march-in rights, to such intellectual property due to the fact that the research was funded at least in part by the U.S. government. We are also party to other license agreements for intellectual property underlying certain of our therapeutic candidates and programs. Additionally, our Founded Entities Akili, Follica, Vedanta, Sonde and Vor, are party to license agreements with academic institutions pursuant to which such Founded Entities have in-licensed certain intellectual property underlying various of their therapeutic candidates. While these license agreements are exclusive, they contain provisions pursuant to which the government has certain rights, including march-in rights, to such patents and technologies due to the fact that the research was funded at least in part by the U.S. government. When new technologies are developed with government funding, the government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the government to use the invention or to have others use the invention on its behalf. These rights may permit the government to disclose our information to third parties and to exercise march-in rights to use or allow third parties to use our technology. The government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to U.S. industry. In addition, our rights in such inventions may be subject to certain requirements to manufacture therapeutics embodying such inventions in the United States. Any exercise by the government of such rights or by any third party of its reserved rights could harm our competitive position, business, financial condition, results of operations, and prospects.

If our or our Founded Entities' trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our or our Founded Entities' registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We and our Founded Entities may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential collaborators or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we and our Founded Entities are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. We and our Founded Entities may license our trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how our or our Founded Entities' trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and tradenames by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names. Our or our Founded Entities' efforts to enforce or protect our proprietary rights related to trademarks, trade names, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our competitive position, business, financial condition, results of operations and prospects.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect or enforce intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we and our Founded Entities may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing therapeutics made using our inventions in and into the United States or other jurisdictions. Competitors may use our and our Founded Entities' technologies in jurisdictions where we have not obtained patent protection to develop their own therapeutics and may also export infringing therapeutics to territories where we have patent protection, but enforcement is not as strong as that in the United States. These therapeutics may compete with our or our Founded Entities' therapeutics and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology and pharmaceutical therapeutics, which could make it difficult for us to stop the infringement of our or our Founded Entities' patents or marketing of competing therapeutics in violation of our proprietary rights generally. Proceedings to enforce our or our Founded Entities' patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our or our Founded Entities' patents at risk of being invalidated

or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us or our Founded Entities. We may not prevail in any lawsuits that we or our Founded Entities initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

In some jurisdictions including European Union countries, compulsory licensing laws compel patent owners to grant licenses to third parties. In addition, some countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we, our Founded Entities or any of our licensors are forced to grant a license to third parties under patents relevant to our or our Founded Entities' business, or if we, our Founded Entities or our licensors are prevented from enforcing patent rights against third parties, our competitive position may be substantially impaired in such jurisdictions.

Our or our Founded Entities' proprietary rights may not adequately protect our technologies and therapeutic candidates, and do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our or our Founded Entities' intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our or our Founded Entities' business, or permit us to maintain our competitive advantage. The following examples are illustrative:

- others may be able to make therapeutics that are the same as or similar to the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates but that are not covered by the claims of the patents that we or our Founded Entities own or have exclusively licensed;
- others, including inventors or developers of our or our Founded Entities' owned or in-licensed patented technologies who may become involved with competitors, may independently develop similar technologies that function as alternatives or replacements for any of our or our Founded Entities' technologies without infringing our intellectual property rights;
- we, our Founded Entities or our licensors or our other collaboration partners might not have been the first to conceive and reduce to practice the inventions covered by the patents or patent applications that we or our Founded Entities own or license or will own or license;
- we, our Founded Entities or our licensors or our other collaboration partners might not have been the first to file patent applications covering certain of the patents or patent applications that we or they own or have obtained a license, or will own or will have obtained a license;
- we, our Founded Entities or our licensors may fail to meet obligations to the U.S. government with respect to in-licensed patents and patent applications funded by U.S. government grants, leading to the loss of patent rights;
- it is possible that our or our Founded Entities' pending patent applications will not result in issued patents;
- it is possible that there are prior public disclosures that could invalidate our, our Founded Entities' or our licensors' patents;
- issued patents that we or our Founded Entities own or exclusively license may not provide us with any competitive advantage, or may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- our or our Founded Entities' competitors might conduct R&D activities in countries where we do not have patent rights, or in countries where R&D safe harbor laws exist, and then use the information learned from such activities to develop competitive therapeutics for sale in our major commercial markets;
- ownership, validity or enforceability of our, our Founded Entities' or our licensors' patents or patent applications may be challenged by third parties; and
- the patents of third parties or pending or future applications of third parties, if issued, may have an adverse effect on our business.

Risks Related to Our License Arrangements

The failure to maintain our licenses and realize their benefits may harm our business.

We have acquired and in-licensed certain of our technologies from third parties. We may in the future acquire, in-license or invest in additional technology that we believe would be beneficial to our business. We are subject to a number of risks associated with our acquisition, in-license or investment in technology, including the following:

- diversion of financial and managerial resources from existing operations;
- successfully negotiating a proposed acquisition, in-license or investment in a timely manner and at a price or on terms and conditions favorable to us;
- successfully combining and integrating a potential acquisition into our existing business to fully realize the benefits of such acquisition;
- the impact of regulatory reviews on a proposed acquisition, in-license or investment; and
- the outcome of any legal proceedings that may be instituted with respect to the proposed acquisition, in-license or investment.

If we fail to properly evaluate potential acquisitions, in-licenses, investments or other transactions associated with the creation of new R&D programs or the maintenance of existing ones, we might not achieve the anticipated benefits of any such transaction, we might incur costs in excess of what we anticipate, and management resources and attention might be diverted from other necessary or valuable activities.

Our or our Founded Entities' rights to develop and commercialize our Wholly Owned Programs or our Founded Entities' therapeutic candidates are subject in part to the terms and conditions of licenses granted to us and our Founded Entities by others, and the patent protection, prosecution and enforcement for some of our Wholly Owned Programs or our Founded Entities' therapeutic candidates may be dependent on our and our Founded Entities' licensors.

We and our Founded Entities currently are reliant upon licenses of certain intellectual property rights and proprietary technologies from third parties that are important or necessary to the development of our and our Founded Entities' proprietary technologies, including technologies related to our Wholly Owned Programs and our Founded Entities' therapeutic candidates. These licenses, and other licenses we and they may enter into in the future, may not provide adequate rights to use such intellectual property and proprietary technologies in all relevant fields of use or in all territories in which we or our Founded Entities may wish to develop or commercialize technology and therapeutic candidates in the future. Licenses to additional third-party proprietary technology or intellectual property rights that may be required for our or our Founded Entities' development programs may not be available in the future or may not be available on commercially reasonable terms. In that event, we or our Founded Entities may be required to expend significant time and resources to redesign our proprietary technology or therapeutic candidates or to develop or license replacement technology, which may not be feasible on a technical or commercial basis. If we and our Founded Entities are unable to do so, we may not be able to develop and commercialize technology and therapeutic candidates in fields of use and territories for which we are not granted rights pursuant to such licenses, which could harm our competitive position, business, financial condition, results of operations and prospects significantly.

In some circumstances, we and our Founded Entities may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain and enforce the patents, covering technology that we or our Founded Entities license from third parties. In addition, some of our or our Founded Entities' agreements with our licensors require us to obtain consent from the licensor before we can enforce patent rights, and our licensor may withhold such consent or may not provide it on a timely basis. Therefore, we cannot be certain that our licensors or collaborators will prosecute, maintain, enforce and defend such intellectual property rights in a manner consistent with the best interests of our business, including by taking reasonable measures to protect the confidentiality of know-how and trade secrets, or by paying all applicable prosecution and maintenance fees related to intellectual property registrations for any of our Wholly Owned Programs or our Founded Entities' therapeutic candidates and proprietary technologies. We and our Founded Entities also cannot be certain that our licensors have drafted or prosecuted the patents and patent applications licensed to us in compliance with applicable laws and regulations, which may affect the validity and enforceability of such patents or any patents that may issue from such applications. This could cause us to lose rights in any applicable intellectual property that we in-license, and as a result our ability to develop and commercialize therapeutic candidates may be adversely affected and we may be unable to prevent competitors from making, using and selling competing therapeutics.

In addition, our or our Founded Entities' licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor's rights. In addition, while we cannot currently determine the amount of the royalty obligations we would be required to pay on sales of future therapeutics, if any, the amounts may be significant. The amount of our and our Founded Entities' future royalty obligations will depend on the technology and intellectual property we and our Founded Entities use in therapeutic candidates that we successfully develop and commercialize, if any. Therefore, even if we or our Founded

Entities successfully develop and commercialize therapeutic candidates, we may be unable to achieve or maintain profitability. In addition, we or our Founded Entities may seek to obtain additional licenses from our licensors and, in connection with obtaining such licenses, we may agree to amend our existing licenses in a manner that may be more favorable to the licensors, including by agreeing to terms that could enable third parties (potentially including our competitors) to receive licenses to a portion of the intellectual property rights that are subject to our or our Founded Entities' existing licenses. Any of these events could have a material adverse effect on our or our Founded Entities' competitive position, business, financial conditions, results of operations, and prospects.

If we or our Founded Entities fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or these agreements are terminated or we or our Founded Entities otherwise experience disruptions to our business relationships with our licensors, we could lose intellectual property rights that are important to our business.

We are party to various agreements that we depend on to develop our Wholly Owned Programs or our Founded Entities' therapeutic candidates and various proprietary technologies, and our rights to use currently licensed intellectual property, or intellectual property to be licensed in the future, are or will be subject to the continuation of and our and our Founded Entities' compliance with the terms of these agreements. For example, under certain of our and our Founded Entities' license agreements we and our Founded Entities are required to use commercially reasonable efforts to develop and commercialize therapeutic candidates covered by the licensed intellectual property rights, maintain the licensed intellectual property rights, and achieve certain development milestones, each of which could result in termination in the event we or our Founded Entities fail to comply.

In spite of our efforts, our or our Founded Entities' licensors might conclude that we have materially breached our obligations under such license agreements and might therefore terminate the license agreements, thereby removing or limiting our or our Founded Entities' ability to develop and commercialize therapeutics and technology covered by these license agreements.

Moreover, disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our Wholly Owned Programs or our Founded Entities' therapeutic candidates, technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our or our Founded Entities' collaborative development relationships;
- our and our Founded Entities' diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our and our Founded Entities' licensors and us and our Founded Entities and our partners; and
- the priority of invention of patented technology.

In addition, certain provisions in our and our Founded Entities' license agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the agreement, either of which could have a material adverse effect on our or our Founded Entities' business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we or our Founded Entities have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected therapeutic candidates, which could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects.

Third-party claims of intellectual property infringement may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. However, our research, development and commercialization activities may be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, derivation, oppositions, inter partes review and post-grant review before the USPTO, and corresponding foreign patent offices. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are pursuing development candidates. Our competitors in both the United States and abroad, many of which have substantially greater resources and have made substantial investments in patent portfolios and competing technologies, may have applied for or obtained or may in the future apply for or obtain, patents that will prevent, limit or otherwise interfere with our ability to make, use and sell, if approved, the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates. In addition, many companies in the biotechnology and pharmaceutical industries have employed intellectual property litigation as a means to gain an advantage over their competitors. As the biotechnology and pharmaceutical industries expand and more patents are issued, and as we gain greater visibility and market exposure as a public company, the risk increases that our existing therapeutic candidates and any other therapeutic candidates that we or our Founded Entities may identify may be subject to claims of infringement of the patent rights of third parties.

There may be other third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our or our Founded Entities' existing therapeutic candidates and any other therapeutic candidates that we or they may identify. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our or our Founded Entities' existing therapeutic candidates and any other therapeutic candidates that we or they may identify may infringe. In addition, third parties may obtain patents in the future and claim that use of our or our Founded Entities' technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of our or our Founded Entities' existing therapeutic candidates and any other therapeutic candidates that we or they may identify, any molecules formed during the manufacturing process, or any final therapeutic itself, the holders of any such patents may be able to block our ability to commercialize such therapeutic candidate unless we obtained a license under the applicable patents, or until such patents expire. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our Wholly Owned Programs or our Founded Entities' therapeutic candidates. Furthermore, the scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history and can involve other factors such as expert opinion. Our analysis of these issues, including interpreting the relevance or the scope of claims in a patent or a pending application, determining applicability of such claims to our proprietary technologies or therapeutic candidates, predicting whether a third party's pending patent application will issue with claims of relevant scope, and determining the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our or our Founded Entities' ability to develop and market the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates. We do not always conduct independent reviews of pending patent applications of and patents issued to third parties.

Similarly, if any third-party patents were held by a court of competent jurisdiction to cover aspects of our or our Founded Entities' formulations, processes for manufacture or methods of use, including any combination therapies, the holders of any such patents may be able to block our or our Founded Entities' ability to develop and commercialize the applicable therapeutic candidate unless we obtained a license or until such patent expires. In either case, such a license may not be available on commercially reasonable terms or at all, or it may be non-exclusive, which could result in our competitors gaining access to the same intellectual property.

Parties making claims against us or our Founded Entities may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our or our Founded Entities' existing therapeutic candidates and any other therapeutic candidates that we may identify. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of management and employee resources from our business. In the event of a successful claim of infringement against us or our Founded Entities, we or our Founded Entities may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign our infringing therapeutics or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

Parties making claims against us or our Founded Entities may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Furthermore, because of

the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have material adverse effect on our ability to raise additional funds or otherwise have a material adverse effect on our business, results of operations, financial condition and prospects.

Risks Related to Our Patents

Patent terms may be inadequate to protect our competitive position on therapeutic candidates for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional or international patent application filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our Wholly Owned Programs or our Founded Entities' therapeutic candidates are obtained, once the patent life has expired, we or our Founded Entities may be open to competition from competitive therapeutics, including generics or biosimilars. Given the amount of time required for the development, testing and regulatory review of new therapeutic candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our or our Founded Entities' owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing therapeutics similar or identical to ours.

If we or our Founded Entities are not able to obtain patent term extension or non-patent exclusivity in the United States under the Hatch-Waxman Act and in foreign countries under similar legislation, thereby potentially extending the marketing exclusivity term of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates, our business may be materially harmed.

Depending upon the timing, duration and specifics of FDA marketing approval of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates, one or more of the U.S. patents covering each of such therapeutic candidates or the use thereof may be eligible for up to five years of patent term extension under the Hatch-Waxman Act. The Hatch-Waxman Act allows a maximum of one patent to be extended per new drug application, or NDA, for an FDA approved therapeutic as compensation for the patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of therapeutic approval and only those claims covering such approved drug therapeutic, a method for using it or a method for manufacturing it may be extended. Patent term extension also may be available in certain foreign countries upon regulatory approval of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates. Nevertheless, we or our Founded Entities may not be granted patent term extension either in the United States or in any foreign country because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the term of extension, as well as the scope of patent protection during any such extension, afforded by the governmental authority could be less than we request.

If we or our Founded Entities are unable to obtain patent term extension or restoration, or the term of any such extension is less than our request, the period during which we will have the right to exclusively market our therapeutic may be shortened and our competitors may obtain approval of competing therapeutics following our patent expiration sooner, and our revenue could be reduced, possibly materially.

Further, for certain of our and our Founded Entities' licensed patents, we and our Founded Entities do not have the right to control prosecution, including filing with the USPTO, a petition for patent term extension under the Hatch-Waxman Act. Thus, if one of our or our Founded Entities' licensed patents is eligible for patent term extension under the Hatch-Waxman Act, we may not be able to control whether a petition to obtain a patent term extension is filed with, or whether a patent term extension is obtained from, the USPTO.

Also, there are detailed rules and requirements regarding the patents that may be submitted to the FDA for listing in the Approved Drug Products with Therapeutic Equivalence Evaluations, or the Orange Book. We or our Founded Entities may be unable to obtain patents covering the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates that contain one or more claims that satisfy the requirements for listing in the Orange Book. Even if we or our Founded Entities submit a patent for listing in the Orange Book, the FDA may decline to list the patent, or a manufacturer of generic drugs may challenge the listing. If or when one of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates is approved and a patent covering that therapeutic candidate is not listed in the Orange Book, a manufacturer of generic drugs would not have to provide advance notice to us of any abbreviated new drug application, or ANDA, filed with the FDA to obtain permission to sell a generic version of such therapeutic candidate.

Issued patents covering our Wholly Owned Programs or our Founded Entities' therapeutic candidates could be found invalid or unenforceable if challenged in courts or patent offices.

If we, our Founded Entities or one of our licensing partners initiated legal proceedings against a third party to enforce a patent covering one or more of our Wholly Owned Programs or our Founded Entities' therapeutic candidates, the defendant could counterclaim that the patent covering the relevant therapeutic candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including subject matter eligibility, novelty, nonobviousness, written description or enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post grant review, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in revocation or amendment to our or our Founded Entities' patents in such a way that they no longer cover our Wholly Owned Programs or our Founded Entities' therapeutic candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our Wholly Owned Programs or our Founded Entities' therapeutic candidates. Such a loss of patent protection could have a material adverse impact on our business.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our and our Founded Entities' ability to protect our therapeutics.

Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. Assuming that other requirements for patentability are met, prior to March 2013, in the United States, the first to invent the claimed invention was entitled to a patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 2013, under the Leahy-Smith America Invents Act, or the America Invents Act, enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. A third party that files a patent application in the USPTO after March 2013, but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us and our Founded Entities to be cognizant of the time from invention to filing of a patent application and be diligent in filing patent applications, but circumstances could prevent us from promptly filing patent applications on our inventions. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we, our Founded Entities or our licensors were the first to either (i) file any patent application related to our Wholly Owned Programs or our Founded Entities' therapeutic candidates or (ii) invent any of the inventions claimed in our, our Founded Entities or our licensor's patents or patent applications.

The America Invents Act also includes a number of significant changes that affect the way patent applications are prosecuted and also may affect patent litigation. These include allowing third party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, inter partes review, and derivation proceedings. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly,

a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. Therefore, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our or our Founded Entities' owned or in-licensed patent applications and the enforcement or defense of our or our Founded Entities' owned or in-licensed issued patents, all of which could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects.

In addition, the patent positions of companies in the development and commercialization of pharmaceuticals are particularly uncertain. Recent U.S. Supreme Court and Federal Circuit rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. This combination of events has created uncertainty with respect to the validity and enforceability of patents, once obtained. Depending on future actions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and/or applications. We and our Founded Entities have systems in place to remind us to pay these fees, and we and our Founded Entities employ outside firms and rely on outside counsel to pay these fees due to the USPTO and non-U.S. patent agencies. However, we and our Founded Entities cannot guarantee that our licensors have similar systems and procedures in place to pay such fees. In addition, the USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

Risks Related to Confidentiality

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed.

We and our Founded Entities consider proprietary trade secrets, confidential know-how and unpatented know-how to be important to our business. We and our Founded Entities may rely on trade secrets and confidential know-how to protect our technology, especially where patent protection is believed by us to be of limited value. However, trade secrets and confidential know-how are difficult to protect, and we have limited control over the protection of trade secrets and confidential know-how used by our licensors, collaborators and suppliers. Because we have relied in the past on third parties to manufacture the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates, because we may continue to do so in the future, and because we expect to collaborate with third parties on the development of our current therapeutic candidates and any future therapeutic candidates we develop, we may, at times, share trade secrets with them. We also conduct joint R&D programs that may require us to share trade secrets under the terms of our R&D partnerships or similar agreements. Under such circumstances, trade secrets and confidential know-how can be difficult to maintain as confidential.

We and our Founded Entities seek to protect our confidential proprietary information, in part, by confidentiality agreements and invention assignment agreements with our employees, consultants, scientific advisors, contractors and collaborators. These agreements are designed to protect our proprietary information. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our and our Founded Entities' trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. For example, any of these parties may breach the agreements and disclose proprietary information, including trade secrets, and we may not be able to obtain adequate remedies for such breaches. We and our Founded Entities also seek to preserve the integrity and confidentiality of our confidential proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. If any of our or our Founded Entities' confidential proprietary information were to be lawfully obtained or independently developed by a competitor, we or our Founded Entities would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position.

Unauthorized parties may also attempt to copy or reverse engineer certain aspects of our or our Founded Entities' therapeutics that we consider proprietary. We or our Founded Entities may not be able to obtain adequate remedies in the event of such unauthorized use. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. Trade secrets will also over time be disseminated within the industry through independent development, the publication of journal articles and the movement of personnel skilled in the art from company to company or academic to industry scientific positions. Though our or our Founded Entities' agreements with third parties typically restrict the ability of our advisors, employees, collaborators, licensors, suppliers, third-party contractors and consultants to publish data potentially relating to our trade secrets, our agreements may contain certain limited publication rights. In addition, if any of our or our Founded Entities' trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Despite employing the contractual and other security precautions described above, the need to share trade secrets increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. If any of these events occurs or if we otherwise lose protection for our trade secrets, the value of such information may be greatly reduced and our competitive position, business, financial condition, results of operations, and prospects would be harmed.

We or our Founded Entities may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

As is common in the biotechnology and pharmaceutical industries, we and our Founded Entities employ individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we and our Founded Entities try to ensure that our employees, consultants and independent contractors do not use the proprietary information or know-how of others in their work for us, we or our Founded Entities may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of our employee's former employer or other third parties. Litigation may be necessary to defend against these claims. If we or our Founded Entities fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely impact our business. Even if we or our Founded Entities are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Risks Related to Challenges or Lawsuits Related to Intellectual Property

We may become involved in lawsuits to protect or enforce our or our Founded Entities' patents or other intellectual property, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our or our Founded Entities' patents or other intellectual property. Our and our Founded Entities' ability to enforce our patent or other intellectual property rights depends on our ability to detect infringement. It may be difficult to detect infringers who do not advertise the components or methods that are used in connection with their therapeutics and services. Moreover, it may be difficult or impossible to obtain evidence of infringement in a competitor's or potential competitor's therapeutic or service. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded if we were to prevail may not be commercially meaningful. If we were to initiate legal proceedings against a third party to enforce a patent covering one or more of our Wholly

Owned Programs or our Founded Entities' therapeutic candidates, the defendant could counterclaim that the patent covering our or our Founded Entities' therapeutic candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including subject matter eligibility, novelty, nonobviousness, written description or enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity and unenforceability is unpredictable. Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our or our Founded Entities' patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all, or if a non-exclusive license is offered and our competitors gain access to the same technology. Our defense of litigation or interference or derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue clinical trials, continue research programs, license necessary technology from third parties, or enter into development partnerships that would help us bring therapeutic candidates to market. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our or our Founded Entities' confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions, or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could adversely impact the price of our ADSs. Furthermore, any of the foregoing could have a material adverse effect on our financial condition, results of operations, and prospects.

We and our Founded Entities may be subject to claims challenging the inventorship of our patents and other intellectual property.

Our and our Founded Entities' agreements with employees and our personnel policies provide that any inventions conceived by an individual in the course of rendering services to us shall be our exclusive property. Although our policy is to have all such individuals complete these agreements, we may not obtain these agreements in all circumstances, and individuals with whom we have these agreements may not comply with their terms. The assignment of intellectual property may not be automatic upon the creation of an invention and despite such agreement, such inventions may become assigned to third parties. In the event of unauthorized use or disclosure of our trade secrets or proprietary information, these agreements, even if obtained, may not provide meaningful protection, particularly for our trade secrets or other confidential information.

We, our Founded Entities or our licensors may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or in-licensed patents, trade secrets, or other intellectual property as an inventor or co-inventor. For example, we, our Founded Entities or our licensors may have inventorship disputes arising from conflicting obligations of employees, consultants or others who are involved in developing our Wholly Owned Programs or our Founded Entities' therapeutic candidates. Litigation may be necessary to defend against these and other claims challenging inventorship of our, our Founded Entities' or our licensors' ownership of our owned or in-licensed patents, trade secrets or other intellectual property. If we, our Founded Entities or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our Wholly Owned Programs or our Founded Entities' therapeutic candidates. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Any of the foregoing could have a material adverse effect on our competitive position, business, financial condition, results of operations and prospects.

Risks Related to the COVID-19 Pandemic

The COVID-19 pandemic has impacted, and may in the future impact, our business, including our clinical trials and preclinical studies, and may materially and adversely affect our business in the future.

Public health crises such as pandemics or other global emergencies could adversely impact our business and have a material adverse impact on our operations and financial condition and results. As a result of the COVID-19 outbreak or any future pandemics, we have experienced, and may in the future experience, disruptions that severely impact our business, clinical trials and preclinical studies, including:

- delays or difficulties in enrolling patients in our clinical trials;
- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- delays or disruptions in non-clinical experiments due to unforeseen circumstances at contract research organizations, or CROs, and vendors along their supply chain;
- increased rates of patients withdrawing from our clinical trials following enrollment as a result of contracting COVID-19, being forced to quarantine, or not accepting home health visits;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site data monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others or interruption of clinical trial subject visits and study procedures (particularly any procedures that may be deemed non-essential), which may impact the integrity of subject data and clinical study endpoints;
- interruption or delays in the operations of the FDA, comparable foreign regulatory agencies and notified bodies, which may impact review and approval or certification timelines;
- interruption of, or delays in receiving, supplies of our therapeutic candidates from our contract manufacturing organizations due to staffing shortages, production slowdowns or stoppages and disruptions in delivery systems; and
- limitations on employee resources that would otherwise be focused on the conduct of our preclinical studies and clinical trials, including because of sickness of employees or their families, the desire of employees to avoid contact with large groups of people, an increased reliance on working from home or mass transit disruptions.

The COVID-19 pandemic has had, and may continue to have, an unfavorable impact on global economic conditions, including a decrease in or loss of insurance coverage among individuals in the United States, an increase in unemployment, and other negative impacts. In addition, the trading prices for biopharmaceutical companies have been highly volatile as a result of recent extreme volatility in the global economy, including as a result of the COVID-19 pandemic. As a result, if we require any further capital we may face difficulties raising capital through sales of our common stock or such sales may be on unfavorable terms. The extent to which the COVID-19 pandemic may impact our business, preclinical studies and clinical trials will depend on future developments, which are highly uncertain and cannot be predicted with confidence.

To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this "Risk Factors" section, such as those relating to our clinical development operations, the supply chain for our ongoing and planned clinical trials, and the availability of governmental and regulatory authorities to conduct inspections of our clinical trial sites, review materials submitted by us in support of our applications for regulatory approval and grant approval for our therapeutic candidates.

Risks Related to Our Business and Industry

We attempt to distribute our scientific, execution and financing risks across a variety of therapeutic areas, indications, programs and modalities that are driven by our proven innovation and drug development strategy. However, our assessment of, and approach to, risk may not be comprehensive or effectively avoid delays or failures in one or more of our programs. Failures in one or more of our programs could adversely impact other programs and have a material adverse impact on our business, results of operations and ability to fund our business.

We are dedicated to giving life to new classes of medicine to Improve the lives of patients with devastating diseases. We have created a broad and deep pipeline through our experienced research and development team and our extensive network of scientists, clinicians and industry leaders that is being advanced both internally and through our Founded Entities. Our R&D engine has resulted in the development of a number of therapeutics and therapeutic candidates, including two that have received both US FDA clearance and European marketing authorization and a third that we expect will soon be filed for FDA approval. A number of these programs are being advanced by PureTech or our Founded Entities in various indications and stages of clinical development, including registration enabling studies. All of the underlying programs and platforms that resulted in this pipeline of therapeutic candidates were initially identified or discovered and then advanced by the PureTech team through key validation points. As our and certain of our Founded Entities' therapeutic candidates progress through clinical development, we or others may determine that certain of our risk allocation decisions were incorrect or insufficient, that individual programs or our science in general has technology or biology risks that were unknown or underappreciated, or that we have allocated resources across our programs in such a way that did not maximize potential value creation. All of these risks may relate to our current and future programs sharing similar science and infrastructure, and in the event material decisions in any of these areas turn out to have been incorrect or under-optimized, we may experience a material adverse impact on our business and ability to fund our operations.

Our business is highly dependent on the clinical advancement of our programs and our success in identifying potential therapeutic candidates. Delay or failure to advance our programs could adversely impact our business.

Over time, our and our Founded Entities' preclinical and clinical work led us to identify potential synergies across target therapeutic indications, generating a broad portfolio of therapeutic candidates across multiple programs. Even if a particular program is successful in any phase of development, such program could fail at a later phase of development, and other programs within the same therapeutic area may still fail at any phase of development including at phases where earlier programs in that therapeutic area were successful. This may be a result of technical challenges unique to that program or due to biology risk, which is unique to every program. As we progress our programs through clinical development, there may be new technical challenges that arise that cause an entire program or a group of programs within an area of focus to fail. While we aim to segregate risk across programs, and in certain cases among our Founded Entities, there may be foreseen and unforeseen risks across the therapeutic candidates within our Wholly Owned Pipeline and programs being developed by our Founded Entities in whole or in part. In addition, if any one or more of our clinical programs encounter safety, tolerability, or efficacy problems, developmental delays, regulatory issues, or other problems, our business could be significantly harmed.

Our future success depends on our ability to retain key employees, directors, consultants and advisors and to attract, retain and motivate qualified personnel.

Our ability to compete in the highly competitive biotechnology industry depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel. We are highly dependent on the management, R&D, clinical, financial and business development expertise of our executive officers, our directors, as well as the other members of our scientific and clinical teams, including Daphne Zohar, our chief executive officer, Bharatt Chowrira, our president and chief business, finance and operating officer, Eric Elenko, our chief innovation and strategy officer, and Julie Krop, our chief medical officer. The loss of the services of any of our executive officers and other key personnel, and our inability to find suitable replacements could result in delays in therapeutic development and our financial condition and results of operations could be materially adversely affected.

Furthermore, each of our executive officers may terminate their employment with us at any time. Recruiting and retaining qualified scientific and clinical personnel and, if we progress the development of the therapeutic candidates within our Wholly Owned Pipeline toward scaling up for commercialization, sales and marketing personnel, will also be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval for and commercialize the therapeutic candidates within our Wholly Owned Pipeline. Competition to hire qualified personnel in our industry is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. Furthermore, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited or that they have divulged proprietary or other confidential information, or that their former employers own their research output. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions.

In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

We will need to expand our organization and we may experience difficulties in managing this growth, which could disrupt our operations.

As we mature, we expect to expand our full-time employee base and to hire more consultants and contractors. Our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time toward managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of additional therapeutic candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and/or grow revenues could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize therapeutic candidates and compete effectively will depend, in part, on our ability to effectively manage any future growth.

Because we are developing multiple programs and therapeutic candidates and are pursuing a variety of target indications and treatment modalities, we may expend our limited resources to pursue a particular therapeutic candidate and fail to capitalize on development opportunities or therapeutic candidates that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and personnel resources, we may forgo or delay pursuit of opportunities with potential target indications or therapeutic candidates that later prove to have greater commercial potential than our current and planned development programs and therapeutic candidates. Our resource allocation decisions may cause us to fail to capitalize on viable commercial therapeutics or profitable market opportunities. Our spending on current and future research and development programs and other future therapeutic candidates for specific indications may not yield any commercially viable future therapeutic candidates. If we do not accurately evaluate the commercial potential or target market for a particular therapeutic candidate, we may be required to relinquish valuable rights to that therapeutic candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such future therapeutic candidates.

Additionally, we may pursue additional in-licenses or acquisitions of development-stage assets or programs, which entails additional risk to us. For example, in 2019 we acquired LYT-100, which is the most advanced therapeutic candidate in our Wholly Owned Pipeline and to which we are investing significant resources for its development. Identifying, selecting and acquiring promising therapeutic candidates requires substantial technical, financial and human resources expertise. Efforts to do so may not result in the actual acquisition or license of a successful therapeutic

candidate, potentially resulting in a diversion of our management's time and the expenditure of our resources with no resulting benefit. For example, if we are unable to identify programs that ultimately result in approved therapeutics, we may spend material amounts of our capital and other resources evaluating, acquiring and developing therapeutics that ultimately do not provide a return on our investment.

Product liability lawsuits against us could cause us to incur substantial liabilities and could limit commercialization of any therapeutic candidates that we may develop.

We face an inherent risk of product liability exposure related to the testing of therapeutic candidates in human clinical trials and will face an even greater risk if we commercially sell any therapeutics that we may develop. If we cannot successfully defend ourselves against claims that the therapeutic candidates within our Wholly Owned Pipeline or medicines caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any therapeutic candidates or medicines that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue; and
- the inability to commercialize the therapeutic candidates within our Wholly Owned Pipeline.

Although we maintain product liability insurance, including coverage for clinical trials that we sponsor, it may not be adequate to cover all liabilities that we may incur. We anticipate that we will need to increase our insurance coverage as we commence additional clinical trials and if we successfully commercialize any therapeutic candidates. The market for insurance coverage is increasingly expensive, and the costs of insurance coverage will increase as our clinical programs increase in size. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

Litigation against us could be costly and time-consuming to defend and could result in additional liabilities.

We may from time to time be subject to legal proceedings and claims that arise in the ordinary course of business or otherwise, such as claims brought by third parties in connection with commercial disputes and employment claims made by our current or former employees. Claims may also be asserted by or on behalf of a variety of other parties, including government agencies, patients, or stockholders. We could also be subject to securities class action litigation. In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biotechnology companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

Any litigation involving us may result in substantial costs, operationally restrict our business, and may divert management's attention and resources, which may seriously harm our business, overall financial condition, and results of operations. Insurance may not cover existing or future claims, be sufficient to fully compensate us for one or more of such claims, or continue to be available on terms acceptable to us. A claim brought against us that is uninsured or underinsured could result in unanticipated costs, thereby adversely impacting our results of operations.

The increasing use of social media platforms presents new risks and challenges.

Social media is increasingly being used to communicate about our and our Founded Entities' clinical development programs and the diseases our therapeutics are being developed to treat, and we intend to utilize appropriate social media in connection with our commercialization efforts following approval of the therapeutic candidates within our Wholly Owned Pipeline. Social media practices in the biopharmaceutical industry continue to evolve and regulations relating to such use are not always clear. This evolution creates uncertainty and risk of noncompliance with regulations applicable to our business. For example, patients may use social media channels to comment on their experience in an ongoing blinded clinical study or to report an alleged adverse event. When such disclosures occur, there is a risk that we fail to monitor and comply with applicable adverse event reporting obligations or we may not be able to defend our business or the public's legitimate interests in the face of the political and market pressures generated by social media due to restrictions on what we may say about the therapeutic candidates within our Wholly Owned Pipeline. There is also a risk of inappropriate disclosure of sensitive information or negative or inaccurate posts or comments about us on any social networking website. If any of these events were to occur or we otherwise fail to comply with applicable regulations, we could incur liability, face regulatory actions or incur other harm to our business.

Our and our Founded Entities' employees, independent contractors, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk of fraud, misconduct or other illegal activity by our employees, independent contractors, consultants, commercial partners and vendors as well as the employees, independent contractors, consultants, commercial partners and vendors of our Founded Entities. Misconduct by these parties could include intentional, reckless and negligent conduct that fails to: comply with the laws of the FDA and comparable foreign regulatory authorities; provide true, complete and accurate information to the FDA and comparable foreign regulatory authorities; comply with manufacturing standards we have established; comply with healthcare fraud and abuse laws in the United States and similar foreign fraudulent misconduct laws; or report financial information or data accurately or to disclose unauthorized activities. If we or our Founded Entities obtain FDA or comparable foreign regulatory authorities approval, or notified bodies certification, of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates and begin commercializing those therapeutics in the United States and abroad, our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. In particular, research, sales, marketing, education and other business arrangements in the healthcare industry are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, educating, marketing and promotion, sales and commission, certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Employee litigation and unfavorable publicity could negatively affect our future business.

Our employees may, from time to time, bring lawsuits against us regarding injury, creating a hostile work place, discrimination, wage and hour disputes, sexual harassment, or other employment issues. In recent years, there has been an increase in the number of discrimination and harassment claims generally. Coupled with the expansion of social media platforms and similar devices that allow individuals access to a broad audience, these claims have had a significant negative impact on some businesses. Certain companies that have faced employment- or harassment-related lawsuits have had to terminate management or other key personnel, and have suffered reputational harm that has negatively impacted their business. If we were to face any employment-related claims, our business could be negatively affected.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste therapeutics. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be

asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or therapeutic efforts. Our failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Cyberattacks or other failures in our telecommunications or information technology systems, or those of our collaborators, contract research organizations, third-party logistics providers, distributors or other contractors or consultants, could result in information theft, data corruption and significant disruption of our business operations.

We, our collaborators, our CROs, third-party logistics providers, distributors and other contractors and consultants utilize information technology, or IT, systems and networks to process, transmit and store electronic information in connection with our business activities. As use of digital technologies has increased, cyber incidents, including third parties gaining access to employee accounts using stolen or inferred credentials, computer malware, viruses, spamming, phishing attacks or other means, and deliberate attacks and attempts to gain unauthorized access to computer systems and networks, have increased in frequency and sophistication. These threats pose a risk to the security of our, our collaborators', our CROs', third-party logistics providers', distributors' and other contractors' and consultants' systems and networks, and the confidentiality, availability and integrity of our data. There can be no assurance that we will be successful in preventing cyberattacks or successfully mitigating their effects. Similarly, there can be no assurance that our collaborators, CROs, third-party logistics providers, distributors and other contractors and consultants will be successful in protecting our clinical and other data that is stored on their systems.

We and certain of our service providers are from time to time subject to cyberattacks and security incident. Although to our knowledge we have not experienced any significant system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of development programs and business operations.

Any cyber-attack, data breach or destruction or loss of data could result in a violation of applicable U.S. and international privacy, data protection and other laws, and subject us to litigation and governmental investigations and proceedings by federal, state and local regulatory entities in the United States and by international regulatory entities, resulting in exposure to material civil and/or criminal liability. Further, our general liability insurance and corporate risk program may not cover all potential claims to which we are exposed and may not be adequate to indemnify us for all liability that maybe imposed; and could have a material adverse effect on our business and prospects. For example, the loss of clinical trial data from completed or ongoing clinical trials for any of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates could result in delays in our development and regulatory approval efforts and significantly increase our costs to recover or reproduce the data. In addition, we may suffer reputational harm or face litigation or adverse regulatory action as a result of cyber-attacks or other data security breaches and may incur significant additional expense to implement further data protection measures.

The increasing focus on environmental sustainability and social initiatives could increase our costs, harm our reputation and adversely impact our financial results.

There has been increasing public focus by investors, patients, environmental activists, the media and governmental and nongovernmental organizations on a variety of environmental, social and other sustainability matters. We may experience pressure to make commitments relating to sustainability matters that affect us, including the design and implementation of specific risk mitigation strategic initiatives relating to sustainability. Expectations regarding the management of environmental, social and governance, or ESG, initiatives continues to evolve rapidly. While we may from time to time engage in various initiatives (including but not limited to voluntary disclosures, policies, or goals) to improve our ESG profile or respond to stakeholder expectations, we cannot guarantee that these initiatives will have the desired effect. If we are not effective in addressing environmental, social and other sustainability matters affecting our business, or setting and meeting relevant sustainability goals, our reputation and financial results may suffer. In addition, even if we are effective at addressing such concerns, we may experience increased costs as a result of executing upon our sustainability goals that may not be offset by any benefit to our reputation, which could have an adverse impact on our business and financial condition.

In addition, this emphasis on environmental, social and other sustainability matters has resulted and may result in the adoption of new laws and regulations, including new reporting requirements. If we fail to comply with new laws, regulations or reporting requirements, our reputation and business could be materially and adversely impacted.

We may acquire businesses, or therapeutics or therapeutic candidates, or form strategic alliances, in the future, and we may not realize the benefits of such acquisitions.

We acquire or in-license businesses or therapeutics from other companies or create joint ventures with third parties that we believe will complement or augment our existing business. If we acquire businesses with promising markets or technologies, we may not be able to realize the benefit of acquiring such businesses if we are unable to successfully integrate them with our existing operations and company culture or retain key personnel from the acquired company. We may encounter numerous difficulties in developing, manufacturing and marketing any new therapeutics or therapeutic candidates resulting from a strategic alliance or acquisition that delay or prevent us from realizing their expected benefits or enhancing our business. We cannot assure you that, following any such acquisition or license, we will achieve the expected synergies to justify the transaction. Failure to successfully identify, complete, manage and integrate acquisitions could materially and adversely affect our business, financial condition and results of operations and could cause the price of our securities to decline.

Changes in funding for the FDA, the SEC and other government agencies could hinder their ability to hire and retain key leadership and other personnel, prevent new therapeutics and services from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA, foreign regulatory authorities and notified bodies to review and approve or certify new therapeutics or take action with respect to other regulatory matters can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept payment of user fees, and statutory, regulatory, and policy changes. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable. The priorities of the FDA and foreign regulatory authorities may also influence the ability of the FDA and foreign regulatory authorities to take action on regulatory matters, for example the FDA's and foreign regulatory authorities' budget and funding levels and ability to hire and retain key personnel.

Disruptions at the FDA and foreign regulatory authorities may also slow the time necessary for new drugs to be reviewed and/or approved, or for other actions to be taken, by relevant government agencies, which would adversely affect our business. For example, over the last several years, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA and the SEC, have had to furlough critical FDA, SEC and other government employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Similarly, a prolonged government shutdown could prevent the timely review of our patent applications by the USPTO, which could delay the issuance of any U.S. patents to which we might otherwise be entitled. Further, in our operations as a public company, future government shutdowns could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

Separately, in response to the global COVID-19 pandemic, the FDA postponed most inspections of domestic and foreign manufacturing facilities at various points. Even though the FDA has since resumed standard inspection operations of domestic facilities where feasible, the FDA has continued to monitor and implement changes to its inspectional activities to ensure the safety of its employees and those of the firms it regulates as it adapts to the evolving COVID-19 pandemic, and any resurgence of the virus or emergence of new variants may lead to further inspectional delays. Regulatory authorities outside the U.S. have adopted similar restrictions or other policy measures in response to the COVID-19 pandemic or for other reasons and may experience delays in their regulatory activities. If a prolonged government shutdown or other disruption occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Future shutdowns or other disruptions could also affect other government agencies such as the SEC, which may also impact our business by delaying review of our public filings, to the extent such review is necessary, and our ability to access the public markets.

Furthermore, in the EU, notified bodies must be officially designated to certify products and services in accordance with the EU Medical Devices

Regulation. Several notified bodies have been designated under the EU Medical Devices Regulation. However, the COVID-19 pandemic has significantly slowed down their designation process and the current designated notified bodies are facing a large amount of requests with the new regulation as a consequence of which review times may have lengthened. This situation may impact the way we are conducting our business in the EU and the EEA and the ability of our notified body to timely review and process our regulatory submissions and perform its audits

We or the third parties upon whom we depend may be adversely affected by a natural disaster and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Natural disasters could severely disrupt our operations, and have a material adverse effect on our business, results of operations, financial condition and prospects. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as the manufacturing facilities of our third-party CMOs, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we have in place currently are limited and are unlikely to prove adequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which, could have a material adverse effect on our business, financial condition, results of operations and prospects.

We will continue to incur increased costs as a result of operating as a U.S.-listed public company, and our management will be required to devote substantial time to new compliance initiatives.

As a U.S. public company, and particularly now that we are no longer an emerging growth company, we have incurred and will continue to incur significant legal, accounting and other expenses that we did not incur as a public company listed on the LSE. In addition, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and rules subsequently implemented by the SEC and Nasdaq have imposed various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance.

Pursuant to Section 404, we are required to furnish a report by our management on our internal control over financial reporting, including an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404, we have and continue to be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk we will not be able to conclude that our internal control over financial reporting is effective as required by Section 404. This could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

Risks Related to Our International Operations

Our international operations may expose us to business, regulatory, political, operational, financial, pricing and reimbursement and economic risks associated with doing business outside of the United States.

As a company based in the United Kingdom, our business is subject to risks associated with being organized outside of the United States. While the majority of our operations are in the United States and our functional currency is the U.S. dollar, our future results could be harmed by a variety of international factors, including:

- economic weakness, including inflation, or political instability in particular non-U.S. economies and markets;
- differing and changing regulatory requirements;
- difficulties in compliance with different, complex and changing laws, regulations and court systems of multiple jurisdictions and compliance with a wide variety of foreign laws, treaties and regulations;
- changes in a specific country's or region's political or economic environment, including, but not limited to, the implications of one or more of the following occurring the decision of the United Kingdom:
- future activities subject to the terms of the Trade and Cooperation Agreement between the United Kingdom and the European Union effective May 1, 2021, which has not impacted our results to-date;
- a second referendum on Scottish independence from the United Kingdom; and/or
- a snap general election; and
- negative consequences from changes in tax laws.

In addition, our business strategy incorporates potential international expansion to target patient populations outside the United States. If we or our Founded Entities receive regulatory approval for and commercialize any of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates in patient populations outside the United States, we may hire sales representatives and conduct physician and patient association outreach activities outside of the United States. Doing business internationally involves a number of risks, including, but not limited to:

- multiple, conflicting, and changing laws and regulations such as privacy regulations, tax laws, export and import restrictions, employment laws, regulatory requirements, and other governmental approvals, permits, and licenses;
- failure by us to obtain and maintain regulatory approvals for the use of our therapeutics in various countries;
- additional potentially relevant third-party patent rights;
- complexities and difficulties in obtaining protection and enforcing our intellectual property;
- difficulties in staffing and managing foreign operations;
- complexities associated with managing multiple payor reimbursement regimes, government payors, or patient self-pay systems;
- limits in our ability to penetrate international markets;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our therapeutics, and exposure to foreign currency exchange rate fluctuations;
- natural disasters, political and economic instability, including wars, such as the conflict between Russia and Ukraine, terrorism, and political unrest, outbreak of disease, boycotts, curtailment of trade, and other business restrictions;
- certain expenses including, among others, expenses for travel, translation, and insurance; and
- regulatory and compliance risks that relate to maintaining accurate information and control over sales and activities that may fall within the purview of the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, its books and records provisions, or its anti-bribery provisions.

Any of these factors could significantly harm our potential international expansion and operations and, consequently, our results of operations.

Unfavorable global economic conditions could adversely affect our business, financial condition or results of operations.

Our ability to invest in and expand our business and meet our financial obligations, to attract and retain third-party contractors and collaboration partners and to raise additional capital depends on our operating and financial performance, which, in turn, is subject to numerous factors, including the prevailing economic and political conditions and financial, business and other factors beyond our control, such as the rate of unemployment, the number of uninsured persons in the United States, political influences and inflationary pressures. For example, an overall decrease in or loss of insurance coverage among individuals in the United States as a result of unemployment, underemployment or the repeal of certain provisions of the ACA, may decrease the demand for healthcare services and pharmaceuticals. If fewer patients are seeking medical care because they do not have insurance coverage, we and our Founded Entities may experience difficulties in any eventual commercialization of the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates and our business, results of operations, financial condition and cash flows could be adversely affected.

In addition, our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets upon which pharmaceutical and biopharmaceutical companies such as us are dependent for sources of capital. In the past, global financial crises have caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including a reduced ability to raise additional capital when needed on acceptable terms, if at all, and weakened demand for the therapeutic candidates within our Wholly Owned Pipeline. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption. Any of the foregoing could harm our business and we

cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business. Additionally, we maintain the majority of our cash and cash equivalents in accounts with major U.S. and multi-national financial institutions, and our deposits at certain of these institutions exceed insured limits. Market conditions can impact the viability of these institutions. In the event of failure of any of the financial institutions where we maintain our cash and cash equivalents, there can be no assurance that we would be able to access uninsured funds in a timely manner or at all. Any inability to access or delay in accessing these funds could adversely affect our business and financial position.

We are subject to the U.K. Bribery Act 2010, or the Bribery Act, the U.S. Foreign Corrupt Practices Act of 1977 (as amended) ("FCPA") and other anti-corruption laws, as well as export control laws, import and customs laws, trade and economic sanctions laws and other laws governing our operations.

Our operations are subject to anti-corruption laws, including the Bribery Act, the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. §201, the U.S. Travel Act, and other anti-corruption laws that apply in countries where we do business. These laws generally prohibit us and our employees and intermediaries acting on our behalf from corruptly authorizing, promising, offering, or providing, directly or indirectly, anything else of value, to government officials or other persons to obtain or retain business or gain some other business advantage. The Bribery Act also prohibits: (i) "commercial" bribery of private parties, in addition to bribery involving domestic or foreign officials; (ii) the acceptance of bribes, as well as the giving of bribes, and (iii) "facilitation payments", meaning generally low level payments designed to secure or expedite routine governmental actions or other conduct to which persons are already under obligations to perform. The Bribery Act also creates an offence applicable corporate entities for failure to prevent bribery by our employees, officers, directors and other third parties acting on our behalf, to which the only defence is to maintain "adequate procedures" designed to prevent such acts of bribery.

In the future, we and our strategic partners may operate in jurisdictions that pose a heightened risk of potential Bribery Act or FCPA violations, and we may participate in collaborations and relationships with third parties whose conduct could potentially subject us to liability under the Bribery Act, FCPA or other anti-corruption laws, even if we do not explicitly authorize or have actual knowledge of such activities. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted.

We are also subject to other laws and regulations governing our international operations, including regulations administered by the governments of the United Kingdom and the United States, and authorities in the European Union and its member states, including applicable export control regulations, economic sanctions and embargoes on certain countries, regions, and persons, import and customs requirements and currency exchange regulations, collectively referred to as the Trade Control laws. Compliance with Trade Control Laws regarding the import and export of our products may create delays in the introduction of our products in international markets, and, in some cases, prevent the export of our products to some countries altogether.

There is no assurance that we will be completely effective in ensuring our compliance with all applicable anti-corruption laws, including the Bribery Act, the FCPA or other legal requirements, including Trade Control laws. If we are not in compliance with the Bribery Act, the FCPA and other anti-corruption laws or Trade Control laws, we may be subject to criminal and civil penalties, disgorgement, debarment from debarment from government contracts as well as other sanctions and remedial measures, and may also result in collateral litigation. These consequences could have an adverse impact on our business, financial condition, results of operations and liquidity. Likewise, any investigation of any potential violations of the Bribery Act, the FCPA, other anti-corruption laws or Trade Control laws by United Kingdom, United States or other authorities could also have an adverse impact on our reputation, our business, results of operations and financial condition. In addition, responding to any enforcement action may result in a significant diversion of management's attention and resources and significant defense costs and other professional fees.

The United Kingdom's withdrawal from the European Union may have a negative effect on global economic conditions, financial markets and our business, which could reduce the price of our ADSs.

Since the end of the Brexit transition period on January 1, 2021, Great Britain (England, Scotland and Wales) has not been directly subject to EU laws, however under the terms of the Ireland/Northern Ireland Protocol, EU laws generally apply to Northern Ireland. On February 27, 2023, the UK Government and the European Commission reached a political agreement on the "Windsor Agreement" which will revise the Protocol on Ireland/Northern Ireland in order to address some of the perceived shortcomings in its operation. Under the proposed changes, Northern Ireland would be reintegrated under the regulatory authority of the MHRA with respect to medicinal products. These proposed changes need to be codified and agreed by the respective parliaments of the UK and EU before taking effect. There could be additional uncertainty and risk around what these changes will mean to our business. It is currently unclear to what extent the UK Government will seek to align its regulations with the EU. The EU laws that have been transposed into UK law through secondary legislation remain applicable in Great Britain. However, under the Retained EU Law (Revocation and Reform) Bill 2022, which is currently before the UK parliament, any retained EU law not expressly preserved and "assimilated" into domestic law or extended by ministerial regulations (to no later than June 23, 2026) will automatically expire and be revoked by December 31, 2023. In addition, new legislation such as the (EU) CTR is not applicable in Great Britain. Whilst the EU-UK Trade and Cooperation Agreement, or TCA, includes the mutual recognition of Good Manufacturing Practice, or GMP, inspections of manufacturing facilities for medicinal products and GMP documents issued, it does not contain wholesale mutual recognition of UK and EU pharmaceutical regulations and product standards. There may be divergent local requirements in Great Britain from the EU in the future, which may impact clinical and development activities that occur in the UK in the future. Similarly, clinical trial submissions in the UK will not be able to be bundled with those of EU member states within the EMA Clinical Trial Information System, or CTIS, adding further complexity, cost and potential risk to future clinical and development activity in the UK. Significant political and economic uncertainty remains about how much the relationship between the UK and EU will differ as a result of the UK's withdrawal.

These developments, or the perception that any related developments could occur, have had and may continue to have a material adverse effect on global economic conditions and the stability of global financial markets, and may significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. Any of these factors could depress economic activity and restrict our access to capital, which could have a material adverse effect on our business, financial condition and results of operations and may adversely affect the market price of our ADSs.

The uncertainty regarding new or modified arrangements between the UK and other countries following the withdrawal may have a material adverse effect on the movement of personnel, goods, information or data between the UK and members of the EU and the United States, including the interruption of or delays in imports into the UK of goods originating within the EU and exports from the UK of goods originating there. For example, shipments into the UK of medicinal product substance manufactured for us in the EU may be interrupted or delayed and thereby prevent or delay the manufacture in the UK of drug product. Similarly, shipments out of the UK of drug product to the United States or the EU may be interrupted or delayed and thereby prevent or delay the delivery of drug product to clinical sites. Such a situation could hinder our ability to conduct current and planned clinical trials and have an adverse effect on our business.

Exchange rate fluctuations may materially affect our results of operations and financial condition.

Although we are based in the United Kingdom, our financial statements are denominated in U.S dollars and many of our business activities are carried out with partners outside the U.S. and United Kingdom and these transactions may be denominated in another currency. As a result, our business and the price of our ADSs may be affected by fluctuations in foreign exchange rates not only between the pound sterling and the U.S. dollar, but also the currencies of other countries, which may have a significant impact on our results of operations and cash flows from period to period. Currently, we do not have any exchange rate hedging arrangements in place.

Risks Related to Our Equity Securities and ADSs

The market price of our ADSs has been and will likely continue to be highly volatile, and you could lose all or part of your investment.

The market price of our ADSs has been and will likely continue to be volatile. The stock market in general, and the market for biopharmaceutical companies in particular, has experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your ADSs at or above the purchase price. The market price for our ADSs may be influenced by many factors, including:

- adverse results or delays in our preclinical studies or clinical trials;
- reports of AEs or other negative results in clinical trials of third parties' therapeutic candidates that target the therapeutic candidates within our Wholly Owned Pipeline's or our Founded Entities' therapeutic candidates' target indications;
- an inability for us to obtain additional funding on reasonable terms or at all;

- any delay in submitting an IND, BLA or NDA for the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates and any adverse development or perceived adverse development with respect to the FDA's review of that IND, BLA or NDA;
- failure to develop successfully and commercialize the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates;
- announcements we make regarding our current therapeutic candidates, acquisition of potential new therapeutic candidates and companies and/or in-licensing;
- failure to maintain our or our Founded Entities' existing license arrangements or enter into new licensing and collaboration agreements;
- failure by us, our Founded Entities or our licensors to prosecute, maintain or enforce our intellectual property rights;
- changes in laws or regulations applicable to future therapeutics;
- inability to obtain adequate clinical or commercial supply for the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates or the inability to do so at acceptable prices;
- adverse regulatory decisions, including failure to reach agreement with applicable regulatory authorities on the design or scope of our planned clinical trials;
- failure to obtain and maintain regulatory exclusivity for the therapeutic candidates within our Wholly Owned Pipeline or our Founded Entities' therapeutic candidates;
- regulatory approval or commercialization of new therapeutics or other methods of treating our target disease indications by our competitors;
- failure to meet or exceed financial projections we may provide to the public or to the investment community;
- publication of research reports or comments by securities or industry analysts;
- the perception of the pharmaceutical and biotechnology industries by the public, legislatures, regulators and the investment community;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us, our Founded Entities our strategic collaboration partners or our competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our or our Founded Entities' ability to obtain patent protection for our technologies;
- additions or departures of our key scientific or management personnel;
- significant lawsuits, including patent or shareholder litigation, against us;
- changes in the market valuations of similar companies;
- adverse developments relating to any of the above or additional factors with respect to our Founded Entities;
- sales or potential sales of substantial amounts of our ADSs; and
- trading volume of our ADSs.

In addition, companies trading in the stock market in general, and Nasdaq, in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our ADSs, regardless of our actual operating performance. Since our ADSs were initially sold in November 2020 at a price of $33.00 per ADS, our ADS price has fluctuated significantly. If the market price of our ADSs does not exceed the price at which you acquired them, you may not realize any return on your investment in us and may lose some or all of your investment.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our ADS price and trading volume could decline.

The trading market for our ADSs and ordinary shares depends in part on the research and reports that securities or industry analysts publish about us or our business. If no or few securities or industry analysts cover our company, the trading price for our ADSs and ordinary shares would be negatively impacted. If one or more of the analysts who covers us downgrades our equity securities or publishes incorrect or unfavorable research about our business, the price of our ordinary shares and ADSs would likely decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, or downgrades our securities, demand for our ordinary shares and ADSs could decrease, which could cause the price of our ordinary shares and ADSs or their trading volume to decline.

Future sales, or the possibility of future sales, of a substantial number of our securities could adversely affect the price of the shares and dilute shareholders.

Sales of a substantial number of our ADSs in the public market could occur at any time, subject to certain restrictions described below. If our existing shareholders sell, or indicate an intent to sell, substantial amounts of our securities in the public market, the trading price of the ADSs could decline significantly and could decline below the original purchase price. As of March 31, 2023, we had 278,461,805 outstanding ordinary shares. Ordinary shares subject to outstanding options under our equity incentive plans and the ordinary shares reserved for future issuance under our equity incentive plans will become eligible for sale in the public market in the future, subject to certain legal and contractual limitations.

Holders of ADSs are not treated as holders of our ordinary shares.

If you purchase an ADS, you will become a holder of ADSs with underlying ordinary shares in a company incorporated under English law. Holders of ADSs are not treated as holders of our ordinary shares, unless they withdraw the ordinary shares underlying their ADSs in accordance with the deposit agreement and applicable laws and regulations. The depositary is the holder of the ordinary shares underlying the ADSs. Holders of ADSs therefore do not have any rights as holders of our ordinary shares, other than the rights that they have pursuant to the deposit agreement. See "Description of Securities Other Than Equity Securities" in our Annual Report on Form 20-F.

Holders of ADSs may be subject to limitations on the transfer of their ADSs and the withdrawal of the underlying ordinary shares.

ADSs are transferable on the books of the depositary. However, the depositary may close its books at any time or from time to time when it deems expedient in connection with the performance of its duties. The depositary may refuse to deliver, transfer or register transfers of ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary think it is advisable to do so because of any requirement of law, government or governmental body, or under any provision of the deposit agreement, or for any other reason, subject to the right of ADS holders to cancel their ADSs and withdraw the underlying ordinary shares. Temporary delays in the cancellation of your ADSs and withdrawal of the underlying ordinary shares may arise because the depositary has closed its transfer books or we have closed our transfer books, the transfer of ordinary shares is blocked to permit voting at a shareholders' meeting or we are paying a dividend on our ordinary shares. In addition, ADS holders may not be able to cancel their ADSs and withdraw the underlying ordinary shares when they owe money for fees, taxes and similar charges and when it is necessary to prohibit withdrawals in order to comply with any laws or governmental regulations that apply to ADSs or to the withdrawal of ordinary shares or other deposited securities. See "Description of Securities Other Than Equity Securities" in our Annual Report on Form 20-F.

ADS holders may not be entitled to a jury trial with respect to claims arising under the deposit agreement, which could result in less favorable outcomes to the plaintiff(s) in any such action.

The deposit agreement governing the ADSs representing our ordinary shares provides that, to the fullest extent permitted by law, holders and beneficial owners of ADSs irrevocably waive the right to a jury trial of any claim they may have against us or the depositary arising out of or relating to the ADSs or the deposit agreement.

If this jury trial waiver provision is not permitted by applicable law, an action could proceed under the terms of the deposit agreement with a jury trial. If we or the depositary opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable based on the facts and circumstances of that case in accordance with the applicable state and federal law. To our knowledge, the enforceability of a contractual pre-dispute jury trial waiver in connection with claims arising under the federal securities laws has not been finally adjudicated by the U.S. Supreme Court. However, we believe that a contractual pre-dispute jury trial waiver provision is generally enforceable, including under the laws of the State of New York, which govern the deposit agreement, by a federal or state court in the City of New York, which has non-exclusive jurisdiction over matters arising under the deposit agreement. In determining whether to enforce a contractual pre-dispute jury trial waiver provision, courts will generally consider whether a party knowingly, intelligently and voluntarily waived the right to a jury trial. We believe that this is the case with respect to the deposit agreement and the ADSs. It is advisable that you consult legal counsel regarding the jury waiver provision before entering into the deposit agreement.

If you or any other holders or beneficial owners of ADSs bring a claim against us or the depositary in connection with matters arising under the deposit agreement or the ADSs, including claims under federal securities laws, you or such other holder or beneficial owner may not be entitled to a jury trial with respect to such claims, which may have the effect of limiting and discouraging lawsuits against us and/or the depositary. If a lawsuit is

brought against us and/or the depositary under the deposit agreement, it may be heard only by a judge or justice of the applicable trial court, which would be conducted according to different civil procedures and may result in different outcomes than a trial by jury would have had, including results that could be less favorable to the plaintiff(s) in any such action, depending on, among other things, the nature of the claims, the judge or justice hearing such claims, and the venue of the hearing.

No condition, stipulation or provision of the deposit agreement or ADSs serves as a waiver by any holder or beneficial owner of ADSs or by us or the depositary of compliance with the U.S. federal securities laws and the rules and regulations promulgated thereunder.

One of our principal shareholders has a significant holding in the company which may give them influence in certain matters requiring approval by shareholders, including approval of significant corporate transactions in certain circumstances.

As of March 31, 2023, Invesco Asset Management Limited, or Invesco, held approximately 23.32 percent of our ordinary shares. Accordingly, Invesco may, as a practical matter, be able to influence certain matters requiring approval by shareholders, including approval of significant corporate transactions in certain circumstances. Such concentration of ownership may also have the effect of delaying or preventing any future proposed change in control of the Company. The trading price of the ordinary shares could be adversely affected if potential new investors are disinclined to invest in the Company because they perceive disadvantages to a large shareholding being concentrated in the hands of a single shareholder. The interests of Invesco and the investors that acquire ADSs may not be aligned. Invesco may make acquisitions of, or investments in, other businesses in the same sectors as us or our Founded Entities. These businesses may be, or may become, competitors of us or our Founded Entities. In addition, funds or other entities managed or advised by Invesco may be in direct competition with us or our Founded Entities on potential acquisitions of, or investments in, certain businesses. In addition, Invesco holds equity interests in certain of our Founded Entities where they may exert direct influence.

You will not have the same voting rights as the holders of our ordinary shares and may not receive voting materials in time to be able to exercise your right to vote.

Except as described in our Annual Report on Form 20-F and the deposit agreement, holders of the ADSs will not be able to exercise voting rights attaching to the ordinary shares represented by the ADSs. Under the terms of the deposit agreement, holders of the ADSs may instruct the depositary to vote the ordinary shares underlying their ADSs. Otherwise, holders of ADSs will not be able to exercise their right to vote unless they withdraw the ordinary shares underlying their ADSs to vote them in person or by proxy in accordance with applicable laws and regulations and our Articles of Association. Even so, ADS holders may not know about a meeting far enough in advance to withdraw those ordinary shares. If we ask for the instructions of holders of the ADSs, the depositary, upon timely notice from us, will notify ADS holders of the upcoming vote and arrange to deliver our voting materials to them. Upon our request, the depositary will mail to holders a shareholder meeting notice that contains, among other things, a statement as to the manner in which voting instructions may be given. We cannot guarantee that ADS holders will receive the voting materials in time to ensure that they can instruct the depositary to vote the ordinary shares underlying their ADSs. A shareholder is only entitled to participate in, and vote at, the meeting of shareholders, provided that it holds our ordinary shares as of the record date set for such meeting and otherwise complies with our Articles of Association. In addition, the depositary's liability to ADS holders for failing to execute voting instructions or for the manner of executing voting instructions is limited by the deposit agreement. As a result, holders of ADSs may not be able to exercise their right to give voting instructions or to vote in person or by proxy and they may not have any recourse against the depositary or us if their ordinary shares are not voted as they have requested or if their shares cannot be voted.

You may not receive distributions on our ordinary shares represented by the ADSs or any value for them if it is illegal or impractical to make them available to holders of ADSs.

The depositary for the ADSs has agreed to pay to you any cash dividends or other distributions it or the custodian receives on our ordinary shares or other deposited securities after deducting its fees and expenses. You will receive these distributions in proportion to the number of our ordinary shares your ADSs represent. However, in accordance with the limitations set forth in the deposit agreement, it may be unlawful or impractical to make a distribution available to holders of ADSs. We have no obligation to take any other action to permit distribution on the ADSs, ordinary shares, rights or anything else to holders of the ADSs. This means that you may not receive the distributions we make on our ordinary shares or any value from them if it is unlawful or impractical to make them available to you. These restrictions may have an adverse effect on the value of your ADSs.

Because we do not have immediate plans to pay any cash dividends on our ADSs, capital appreciation, if any, may be your sole source of gains and you may never receive a return on your investment.

Under current English law, a company's accumulated realized profits must exceed its accumulated realized losses (on a non-consolidated basis) before dividends can be declared and paid. Therefore, we must have sufficient distributable profits before declaring and paying a dividend. We have not paid dividends in the past on our ordinary shares. We have not announced any immediate plans to pay any cash dividends. As a result, capital appreciation, if any, on our ADSs will be your sole source of gains for the foreseeable future, and you would suffer a loss on your investment if you were unable to sell your ADSs at or above the price that you initially paid for them. Investors seeking cash dividends should not purchase our ADSs.

Risks Related to Our Corporate Status

We are not, and do not intend to become, regulated as an "investment company" under the Investment Company Act of 1940, as amended, or the 1940 Act, and if we were deemed an "investment company" under the 1940 Act, applicable restrictions could make it impractical for us to continue our business as contemplated and could have a material adverse effect on our business.

The 1940 Act and the rules thereunder contain detailed parameters for the organization and operation of investment companies. Among other things, the 1940 Act and the rules thereunder limit or prohibit transactions with affiliates, impose limitations on the issuance of debt and equity securities and impose certain governance requirements. We have not been and do not intend to become regulated as an investment company, and we intend to conduct our activities so that we will not be deemed to be an investment company under the 1940 Act. In order to ensure that we are not deemed to be an investment company, we may be limited in the assets that we may continue to own and, further, may need to dispose of or acquire certain assets at such times or on such terms as may be less favorable to us than in the absence of such requirement. If anything were to happen which would cause us to be deemed to be an investment company under the 1940 Act (such as significant changes in the value of our Founded Entities or a change in circumstance that results in a reclassification of our interests in our Founded Entities for purposes of the 1940 Act), the requirements imposed by the 1940 Act could make it impractical for us to continue our business as currently conducted, which would materially adversely affect our business, results of operations and financial condition. In addition, if we were to become inadvertently subject to the 1940 Act, any violation of the 1940 Act could subject us to material adverse consequences, including potentially significant regulatory penalties and the possibility that certain of our contracts could be deemed unenforceable.

As a foreign private issuer, we are exempt from a number of rules under the U.S. securities laws and are permitted to file less information with the SEC than a U.S. company. This may limit the information available to holders of ADSs or our ordinary shares.

We are a "foreign private issuer," as defined in the SEC's rules and regulations and, consequently, we are not subject to all of the disclosure requirements applicable to public companies organized within the United States. For example, we are exempt from certain rules under the Exchange Act, that regulate disclosure obligations and procedural requirements related to the solicitation of proxies, consents or authorizations applicable to a security registered under the Exchange Act, including the U.S. proxy rules under Section 14 of the Exchange Act. In addition, our officers and directors are exempt from the reporting and "short-swing" profit recovery provisions of Section 16 of the Exchange Act and related rules with respect to their purchases and sales of our securities. Moreover, while we currently make annual and semi-annual filings with respect to our listing on the LSE, we will not be required to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. domestic issuers and will not be required to file quarterly reports on Form 10-Q or current reports on Form 8-K under the Exchange Act. Accordingly, there will be less publicly available information concerning our company than there would be if we were not a foreign private issuer.

As a foreign private issuer, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from Nasdaq corporate governance listing standards. These practices may afford less protection to shareholders than they would enjoy if we complied fully with corporate governance listing standards.

As a foreign private issuer listed on Nasdaq, we are subject to corporate governance listing standards. However, rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. Certain corporate governance practices in the United Kingdom, which is our home country, may differ significantly from corporate governance listing standards. For example, neither the corporate laws of the United Kingdom nor our articles of association require a majority of our directors to be independent and we could include non-independent directors as members of our nomination and remuneration committee, though a

majority is required, and our independent directors would not necessarily hold regularly scheduled meetings at which only independent directors are present. Currently, we follow home country practice to the maximum extent possible. Therefore, our shareholders may be afforded less protection than they otherwise would have under corporate governance listing standards applicable to U.S. domestic issuers. See "Governance" of this Annual Report and Accounts and "Item 16G—Corporate Governance" of our Annual Report on Form 20-F.

We may lose our foreign private issuer status in the future, which could result in significant additional cost and expense.

While we currently qualify as a foreign private issuer, the determination of foreign private issuer status is made annually on the last business day of an issuer's most recently completed second fiscal quarter and, accordingly, the next determination will be made with respect to us on June 30, 2023.

In the future, we would lose our foreign private issuer status if we to fail to meet the requirements necessary to maintain our foreign private issuer status as of the relevant determination date. For example, if more than 50 percent of our securities are held by U.S. residents and more than 50 percent of the members of our executive committee or members of our board of directors are residents or citizens of the United States, we could lose our foreign private issuer status.

The regulatory and compliance costs to us under U.S. securities laws as a U.S. domestic issuer may be significantly more than costs we incur as a foreign private issuer. If we are not a foreign private issuer, we will be required to file periodic reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive in certain respects than the forms available to a foreign private issuer. We would be required under current SEC rules to prepare our financial statements in accordance with U.S. GAAP, rather than IFRS, and modify certain of our policies to comply with corporate governance practices associated with U.S. domestic issuers. Such conversion of our financial statements to U.S. GAAP will involve significant time and cost. In addition, we may lose our ability to rely upon exemptions from certain corporate governance requirements on U.S. stock exchanges that are available to foreign private issuers such as the ones described above and exemptions from procedural requirements related to the solicitation of proxies.

Risks Related to Our Internal Controls

We may discover material weaknesses in our internal control over financial reporting which, if not remediated, could cause us to fail to timely and accurately report our results of operations, meet our reporting obligations or prevent fraud.

Section 404 of the Sarbanes-Oxley Act requires that our management assess our internal control over financial reporting and that we include a report of management on our internal control over financial reporting in our annual reports on Form 20-F. We previously identified and disclosed a material weakness in our internal control over financial reporting in our Annual Report on Form 20-F for the year ended December 31, 2021. This material weakness has since been remediated, but we may discover additional material weaknesses in our internal control over financial reporting in the future, which we may not successfully remediate on a timely basis or at all. Any failure to remediate any significant deficiencies or material weaknesses identified by us or to implement required new or improved controls, or difficulties encountered in their implementation, could cause us to fail to meet our reporting obligations.

If we fail to maintain effective internal control over financial reporting, we could suffer material misstatements in our financial statements and fail to meet our reporting obligations, which could cause investors to lose confidence in our reported financial information. This could in turn limit our access to capital markets or lead to a decline in the trading price of our securities. We may also be required to restate our financial statements from prior periods. Additionally, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from the stock exchange on which we list, regulatory investigations, litigation from shareholders and civil or criminal sanctions, which could have a material adverse effect on our business.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

We are subject to certain reporting requirements of the Exchange Act. Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

Risks Related to Tax Matters

We are treated as a U.S. domestic corporation for U.S. federal income tax purposes.

We are treated as a U.S. domestic corporation for U.S. federal income tax purposes under Section 7874(b) of the Internal Revenue Code of 1986, as amended, or the Code. As a result, we are subject to U.S. income tax on our worldwide income and any dividends paid by us to Non-U.S. Holders (as defined in the discussion under "Taxation in the United States" in our Annual Report on Form 20-F) will generally be subject to U.S. federal income tax withholding at a 30 percent rate or such lower rate as provided in an applicable treaty. Furthermore, PureTech Health plc is also resident for tax purposes in the U.K. and subject to U.K. corporation tax on its worldwide income and gains. Consequently, we may be liable for both U.S. and U.K. income tax, which could have a material adverse effect on our financial condition and results of operations.

This discussion of certain U.S. federal income tax risks is subject in its entirety to the summaries set forth in "Certain United Kingdom Tax Considerations" and "Taxation in the United States" in our Annual Report on Form 20-F.

Our ability to use our U.S. net operating losses to offset future taxable income may be subject to certain limitations.

As of December 31, 2022, we had U.S. federal and state net operating loss carryforwards, or NOLs, of approximately $219.5 million and $71.7million, respectively, due to prior period losses, which, subject to the following discussion, are generally available to be carried forward to offset our future taxable income, if any, until such NOLs are used or expire. In general, under Section 382 of the Code, a corporation that undergoes an "ownership change," generally defined as a greater than 50 percentage point change (by value) in its equity ownership by certain shareholders or groups of shareholders over a rolling three year period, is subject to limitations on its ability to utilize its federal NOLs to offset future taxable income. Similar rules may apply under state law. Our existing federal NOLs may be subject to limitations arising from previous ownership changes. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Code, and our ability to utilize our federal NOLs could be further limited. Additionally, we may not be able to utilize the NOLS of our Founded Entities that have been deconsolidated or that will deconsolidate in the future. Furthermore, our ability to utilize NOLs of companies that we have acquired or may acquire in the future may be subject to limitations. In addition, our federal NOLs generated In taxable periods beginning after December 31, 2017 may only be used to offset 80 percent of our taxable income in taxable years beginning after December 31, 2020. However, such Federal NOLs generated are not subject to expiration For these reasons, even if we attain profitability, we may not be able to realize a tax benefit from the use of our NOLs.

We may be unable to use net operating loss and tax credit carryforwards and certain built-in losses to reduce future U.K. tax liabilities.

As a U.K. incorporated and tax resident entity, PureTech Health plc is subject to U.K. corporate taxation on its tax-adjusted trading profits. Due to the nature of our business, PureTech Health plc has generated losses since inception and therefore we have not paid any U.K. corporation tax. Subject to numerous utilization criteria and restrictions (including those that limit the percentage of profits that can be reduced by carried forward losses and those that can restrict the use of carried forward losses where there is a change of ownership of more than half the ordinary shares of the company and a major change in the nature, conduct or scale of the trade), we expect these to be eligible for carry forward and utilization against future U.K. operating profits.

Future changes to tax laws could materially adversely affect our company and reduce net returns to our shareholders.

The tax treatment of the company is subject to changes in tax laws, regulations and treaties, or the interpretation thereof, tax policy initiatives and reforms under consideration and the practices of tax authorities in jurisdictions in which we operate, as well as tax policy initiatives and reforms related to the Organisation for Economic Co-Operation and Development's, or OECD, Base Erosion and Profit Shifting, or BEPS, Project, the European Commission's state aid investigations and other initiatives. Such changes may include (but are not limited to) the taxation of operating income, investment income, dividends received or (in the specific context of withholding tax) dividends paid. We are unable to predict what tax reform may be proposed or enacted in the future or what effect such changes would have on our business, but such changes, to the extent they are brought into tax legislation, regulations, policies or practices, could affect our financial position and overall or effective tax rates in the future in countries where we have operations, reduce post-tax returns to our shareholders, and increase the complexity, burden and cost of tax compliance.

Tax authorities may disagree with our positions and conclusions regarding certain tax positions, resulting in unanticipated costs, taxes or non-realization of expected benefits.

A tax authority may disagree with tax positions that we have taken, which could result in increased tax liabilities. For example, HM Revenue & Customs, or HMRC, the Internal Revenue Service or another tax authority could challenge our allocation of income by tax jurisdiction and the amounts paid between certain of our Founded Entities pursuant to our intercompany arrangements and transfer pricing policies, including amounts paid with respect to our intellectual property development. Similarly, a tax authority could assert that we are subject to tax in a jurisdiction where we believe we have not established a taxable connection, often referred to as a "permanent establishment" under international tax treaties, and such an assertion, if successful, could increase our expected tax liability in one or more jurisdictions. A tax authority may take the position that material income tax liabilities, interest and penalties are payable by us, in which case, we expect that we might contest such assessment. Contesting such an assessment may be lengthy and costly and if we were unsuccessful in disputing the assessment, the implications could increase our anticipated effective tax rate, where applicable.

Shareholder protections found in provisions under the U.K. City Code on Takeovers and Mergers, or the Takeover Code, will not apply if our securities are no longer admitted to trading on a regulated market or a multilateral trading facility in the United Kingdom or on any stock exchange in the Channel Islands or the Isle of Man and our place of management and control is considered to change to outside the United Kingdom.

We are registered as a public limited company incorporated in England and Wales and have our ordinary shares admitted to trading on a regulated market in the United Kingdom (being the main market of the LSE). Accordingly, we are currently subject to the Takeover Code and, as a result, our shareholders are entitled to the benefit of certain takeover offer protections provided under the Takeover Code. The Takeover Code provides a framework within which takeovers of companies are regulated and conducted. If, at the time of a takeover offer, we have de-listed from the main market of the LSE (and do not maintain a listing of securities on any other regulated market or a multilateral trading facility in the United Kingdom or on any stock exchange in the Channel Islands or the Isle of Man) and the Panel on Takeovers and Mergers determine that we do not have our place of central management and control in the United Kingdom, then the Takeover Code may not apply to us and our shareholders would not be entitled to the benefit of the various protections that the Takeover Code affords. In particular, we would not be subject to the rules regarding mandatory takeover bids. The following is a brief summary of some of the most important rules of the Takeover Code:

- when any person acquires, whether by a series of transactions over a period of time or not, an interest in shares which (taken together with shares already held by that person and an interest in shares held or acquired by persons acting in concert with him or her) carry 30 percent or more of the voting rights of a company that is subject to the Takeover Code, that person is generally required to make a mandatory offer to all the holders of any class of equity share capital or other class of transferable securities carrying voting rights in that company to acquire the balance of their interests in the company;
- when any person who, together with persons acting in concert with him or her, is interested in shares representing not less than 30 percent but does not hold more than 50 percent of the voting rights of a company that is subject to the Takeover Code, and such person, or any person acting in concert with him or her, acquires an additional interest in shares which increases the percentage of shares carrying voting rights in which he or she is interested, then such person is generally required to make a mandatory offer to all the holders of any class of equity share capital or other class of transferable securities carrying voting rights of that company to acquire the balance of their interests in the company;
- a mandatory offer triggered in the circumstances described in the two paragraphs above must be in cash (or be accompanied by a cash alternative) and at not less than the highest price paid within the preceding 12 months to acquire any interest in shares in the company by the person required to make the offer or any person acting in concert with him or her;
- in relation to a voluntary offer (i.e. any offer which is not a mandatory offer), when interests in shares representing 10 percent or more of the shares of a class have been acquired for cash by an offeror (i.e., a bidder) and any person acting in concert with it in the offer period and the previous 12 months, the offer must be in cash or include a cash alternative for all shareholders of that class at not less than the highest price paid for any interest in shares of that class by the offeror and by any person acting in concert with it in that period. Further, if an offeror acquires for cash any interest in shares during the offer period, a cash alternative must be made available at not less than the highest price paid for any interest in the shares of that class;
- if the offeror acquires an interest in shares in an offeree company (i.e., a target) at a price higher than the value of the offer, the offer must be increased to not less than the highest price paid for the interest in shares so acquired;
- the offeree company must obtain competent advice as to whether the terms of any offer are fair and reasonable and the substance of such advice must be made known to all the shareholders, together with the opinion of the board of directors of the offeree company;
- special or favorable deals for selected shareholders are not permitted, except in certain circumstances where independent shareholder approval is given and the arrangements are regarded as fair and reasonable in the opinion of the financial adviser to the offeree;
- all shareholders must be given the same information;
- each document published in connection with an offer by or on behalf of the offeror or offeree must state that the directors of the offeror or the offeree, as the case may be, accept responsibility for the information contained therein;
- profit forecasts, quantified financial benefits statements and asset valuations must be made to specified standards and must be reported on by professional advisers;
- misleading, inaccurate or unsubstantiated statements made in documents or to the media must be publicly corrected immediately;
- actions during the course of an offer by the offeree company, which might frustrate the offer are generally prohibited unless shareholders approve these plans. Frustrating actions would include, for example, lengthening the notice period for directors under their service contract or agreeing to sell off material parts of the target group;
- stringent and detailed requirements are laid down for the disclosure of dealings in relevant securities during an offer, including the prompt disclosure of positions and dealing in relevant securities by the parties to an offer and any person who is interested (directly or indirectly) in 1 percent or more of any class of relevant securities; and employees of both the offeror and the offeree company and the trustees of the offeree company's pension scheme must be informed about an offer. In addition, the offeree company's employee representatives and pension scheme trustees have the right to have a separate opinion on the effects of the offer on employment appended to the offeree board of directors' circular or published on a website.

Company information

Directors, Secretary and Advisors to PureTech

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09582467

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Website
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Board of Directors
Mr. Christopher Viehbacher (Chair)
Ms. Daphne Zohar (Chief Executive Officer)
Dr. Robert Langer (Non-Executive Director)
Dr. Raju Kucherlapati
(Senior Independent Director)
Dr. John LaMattina (Independent
Non-Executive Director)
Ms. Kiran Mazumdar-Shaw
(Independent Non-Executive Director)
Ms. Sharon Barber-Lui
(Independent Non-Executive Director)
Dr. Bharatt Chowrira
(President and Chief Business, Finance &
Operating Officer)

Company Secretary
Dr. Bharatt Chowrira

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Exhibit 15.2

April 28, 2023

Securities and Exchange Commission
Washington, D.C. 20549

Ladies and Gentlemen:

We are currently principal accountants for PureTech Health PLC and, under the date of April 27. 2023, we reported on the consolidated financial statements of PureTech Health PLC as of and for each of the years in the three-year period ended December 31, 2022, and the effectiveness of internal control over financial reporting as of December 31, 2022.

On April 23, 2023, we were notified that PureTech Health PLC's board of directors approved the appointment of PricewaterhouseCoopers LLP (''PwC'') as its principal accountant for the year ending December 31, 2023 and that the auditor-client relationship with KPMG LLP will cease upon shareholder approval at the 2023 Annual General Meeting.

We have read PureTech Health PLC 's statements included under Item 16F of its Form 20-F dated April 28, 2023, and we agree with such statements, except that we are not in a position to agree or disagree with PureTech Health PLC 's statement that the change was approved by the board of directors and subject to shareholder approval at the 2023 Annual General Meeting. We are also not in a position to agree or disagree with the PureTech Health PLC's statement that PwC were not engaged regarding the application of accounting principles to a specific completed or contemplated transaction or regarding the type of audit opinion that might be rendered by PwC on the PureTech Health PLC 's consolidated financial statement or the effectiveness of internal control over financial reporting. Nor are we in a position to agree or disagree with the PureTech Health PLC 's statement that PwC did not provide any written or oral advice that was an important factor considered by the PureTech Health PLC in reaching a decision as to any such accounting, auditing or financial reporting matter or any matter being the subject of disagreement or defined as a reportable event or any other matter as defined in Item 16F(a)(1)(v) on Form 20-F.

Very truly yours,

/s/ KPMG LLP

Exhibit 99.1

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Gelesis Holdings, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Gelesis Holdings, Inc. and subsidiaries (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive loss, non-controlling interest, redeemable convertible preferred stock and stockholders' deficit, and cash flows for each of the years then ended, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the years then ended, in conformity with U.S. generally accepted accounting principles.

Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and has a net capital deficiency that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2015.

Boston, Massachusetts
March 28, 2023

GELESIS HOLDINGS, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share data)

	December 31, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	$ 7,412	$ 28,397
Accounts receivable	1,233	731
Grants receivable	3,359	9,172
Inventories	6,865	13,503
Prepaid expenses and other current assets	4,627	14,203
Total current assets	23,496	66,006
Property and equipment, net	59,335	58,515
Operating lease right-of-use assets	1,520	2,016
Intangible assets, net	13,413	15,680
Other assets	5,560	4,084
Total assets	$ 103,324	$ 146,301
LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable, including due to related party of $135 and $147, respectively	$ 4,131	$ 10,066
Accrued expenses and other current liabilities, including due to related party of $2,809 and $5,664, respectively	10,468	13,660
Deferred income	27,793	32,370
Operating lease liabilities	597	541
Convertible promissory notes held at fair value, including due to related party of $22,082 and $27,128, respectively	27,403	27,128
Notes payable, including due to related party of $2,007 and $0, respectively	7,954	1,950
Warrant liabilities	—	15,821
Total current liabilities	78,346	101,536
Deferred income	9,544	8,914
Operating lease liabilities	967	1,519
Notes payable, including due to related party of $13,659 and $16,523, respectively	25,342	35,131
Warrant liabilities	130	—
Earnout liability	563	—
Other long-term liabilities, including due to related party of $674 and $2,416, respectively	898	5,588
Total liabilities	115,790	152,688
Commitments and contingencies (Note 19)		
Noncontrolling interest	12,590	11,855
Legacy Gelesis redeemable convertible preferred stock, $0.0001 par value – zero shares issued and outstanding at December 31, 2022; 51,730,762 shares authorized at December 31, 2021; and 48,566,655 shares issued and outstanding at December 31, 2021	—	311,594
Stockholders' deficit:		
Preferred stock, $0.0001 par value - 250,000,000 shares authorized at December 31, 2022; zero shares issued and outstanding at December 31, 2022 and December 31, 2021	—	—
Common stock, $0.0001 par value – 900,000,000 shares authorized at December 31, 2022; 73,325,022 shares issued and outstanding at December 31, 2022; 125,961,571 shares authorized at December 31, 2021; 6,248,192 shares issued and outstanding at December 31, 2021	7	1
Additional paid-in capital	297,468	(64,549)
Accumulated other comprehensive income	104	219
Accumulated deficit	(322,635)	(265,507)
Total stockholders' deficit	(25,056)	(329,836)
Total liabilities, noncontrolling interest, redeemable convertible preferred stock and stockholders' deficit	$ 103,324	$ 146,301

The accompanying notes are an integral part of these consolidated financial statements.

GELESIS HOLDINGS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except share and per share data)

	For the Year Ended December 31,	
	2022	2021
Revenue:		
Product revenue, net	$ 25,558	$ 11,185
Licensing revenue	209	—
Total revenue, net	25,767	11,185
Operating expenses:		
Costs of goods sold, including related party expenses of $1,027 and $447, respectively	27,558	9,983
Selling, general and administrative, including related party expenses of $504 and $494, respectively	99,135	71,041
Research and development, including related party expenses of $231 and $255, respectively	18,613	12,867
Amortization of intangible assets	2,267	2,267
Total operating expenses	147,573	96,158
Loss from operations	(121,806)	(84,973)
Change in the fair value of earnout liability	58,308	—
Change in the fair value of convertible promissory notes	(2,559)	(128)
Change in the fair value of warrants	7,084	(7,646)
Interest expense, net	(991)	(1,364)
Other income, net	4,664	781
Loss before income taxes	(55,300)	(93,330)
Provision for income taxes	480	17
Net loss	(55,780)	(93,347)
Accretion of Legacy Gelesis senior preferred stock to redemption value	(37,934)	(94,134)
Accretion of noncontrolling interest put option to redemption value	(253)	(376)
Income allocated to noncontrolling interest holder	(1,095)	—
Net loss attributable to common stockholders	$ (95,062)	$ (187,857)
Net loss per share attributable to common stockholders—basic and diluted	$ (1.35)	$ (32.89)
Weighted average common shares outstanding—basic and diluted	70,300,772	5,712,042

The accompanying notes are an integral part of these consolidated financial statements.

GELESIS HOLDINGS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(In thousands, except share and per share data)

	For the Year Ended December 31,	
	2022	2021
Net loss	$ (55,780)	$ (93,347)
Other comprehensive loss:		
Foreign currency translation adjustment	(115)	(719)
Total other comprehensive loss	(115)	(719)
Comprehensive loss	$ (55,895)	$ (94,066)

The accompanying notes are an integral part of these consolidated financial statements.

GELESIS HOLDINGS, INC.
CONSOLIDATED STATEMENTS OF NONCONTROLLING INTEREST, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT
(In thousands, except share and per share data)

	Noncontrolling interest	Redeemable Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive (Loss) Income	Accumulated Deficit	Total Stockholders' Deficit
		Shares	Amount	Shares	Amount				
Balance at January 1, 2021	$ 12,429	18,446,525	$ 213,524	2,155,490	$ 1	$ 23,907	$ 938	$ (171,784)	(146,938)
Accretion of senior preferred stock to redemption value			94,134			(94,134)			(94,134)
Stock based compensation expense						5,532			5,532
Exercise of stock options				255,062		146			146
Exercise of warrants		290,411	3,934						
Accretion of put option	376							(376)	(376)
Net loss								(93,347)	(93,347)
Foreign currency translation adjustment	(950)						(719)		(719)
Balance at December 31, 2021	$ 11,855	18,736,936	$ 311,592	2,410,552	$ 1	$ (64,549)	$ 219	$ (265,507)	$ (329,836)
Merger recapitalization		29,829,719	$ -	3,837,640	—	—	—	—	—
Balance at December 31, 2021	$ 11,855	48,566,655	$ 311,592	6,248,192	$ 1	$ (64,549)	$ 219	$ (265,507)	$ (329,836)
Accretion of senior preferred stock to redemption value		-	$ 37,934			(37,934)			(37,934.00)
Conversion of redeemable convertible preferred stock into common stock upon merger recapitalization		(48,566,655)	$ (349,526)	48,566,655	—	349,526			349,526.00
Proceeds from Business Combination, net of issuance costs and assumed liabilities				17,399,440	6	69,359			69,365.00
Conversion of preferred stock warrants into common stock warrants upon merger recapitalization						16,747			16,747.00
Issuance of contingent earnout liability upon merger recapitalization						(58,871)			(58,871.00)
Issuance of private placement warrants upon merger recapitalization						(8,140)			(8,140.00)
Stock based compensation expense						29,777			29,777.00
Exercise of stock options				207,033	—	120			120.00
Exercise of warrants				176,126	—	4			4.00
Release of restricted stock units				337,969	—	—			-
Sale of common stock, net of issuance costs				355,361	—	500			500.00
Issuance of commitment shares				34,246	—	39			39.00
Issuance of common stock warrants				—	—	890			890.00
Accretion of put option	253							(253)	(253.00)
Income allocated to noncontrolling interest holder	1,095							(1,095)	(1,095.00)
Net loss								(55,780)	(55,780.00)
Foreign currency translation adjustment	(613)						(115)		(115.00)
Balance at December 31, 2022	$ 12,590	—	$ -	73,325,022	$ 7	$ 297,468	$ 104	$ (322,635)	$ (25,056)

The accompanying notes are an integral part of these consolidated financial statements.

GELESIS HOLDINGS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	For the Year Ended December 31,	
	2022	2021
Cash flows from operating activities:		
Net loss	$ (55,780)	$ (93,347)
Adjustments to reconcile net loss to net cash used in operating activities:		
Amortization of intangible assets	2,267	2,267
Increase in inventory reserves	13,334	—
Reduction in carrying amount of right-of-use assets	475	449
Depreciation	3,221	1,524
Stock-based compensation	29,777	5,532
Issuance of common stock commitment shares	500	—
Gain on sales of common stock	(1)	—
Unrealized loss on foreign currency transactions	608	(37)
Non-cash interest expense	215	173
Gain on CMS amendment	(209)	—
Loss on One S.r.l. amendment	278	—
Accretion on marketable securities	—	(1)
Change in the fair value of earnout liability	(58,308)	—
Change in the fair value of warrants	(7,084)	7,646
Change in the fair value of convertible promissory notes	2,559	128
Change in fair value of One S.r.l. call option	(1,462)	1,024
Change in fair value of interest rate swap contract	(856)	146
Changes in operating assets and liabilities:		
Accounts receivable	(502)	70
Grants receivable	5,216	(1,723)
Prepaid expenses and other current assets	6,147	(8,029)
Inventories	(6,249)	(8,645)
Other assets	(449)	107
Accounts payable	(5,415)	2,604
Accrued expenses and other current liabilities	(269)	8,709
Operating lease liabilities	(474)	(440)
Deferred income	(3,395)	33,140
Other long-term liabilities	(1,872)	(6,588)
Net cash used in operating activities	(77,728)	(55,291)
Cash flows from investing activities:		
Purchases of property and equipment	(9,120)	(19,917)
Maturities of marketable securities	—	24,000
Net cash (used in) provided by investing activities	(9,120)	4,083
Cash flows from financing activities:		
Proceeds from Business Combination, net of transaction costs	70,479	—
Principal repayment of notes payable	(2,033)	(302)
Repayment of convertible promissory notes	(27,284)	—
Proceeds from convertible promissory notes	25,000	27,000
Proceeds from issuance of promissory notes (net of issuance costs of $0 and $207, respectively)	—	5,679
Proceeds from exercise of warrants	4	10
Proceeds from exercise of share-based awards	120	146
Proceeds from sales of common stock, net of issuance costs	39	—
Net cash provided by financing activities	66,325	32,533
Effect of exchange rates on cash	(462)	(1,072)
Net decrease in cash	(20,985)	(19,747)
Cash and cash equivalents at beginning of year	28,397	48,144
Cash and cash equivalents at end of period	$ 7,412	$ 28,397
Noncash investing and financing activities:		
Purchases of property and equipment included in accounts payable and accrued expense	$ 445	$ 1,712
Deferred financing costs included in accounts payable and accrued expense	$ —	$ 773
Recognition of earnout liability	$ 58,871	$ —
Recognition of private placement warrant liability	$ 8,140	$ —
Acquisitions of right-of-use assets under operating leases	$ 101	$ 305
Supplemental cash flow information:		
Interest paid on notes payable	$ 1,342	$ 1,578

The accompanying notes are an integral part of these consolidated financial statements.

GELESIS HOLDINGS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

1. Nature of the Business and Basis of Presentation

Nature of Business

Gelesis Holdings, Inc., or the Company, formerly known as Capstar Special Purpose Acquisition Corp. or "CPSR", is a consumer-centered biotherapeutics company incorporated under the laws of the State of Delaware. The Company aims to transform weight management through proprietary hydrogel technology, inspired by the compositional and mechanical properties of raw vegetables. Since its inception, the Company has devoted substantially all of its efforts to business planning, licensing technology, research and development, commercial activities, recruiting management and technical staff and raising capital and has financed its operations through the issuance of redeemable convertible preferred and common stock, a license and collaboration agreement, supply and distribution agreements, long-term loans, convertible promissory note financings, and government grants.

The Company currently manufactures and markets Plenity® (the "Product"), which is based on a proprietary hydrogel technology. Plenity received a *de novo* clearance from the FDA on April 12, 2019 to aid in weight management when used in conjunction with diet and exercise. In 2020, the Company received its original Conformité Européenne (CE) certificate which allowed Plenity to be marketed as a medical device in Europe as well as rest of the world where CE mark is acceptable. Plenity has been commercially available by prescription in the United States since May 2020. In January 2023, the Company made a 510 (k) submission to the FDA to switch Plenity from prescription ("Rx") to over-the-counter ("OTC").

On July 19, 2021, Gelesis, Inc. (together with its consolidated subsidiaries, "Legacy Gelesis") entered into a Business Combination Agreement (as amended on November 8, 2021 and December 30, 2021, the "Business Combination Agreement") with CPSR, a Delaware corporation and special purpose acquisition company, and CPSR Gelesis Merger Sub, Inc., a Delaware corporation and wholly-owned subsidiary of CPSR ("Merger Sub"). On January 13, 2022, Legacy Gelesis, CPSR, and Merger Sub consummated the business combination ("Business Combination") pursuant to the terms of the Business Combination Agreement. Pursuant to the Business Combination Agreement, on the closing date, (i) Merger Sub merged with and into Legacy Gelesis (the "Merger"), with Legacy Gelesis as the surviving company in the Merger, and, after giving effect to such Merger, Legacy Gelesis became a wholly-owned subsidiary of CPSR and (ii) CPSR changed its name to "Gelesis Holdings, Inc." (together with its consolidated subsidiaries, "Gelesis Holdings"). The Business Combination, together with the PIPE Investment and the sale of the Backstop Purchase Shares, generated approximately $105 million in gross proceeds and $70.5 million in net proceeds (See Note 3). On January 14, 2022, Gelesis Holdings' common stock and public warrants began trading on the New York Stock Exchange ("NYSE") under the symbols "GLS" and "GLS.W", respectively.

The Business Combination was accounted for as a reverse recapitalization in conformity with accounting principles generally accepted in the United States. Under this method of accounting, CPSR has been treated as the "acquired" company for financial reporting purposes. This determination was primarily based on the Legacy Gelesis' stockholders comprising a relative majority of the voting power of the combined company, the Legacy Gelesis' operations prior to the acquisition comprising the only ongoing operations of Gelesis Holdings, the majority of Gelesis Holdings' board of directors appointment by Legacy Gelesis, and Legacy Gelesis' senior management comprising the entirety of the senior management of Gelesis Holdings. Accordingly, for accounting purposes, the consolidated financial statements of Gelesis Holdings will represent a continuation of the consolidated financial statements of Legacy Gelesis with the Business Combination being treated as the equivalent of Legacy Gelesis issuing stock for the net assets of CPSR, accompanied by a recapitalization. The net assets of CPSR will be stated at historical costs, with no goodwill or other intangible assets recorded.

Going Concern

The audited consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the ordinary course of business. The audited consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded assets and liabilities that might be necessary should the Company be unable to continue as a going concern.

The Company has a history of incurring substantial operating losses and has financed its operations primarily from the issuance of equity, promissory notes, government grants, supply and distribution agreements and collaborations and licensing arrangements. Such operating losses and negative cash flows from operations have continued throughout 2022 and the Company expects they will continue in the foreseeable future. The Company expects its cash on hand as of the date of the consolidated financial statements, proceeds from the initial closing of the 2023 Convertible Senior Secured Notes, and collection of accounts and grants receivable will only be sufficient to meet the Company's obligations into the second quarter of 2023, and not at least twelve months beyond the date of issuance of the consolidated financial statements. In light of current levels of liquidity, the Company has significantly reduced discretionary spending as well as headcount from prior levels, particularly with respect to discretionary sales and marketing activities, manufacturing and supply chain functions, and research and development. These conditions raise substantial doubt about the Company's ability to continue as a going concern and may adversely impact the sale of Plenity.

The Company will need to raise additional capital in future periods to fund its operations. The Company will seek to raise necessary funds through a combination of equity issuances, debt financings, strategic collaborations and licensing arrangements, government grants, or other financing mechanisms. The Company's ability to fund the completion of its ongoing and planned clinical studies, as well as its regulatory and commercial efforts, may be substantially dependent upon whether the Company can obtain sufficient funding at acceptable terms. If adequate sources of funding are not available to the Company, the Company may be required to delay, reduce or eliminate research and development programs, reduce or eliminate commercialization efforts, and reduce its headcount. Additionally, the Company is subject to risks common to companies in the biotechnology industry, including but not limited to, risks of failure of the full-scope product commercialization in targeted markets, clinical trials and preclinical studies, the impact of the COVID-19 pandemic on the Company's supply chain and results of operations, dependence on key personnel, protection of proprietary technology, compliance with government regulations, and development by competitors of technological innovations.

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company's consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative United States generally accepted accounting principles as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASUs") issued by the Financial Accounting Standards Board ("FASB").

The Company consolidates those entities where it has a direct and indirect controlling financial interest based on either a variable interest model or voting interest model. The Company's consolidated financial statements include the accounts of the Company, its two wholly-owned subsidiaries and a variable interest entity ("VIE"), Gelesis S.r.l., in which the Company has a controlling interest and is the primary beneficiary. The noncontrolling interest attributable to the Company's VIE is presented as a separate component from stockholders' deficit in the consolidated balance sheets and as a noncontrolling interest in the consolidated statements of noncontrolling interest, redeemable convertible preferred stock and stockholders' deficit. All intercompany balances and transactions have been eliminated in consolidation. Under the variable interest model, a controlling financial interest is determined based on which entity, if any, has (i) the power to direct the activities of the VIE that most significantly impacts the VIE's economic performance and (ii) the obligations to absorb losses that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. Management performs ongoing reassessments of whether changes in the facts and circumstances regarding the Company's involvement with a VIE will cause the consolidation conclusion to change. The consolidation status of a VIE may change as a result of such reassessments. Changes in consolidation status are applied prospectively in accordance with U.S. GAAP.

Reclassification of Prior Year Presentation

Certain prior year amounts have been reclassified for consistency with the current year presentation. These reclassifications had no effect on the reported results of operations or financial position.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of income and expenses during the reporting period. The Company assesses the use of estimates on an ongoing basis; however, actual results could materially differ from those estimates and changes in estimates are reflected in the results of operations in the period in which they become known.

Subsequent Event(s)

The Company considers events or transactions that occur after the balance sheet date but before the consolidated financial statements are issued to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. The Company evaluated all events and transactions through the date these consolidated financial statements were filed with the Securities and Exchange Commission ("SEC") or were available to be issued.

Fair Value of Financial Instruments

The guidance in FASB ASC 820, *Fair Value Measurements and Disclosures* ("ASC 820"), defines fair value and establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

Level 1 – Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.

Level 2 – Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3 – Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Fair value is a market-based measure considered from the perspective of a market participant rather than an entity-specific measure. Therefore, even when market assumptions are not readily available, the Company's own assumptions are set to reflect those that market participants would use in pricing the asset or liability at the measurement date. The Company uses prices and inputs that are current as of the measurement date, including during periods of market dislocation. In periods of market dislocation, the observability of prices and inputs may be reduced for many instruments. This condition could cause an instrument to be reclassified from Level 1 to Level 2 or Level 2 to Level 3.

The Company's earnout liability, private placement warrants, and call option liability are recorded at fair value on a recurring basis. The carrying amount of accounts receivable, grants receivable, accounts payable and accrued expenses are considered a reasonable estimate of their fair value, due to the short-term maturity of these instruments. The carrying amount of notes payable is also considered to be a reasonable estimate of the fair value based on the nature of the debt and that the debt bears interest at the prevailing market rate for instruments with similar characteristics. The Company's cash equivalents, and marketable securities are carried at fair value, determined according to the fair value hierarchy described above.

Earnout Liability: In connection with the Business Combination, Legacy Gelesis Equity holders received the right to receive additional common stock upon the achievement of certain earnout targets. As the earnout consideration contains a settlement provision that precludes it from being indexed to the Company's stock, it is classified as a liability held at fair value in accordance ASC 815 and the instrument is adjusted to fair value at each reporting period. In determining the fair value of the earnout liability at inception and on a recurring basis, the Company utilizes the Monte Carlo simulation value model where the fair value of the earnout is the present value of a distribution of potential outcomes on a daily basis over the term of the earnout period.

Private Placement Warrant Liability: The Private Placement Warrants are recognized as liabilities in accordance with ASC 815. Accordingly, the Company recognizes the warrant instruments as liabilities held at fair value and adjusts the instruments to fair value at each reporting period. In determining the fair value of the Private Placement Warrant liability, the Company utilized a modified Monte Carlo simulation value model at inception and on a recurring basis.

One S.r.l. Call Option: In connection with the October 2020 amended agreement with One S.r.l., the Company granted One a contingent call option to buy back the 10% ownership that the Company acquired in the 2019 One Amendment. The One S.r.l. call option was recorded as a liability held at fair value at the date of issuance and is remeasured at each subsequent reporting date with changes in fair value recorded in other income (expense) in the accompanying consolidated statements of operations. Fair value is determined using a Black-Scholes option pricing model.

Convertible promissory notes: The convertible promissory notes issued in conjunction with the Company's bridge financing arrangements from time to time were recognized at fair value at issuance and subsequent changes in fair value were recorded in the accompanying consolidated statements of operations (see Note 12). Fair value of the promissory notes is determined using a multiple scenario-based valuation method. The fair value of the hybrid instrument was determined by calculating the value of the instrument in each scenario "with" the respective conversion feature and "without". The significant inputs used in estimating the fair value of the

convertible promissory notes include the estimated discount rate, expected term, and the outcome probability with respect to each scenario.

Cash Equivalents

The Company considers all short-term, highly liquid investments with original maturities of 90 days or less at acquisition date to be cash equivalents. Cash equivalents, which consist of money market accounts purchased with original maturities of less than 90 days from the date of purchase, are stated at fair value.

Accounts Receivable

The Company extends credit to customers based upon contractual terms or its evaluation of the customer's financial condition. Customer accounts receivable are stated at amounts due net of applicable discounts and other contractual adjustments as well as an allowance for expected credit losses. The Company assesses the need for an allowance for expected credit losses based upon currently expected credit losses ("CECL") by considering a number of factors, including the length of time trade accounts receivable are past due, the customer's ability to pay its obligation and the condition of the general economy and the industry as a whole. The Company will write off accounts receivable when the Company determines that they are uncollectible. The Company has not historically experienced any collection issues or significant credit losses. Based on historical receipts and collections history, management has determined that an allowance for expected credit losses is not necessary at December 31, 2022 or 2021, respectively.

Government Grants

The Company recognizes grants from governmental agencies in other income on the consolidated statements of operations, gross of the expenditures that were related to the underlying project being co-funded by the grant, when there is reasonable assurance that the Company will comply with the conditions attached to the grant arrangement and payments under the grant will be received. The Company evaluates the conditions of each individual grant as of each reporting period to ensure that the Company has reached reasonable assurance of meeting the conditions of each grant arrangement and that it is expected that the grant payment will be received as a result of meeting the necessary conditions.

The Company has been awarded grants from government agencies in Italy for certain capital expenditures and expenses incurred for research and development work performed under specified programs conducted in Italy. The Company submits qualifying expenses and capital purchases for reimbursement under each specified program, which occurs after the Company has made the capital purchases and/or incurred the research and development costs. The Company records a grant receivable upon incurring such expenses, as approval and reimbursement are considered to be perfunctory once the qualifying program has been approved. Government grants are recognized in the consolidated statements of operations on a systematic basis over the periods in which the Company recognizes the related costs for which the government grant is intended to compensate. Specifically, grant income related to research and development costs is recognized as such expenses are incurred. Research and development costs that were incurred prior to the approval of a qualifying program are recognized as grant income immediately upon approval of the program by the grantor. Grant income related to qualifying capital purchases is recognized in proportion to the depreciation expense incurred on the underlying assets.

Deferred income related to capital purchases for which grant income will be recognized beyond twelve months from the balance sheet date is classified as long-term deferred income on the consolidated balance sheets and amortized to other income, net, over the same life of the related asset.

Inventory

The Company manufactures its own super-absorbent hydrogels used in Plenity® and other product candidates out of its own manufacturing facilities located in Italy. The packaging of the hydrogels is currently outsourced to contract packaging organizations for commercial purposes.

Inventories comprise raw materials, including raw materials for packaging components, work-in-process, and finished goods, which are goods that are available for sale. The Company states inventory at the lower of cost or net realizable value with the cost based on the first-in, first-out method. If the Company identifies excess, obsolete or unsalable items, it writes down its inventory to its net realizable value in the period in which the impairment is identified. These adjustments are recorded based upon various factors related to the product, including the level of product manufactured by the Company, the level of product in the distribution channel, current and projected demand, the expected shelf-life of the product and firm inventory purchase commitments. Significant shipping and handling costs incurred for inventory purchases are included in inventory and costs incurred for product shipments are recorded in cost of goods sold as incurred.

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation. Expenditures for maintenance and repairs are charged to operations as incurred whereas major betterments are capitalized as additions to property and equipment. Depreciation and amortization begin at the time the asset is placed in service, and are recorded using the straight-line method over the estimated useful lives, as follows:

Asset Category	Useful Lives
Computer equipment and software	1 – 3 years
Laboratory and manufacturing equipment	2.5 – 8.3 years
Leasehold improvements	5 – 10 years, or the remaining term of lease, if shorter
Buildings and land improvements	18 – 20 years
Land	Not depreciated

Impairment of Long-Lived Assets

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. When such events occur, the Company compares the carrying amounts of the assets to the undiscounted expected future cash flows the assets are expected to generate and recognizes an impairment loss equal to the excess of the carrying value over the fair value of the related asset. There were no indicators of impairment as of and for the years ended December 31, 2022 and 2021, respectively.

Intangible Assets

Intangible assets with estimable useful lives, or definite-lived intangibles, are carried at cost and are amortized on a straight-line basis over their estimated useful lives and reviewed for impairment upon certain triggering events. We routinely review the remaining estimated useful lives of definite-lived intangible assets. If we reduce the estimated useful life assumption, the remaining unamortized balance is amortized over the revised estimated useful life.

Redeemable Convertible Preferred Stock

The Company has classified redeemable convertible preferred stock as temporary equity in the consolidated balance sheets due to certain change in control clauses that are outside of the Company's control, including liquidation, sale, or transfer of control of the Company, as holders of the redeemable convertible preferred stock could cause redemption of the shares in these situations. The Company accretes the carrying values of the classes of redeemable convertible preferred stock that are mandatorily redeemable to the redemption values. The Company does not accrete the carrying values of the classes of redeemable convertible preferred stock that are not mandatorily redeemable to the redemption values since a liquidation event, sale, or transfer is not considered probable. Subsequent adjustments of the carrying values to the ultimate redemption values will be made only if and when it becomes probable that such a liquidation event will occur.

Noncontrolling Interests

The Company recognizes noncontrolling interest related to VIEs, in which the Company is the primary beneficiary, as temporary equity in the consolidated financial statements separate from the shareholders' equity. Changes in the shareholders' ownership interest in a subsidiary that do not result in deconsolidation are treated as equity transactions if the parent entity retains its controlling financial interest. In addition, when a subsidiary is deconsolidated, any retained noncontrolling equity investment in the former subsidiary will be initially measured at fair value and the difference between the carrying value and fair value of the retained interest will be recorded as a gain or loss.

Leases

The Company determines if an arrangement is a lease at contract inception under ASC 842 – *Leases*. Operating lease assets represent a right to use an underlying asset for the lease term and operating lease liabilities represent an obligation to make lease payments arising from the lease. The Company recognizes operating lease assets and liabilities at the commencement date of the lease based upon the present value of lease payments over the lease term. When determining the lease term, the Company includes options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. As the discount rate implicit in the leases was typically not readily determinable, the Company utilized the fixed rate at which the Company could borrow on a collateralized basis the amount of the lease payments in the same currency, for a similar term, in a similar economic environment, the incremental borrowing rate (IBR).

The Company has elected to apply the practical expedient to account for lease and non-lease components as a single lease component for new and modified leases commencing after adoption election. The Company has also elected not to recognize leases with an initial

term of 12 months or less on the consolidated balance sheets, instead, those lease payments are recognized in the consolidated statements of operations on a straight-line basis over the lease term.

Revenue Recognition

Product Revenue

The Company commercializes Plenity in the U.S. markets principally through synergistic partnerships with online pharmacies and telehealth providers, which in turn sell Plenity directly to patients based on prescriptions. Outside the U.S., the Company primarily seeks collaborations with strategic partners to market Plenity and obtain necessary regulatory approvals as necessary.

Product revenue is recognized by the Company in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services when the customer obtains control of the product, which occurs at a point in time, when the product is received by the Company's customers.

Reserves for Variable Consideration

Revenues from product sales are recorded as product revenue at the net sales price (transaction price), which includes estimates of variable consideration that are reimbursable to customers for which reserves are established and which result from (a) shipping charges to end-users, (b) pharmacy dispensing and platform fees, (c) merchant and processing fees, (d) promotional discounts offered by the Company to end-users, and (e) reserves for expected product quality returns. These reserves for contractual adjustments are based on the amounts earned or to be claimed on the related sales and are classified as reductions of accounts receivable (if the amount is payable to the customer) or a current liability (if the amount is payable to a party other than the customer). Where appropriate, these estimates take into consideration a range of possible outcomes that are probability-weighted for relevant factors such as the Company's historical experience, current contractual and statutory requirements, specific known market events and trends, industry data and forecasted customer buying and payment patterns. Overall, these reserves reflect the Company's best estimates of the amount of consideration to which the Company is entitled based on the terms of the contract(s). The amount of variable consideration that is included in the transaction price may be constrained and is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue recognized will not occur in a future period. Actual amounts of consideration ultimately received may differ from the Company's estimates. If actual results in the future vary from the Company's estimates, the Company will adjust these estimates, which would affect net product revenue and earnings in the period such variances become known. The Company has no plan to seek government or commercial payor reimbursements in the US or the overseas markets. Therefore, reserves for variable consideration do not contain any components related to government and payor rebates or chargebacks.

Product Returns

The Company generally does not accept customer returns, except for product quality related cases. The Company evaluates quality related returns and adjusts the corresponding product warranty reserves and liabilities at least quarterly and at the end of each reporting period.

License and Collaboration Revenues

The Company recognizes revenue from product sales and collaboration arrangements in accordance with ASC 606, *Revenue from Contracts with Customers* (“ASC 606”). Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to be entitled to in exchange for those goods or services. To determine the appropriate amount of revenue to be recognized for arrangements determined to be within the scope of ASC 606, the Company performs the following five steps: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when (or as) the Company satisfies each performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect consideration it expects to be entitled to in exchange for the goods or services it transfers to the customer.

Performance obligations are promised goods or services in a contract to transfer a distinct good or service to the customer and are considered distinct when (i) the customer can benefit from the good or service on its own or together with other readily available resources and (ii) the promised good or service is separately identifiable from other promises in the contract. In assessing whether promised goods or services are distinct, the Company considers factors such as the stage of development of the underlying intellectual property, the capabilities of the customer to develop the intellectual property on its own or whether the required expertise is readily available, and whether the goods or services are integral or dependent to other goods or services in the contract. For performance obligations which consist of the Company’s materials, shipping and distribution activities occur prior to the transfer of control of the Company’s materials and are considered activities to fulfill the Company’s promise to deliver goods to the customers.

The Company has entered and anticipates to enter future license, collaboration and/or distribution agreements, which are within the scope of ASC 606, to manufacture and commercialize product(s). The terms of these agreements typically contain multiple promises or obligations, which may include: (i) manufacturing and supply of covered products, and (ii) regulatory support activities to be provided to the collaboration partner relating to the covered product(s). Payments to the Company under these agreements may include payments based upon the achievement of certain milestones and royalties on any resulting net product sales.

The Company first evaluates collaboration arrangements to determine whether the arrangement (or part of the arrangement) represents a collaborative arrangement pursuant to ASC Topic 808, *Collaborative Arrangements,* based on the risks and rewards and activities of the parties pursuant to the contractual arrangement. The Company accounts for collaborative arrangements (or elements within the contract that are deemed part of a collaborative arrangement), which represent a collaborative relationship and not a customer relationship, outside the scope of ASC 606. The Company's collaborations primarily represent revenue arrangements. The Company uses judgment to determine whether milestones or other variable consideration, except for sales-based royalties, should be included in the transaction price. The transaction price is allocated to each performance obligation on a relative standalone selling price basis, for which the Company recognizes revenue as or when the performance obligations under the contract are satisfied. The Company utilizes key assumptions to determine the standalone selling price, which may include other comparable transactions, pricing considered in negotiating the transaction and the estimated costs. For performance obligations which consist of licenses and other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress. There were no performance obligations to be satisfied over time for recognition purposes as of and for the years ended December 31, 2022 and 2021, respectively.

Amounts received prior to revenue recognition are recorded as deferred income. Amounts expected to be recognized as revenue within the year following the balance sheet date are classified as current portion of deferred income in the accompanying consolidated balance sheets. Amounts not expected to be recognized as revenue within the twelve months following the balance sheet date are classified as deferred income, net of current portion. Amounts recognized as revenue, but not yet received or invoiced are generally recognized as contract assets.

Cost of goods sold

Cost of goods sold includes the cost of manufacturing our proprietary superabsorbent hydrogels for Plenity for which revenue was recognized during the period, as well as the associated costs for encapsulation, packaging, shipment, supply management and quality assurance. Expenses from royalty agreements on net product sales are also recognized as a component of cost of goods sold during the period in which the associated revenues are recognized. A portion of depreciation with respect to property and equipment directly utilized in manufacturing Plenity units is recognized as a component of cost of goods sold over the depreciable life of the asset.

If the Company identifies excess, obsolete or unsalable inventory items, it writes down these to their net realizable values in the period in which the impairment is identified with corresponding charges to cost of goods sold in the consolidated statements of operations. These adjustments are recorded based upon various factors related to the product, including the level of product manufactured by the Company, the level of product in the distribution channel, current and projected demand, the expected shelf-life of the product and firm inventory purchase commitments.

Selling, General and Administrative Costs

Selling, general and administrative costs are expensed as incurred. Selling, general and administrative costs include sales and marketing costs incurred as a result of the commercialization of the Company’s products, payroll and personnel expense, stock-based compensation expense, and costs of programs and infrastructure necessary for the general conduct of the Company’s business.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development costs include payroll and personnel expense, stock-based compensation expense, consulting costs, external contract research and development expenses, as well as depreciation and utilities. Prepaid research and development costs are deferred and amortized over the service period, as the services are provided.

Stock-Based Compensation

The Company’s stock-based compensation consist primarily of stock options and restricted stock units. The measurement date for share-based awards is the date of grant, and stock-based compensation costs are recognized as expense over the respective requisite service periods, which are typically the vesting period. The fair value of each stock option grant is estimated as of the date of grant using the Black-Scholes option-pricing model that requires management to apply judgment and make estimates, including:

- *exercise price:* The exercise price is the fair market value on grant date, which shall mean the closing sale price of common stock, as reported on such market on that date (or if there are no market quotations for such date, the determination shall be made by reference to the last date preceding such date for which there are market quotations);
- *expected volatility:* As the Company was previously a privately-owned company, there is not sufficient historical volatility for the expected term of the options. Therefore, the Company used an average historical share price volatility based on an analysis of reported data for a peer group of comparable companies for which historical information is available. For these analyses, the Company selects companies with comparable characteristics to itself including enterprise value, risk profiles, position within the industry, and with historical share price information sufficient to meet the expected life of the stock-based awards. The Company computes the historical volatility data using the daily closing prices for the selected companies' shares during the equivalent period of the calculated expected term of its stock-based awards. The Company intends to consistently apply this process using representative companies until a sufficient amount of historical information regarding the volatility of its own share price becomes available;
- risk-free interest rate, which is based on the U.S. Treasury yield curve in effect at the time of grant commensurate with the expected term assumption;
- expected term, which is calculated using the simplified method, as prescribed by the Securities and Exchange Commission Staff Accounting Bulletin No. 107, *Share-Based Payment,* as the Company has insufficient historical information regarding its stock options to provide a basis for an estimate. Under this approach, the weighted-average expected life is presumed to be the average of the contractual term of ten years and the weighted-average vesting term of the stock options, taking into consideration multiple vesting tranches;
- dividend yield, which is zero based on the fact that the Company never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future.

Stock-based compensation costs for non-employees are recognized as expense over the vesting period. Stock-based compensation expense is classified in the consolidated statements of operations based on the function to which the related services are provided. Forfeitures are recorded as they occur.

Income Taxes

The consolidated financial statements reflect provisions for federal, state, local and foreign income taxes. Deferred tax assets and liabilities are recognized based on temporary differences between the financial reporting and income tax basis of assets and liabilities using rates anticipated to be in effect when such temporary differences reverse. A change in tax rates is recognized in income in the period of the enactment date. A valuation allowance against net deferred tax assets is required if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company also assesses the probability that the positions taken or expected to be taken in its income tax returns will be sustained by taxing authorities. A "more likely than not" (more than 50%) recognition threshold must be met before a tax benefit can be recognized. Tax positions that are more likely than not to be sustained on examination by the taxing authorities, based on the technical merits of the position, are reflected in the Company's consolidated financial statements. Tax positions are measured as the largest amount of tax benefit that is greater than 50% likely of being realized upon settlement with a taxing authority that has full knowledge of all relevant information. The difference between the benefit recognized for a position and the tax benefit claimed on a tax return is referred to as an unrecognized tax benefit. Potential interest and penalties associated with such uncertain tax positions are recorded as a component of income tax expense.

Foreign Currency Translation

The financial statements of each of the Company's subsidiaries with a functional currency other than the U.S. dollar are translated into U.S. dollars using period-end exchange rates for assets and liabilities, historical exchange rates for stockholders' equity and weighted average exchange rates for operating results. Translation gains and losses are included in accumulated other comprehensive income (loss) in stockholders' equity. Foreign currency transaction gains and losses are included in other (expense) income, net in the results of operations.

Concentrations of Credit Risk and Off -Balance-Sheet Risk

The Company has no significant off-balance-sheet risk such as foreign exchange contracts, option contracts, or other foreign hedging arrangements. Financial instruments that potentially expose the Company to concentrations of credit risk primarily consist of cash and cash equivalents, investments, accounts receivable and unbilled account receivables.

The Company's cash balances, trade receivables, and grants receivable subject the Company to significant concentrations of credit risk. Periodically, the Company maintains deposits in government insured financial institutions in excess of government insured limits. The Company deposits its cash in financial institutions that it believes have high credit quality and has not experienced any losses on such accounts and does not believe it is exposed to any significant credit risk on cash. The Company's grants receivable are due from government agencies, which the Company believes to have high credit quality. The Company has a limited number of commercial customers. The Company monitors the creditworthiness of customers to whom it grants credit terms and has not experienced any credit losses.

Earnings (Loss) per Share

The Company computes basic earnings (loss) per share by dividing income (loss) attributable to common stockholders by the weighted average number of shares of common stock outstanding. During periods of income, the Company allocates participating securities a proportional share of income determined by dividing total weighted average participating securities by the sum of the total weighted average common shares and participating securities (the "two-class method"). The Company's restricted stock and various series of preferred stock participate in dividends declared by the Company and are therefore considered to be participating securities. Participating securities have the effect of diluting both basic and diluted earnings per share during periods of income. During periods of loss, the Company allocates no loss to participating securities because they have no contractual obligation to share in the losses of the Company. The Company computes diluted earnings (loss) per share after giving consideration to the dilutive effect of stock options and warrants that are outstanding during the period, except where such non-participating securities would be anti-dilutive.

Segment Information

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker, or decision-making group, in making decisions on how to allocate resources and assess performance. The Company's chief operating decision maker is the chief executive officer. The Company and the chief operating decision maker view the Company's operations and manage its business as one operating segment. Geographically, the Company operates out of the U.S. and Italy. The corporate headquarters including the core functions of sales and marketing, medical affairs, research and development and general and administrative are located in the U.S., while substantially all of the Company's manufacturing facilities and operations physically reside in Italy.

Effect of Recently Issued Pronouncements

In January 2020, the FASB issued ASU 2020-01, *Investments-Equity Securities (Topic 321), Investments-Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815)*. The amendments in ASU 2020-01 clarify certain interactions between the guidance to account for certain equity securities under Topic 321, the guidance to account for investments under the equity method of accounting in Topic 323, and the guidance in Topic 815, which could change how an entity accounts for an equity security under the measurement alternative or a forward contract or purchased option to purchase securities that, upon settlement of the forward contract or exercise of the purchased option, would be accounted for under the equity method of accounting or the fair value option in accordance with Topic 825, Financial Instruments. These amendments improve current GAAP by reducing diversity in practice and increasing comparability of the accounting for these interactions. The amendments in this update are effective for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years.

The Company adopted ASU 2020-01 as of January 1, 2022 and the adoption of this standard did not have a material impact on the consolidated financial statements and related disclosures.

In August 2020, the FASB issued ASU 2020-06, *Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*. The amendments in ASU 2020-06 include guidance on convertible instruments and the derivative scope exception for contracts in an entity's own equity and simplifies the accounting for convertible instruments which include beneficial conversion features or cash conversion features by removing certain separation models in Subtopic 470-20. Additionally, ASU 2020-06 will require entities to use the "if-converted" method when calculating diluted earnings per share for convertible instruments. The amendments in this update are effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years.

The Company adopted ASU 2020-06 as of January 1, 2022 and the adoption of this standard did not have a material impact on the consolidated financial statements and related disclosures.

In May 2021, the FASB issued ASU 2021-04 , *Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options*. The guidance in ASU 2021-04 requires the issuer to treat a modification of an equity-classified written call option that does not cause the option to become liability-classified as an exchange of the original option for a new option. This guidance applies whether the modification is structured as an amendment to the terms and conditions of the option or as termination of

the original option and issuance of a new option. The amendments in this update are effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years.

The Company adopted ASU 2021-04 as of January 1, 2022 and the adoption of this standard did not have a material impact on the consolidated financial statements and related disclosures.

3. Business Combination and Reverse Recapitalization

As discussed in Note 1, on January 13, 2022, the Company consummated the Business Combination pursuant to the Business Combination Agreement with CPSR dated July 19, 2021, as amended on November 8, 2021 and December 30, 2021. Concurrently with the execution of the Business Combination Agreement, CPSR entered into subscription agreements with certain investors (the "PIPE Investors"). Pursuant to the subscription agreements, the PIPE Investors purchased an aggregate of 9,000,000 shares of CPSR's Class A common stock (the "PIPE Investment") in a private placement at a price of $10.00 per share for an aggregate purchase price of $90.0 million. The PIPE Investment was consummated in connection with the closing. On December 30, 2021, CPSR entered into a backstop agreement (the "Backstop Agreement") with certain investors (the "Backstop Investors"). Pursuant to the Backstop Agreement, the Backstop Investors purchased an aggregate of 744,217 shares of CPSR's Class A common stock ("Backstop Purchase Shares") in a private placement at a price of $10.00 per share for an aggregate purchase price of $7.4 million. Additionally, CPSR issued the Backstop Investors 1,983,750 shares of CPSR Class A common stock as additional consideration. The Backstop Agreement was consummated in connection with the closing.

The Business Combination was accounted for as a reverse recapitalization in accordance with U.S. GAAP. Under this method of accounting, CPSR, who was the legal acquirer, was treated as the acquired company for financial reporting purposes. Accordingly, the Business Combination was treated as the equivalent of Gelesis issuing stock for the net assets of CPSR, accompanied by a recapitalization.

In connection with the Business Combination, aggregate transaction costs of $37.2 million were incurred, consisting of underwriting, legal, and other professional fees, of which $22.3 million were direct transaction costs incurred by CPSR, $9.5 million were assumed liabilities from CPSR, and $5.4 million were transaction costs incurred by Legacy Gelesis. Of the Legacy Gelesis transaction costs, $2.7 million was allocated to the Earnout Shares and expensed upon the Closing, based on the relative fair value of the Earnout Shares as compared to the other newly issued instruments as part of the Business Combination. The remaining transaction costs were recorded within additional paid-in capital on the accompanying consolidated financial statements.

The following table summarizes the net proceeds from the Business Combination, as reconciled to the accompanying consolidated statements of noncontrolling interest, redeemable convertible preferred stock and stockholder's equity (deficit) and the consolidated statements of cash flows (in thousands):

		Amount
Cash - CPSR trust and cash (net of redemptions)	$	7,558
Cash - PIPE Investment		90,000
Cash - Backstop Agreement		7,442
Gross proceeds	$	105,000
Less: transaction costs, advisory fees and liabilities paid		(34,522)
Net proceeds from the Business Combination	$	70,478

Immediately prior to closing of the Business Combination, Legacy Gelesis common stock was split according to the exchange ratio of 2.59, which was determined pursuant to the Business Combination Agreement and based on Legacy Gelesis' implied price per share prior to the Business Combination. Upon closing of the Business Combination, holders received shares of common stock of the Company on a one-to-one basis. For periods prior to the Business Combination, in the accompanying consolidated financial statements, the reported share and per share amounts have been retroactively converted ("Retroactive Application of Recapitalization") by applying the exchange ratio. The consolidated assets, liabilities and results of operations prior to the Business Combination are those of Legacy Gelesis.

Immediately prior to the closing of the Business Combination, Legacy Gelesis redeemable convertible preferred stock converted into Legacy Gelesis common stock and was subsequently split according to the exchange ratio of 2.59. Upon closing of the Business Combination, holders received shares of common stock of the Company on a one-to-one basis.

Immediately prior to the closing of the Business Combination, Legacy Gelesis stock options and restricted stock units ("RSU") were split according to the exchange ratio of 2.59. Upon closing of the Business Combination, holders of Legacy Gelesis stock options

received a stock option to purchase shares of the Company's common stock on a one-to-one basis and holders of Legacy Gelesis RSUs received RSUs of the Company on a one-to-one basis.

Immediately prior to the closing of the Business Combination, Legacy Gelesis redeemable preferred stock warrants were converted into Legacy Gelesis common warrants and were subsequently split according to the exchange ratio of 2.59. Upon closing of the Business Combination, holders received rollover common stock warrants of the Company on a one-to-one basis.

Immediately prior to the closing of the Business Combination, Legacy Gelesis common warrants were split according to the exchange ratio of 2.59. Upon closing of the Business Combination, holders received rollover common stock warrants of the Company on a one-to-one basis.

The number of shares of common stock issued and outstanding immediately following the consummation of the Business Combination was as follows:

	Common Stock
CPSR Public Stockholders	755,223
CPSR Sponsor Stockholders	4,916,250
Total CPSR Stockholders	5,671,473
Common stock issued to Gelesis Legacy Equityholders	54,814,847
Common stock issued to PIPE Investors and Backstop Agreement	11,727,967
Total common stock immediately after Closing	72,214,287

Earnout Shares

In addition, each holder of Legacy Gelesis common stock, Legacy Gelesis options and Legacy Gelesis warrants will receive a pro rata portion of up to 23,482,845 restricted earnout shares of Gelesis Holding's common stock, which will be issued and vest in equal thirds if the trading price of the Company's common stock is greater than or equal to $12.50, $15.00 and $17.50, respectively, for any twenty (20) trading days within any thirty (30)-trading day period on or prior to the date that is five years following the close of the Business Combination and will also vest in connection with any change of control transaction with respect to the Company if the applicable thresholds are met in such change of control transaction during the earnout period (each a "Triggering Event").

The Company determined 18,758,241 earnout shares are considered a contingent consideration arrangement in accordance with ASC 815, and recorded a liability upon the closing of the Business Combination of $58.9 million (see Note 14). The Company determined the remaining 4,724,604 earnout shares, which pertain to Legacy Gelesis equity awards, are incremental compensation in accordance with ASC 718 and equity classified. The total fair value of incremental compensation cost at the close of Business Combination was $14.8 million which will be expensed according to the vesting terms of the original underlying equity awards. The total incremental compensation cost, pertaining to Legacy Gelesis equity awards which had previously vested, was $11.4 million, of which $7.0 million and $4.4 million was recognized immediately following the close of the Business Combination as expense in selling, general and administrative expense and research and development expense, respectively, in the accompanying consolidated statements of operations.

Public Warrants and Private Placement Warrants

Upon the closing of the Business Combination, the Company assumed 13,800,000 Public Warrants and 7,520,000 Private Placement Warrants. The Company determined the Public Warrants qualified as equity instruments in accordance with ASC 815 and reclassified the Public Warrants from liability to equity classification and the carrying value of $7.1 million was transferred to APIC on the accompanying consolidated balance sheets. The Company determined the Private Placement Warrants met the definition of a liability under ASC 815 and recorded a liability reflecting the fair value of the Private Placement Warrants of $8.1 million. See Note 13 and Note 15 for further information on the Private Placement and Public Warrants, respectively.

4. Fair Value Measurements

Assets and liabilities that are measured at fair value on a recurring basis, and the level of the fair value hierarchy utilized to determine such fair values, consisted of the following at December 31, 2022 (in thousands):

		Fair Value Measurements		
	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Asset:				
Interest rate swap contract (see Note 12)	$ 800	$ —	$ 800	$ —
Liabilities:				
Convertible promissory notes (see Note 12)	27,403	—	—	27,403
Earnout liability (see Note 14)	563	—	—	563
Private placement warrant liability (see Note 13)	130	—	—	130
One S.r.l. call option (see Note 11)	674	—	—	674
Total liabilities measured at fair value	$ 28,770	$ —	$ —	$ 28,770

Liabilities that are measured at fair value on a recurring basis, and the level of the fair value hierarchy utilized to determine such fair values, consisted of the following at December 31, 2021 (in thousands):

		Fair Value Measurements		
	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Liabilities:				
Convertible promissory notes (see Note 12)	$ 27,128	$ —	$ —	$ 27,128
Legacy Gelesis preferred stock warrants (see Note 13)	15,821	—	—	15,821
One S.r.l. call option (see Note 11)	2,416	—	—	2,416
Total liabilities measured at fair value	$ 45,365	$ —	$ —	$ 45,365

The following table presents a summary of the changes in the fair value of the Company's Level 3 financial instruments during the years ended December 31, 2022 and 2021, respectively (in thousands):

	Convertible Promissory Notes	Legacy Gelesis Redeemable Preferred Stock Warrants Liabilities	One S.r.l. Call Option	Earnout Liability	Private Placement Warrant Liability
Balance at December 31, 2020	$ —	$ 12,099	$ 1,545	$ —	$ —
Exercise of warrants	—	(3,924)	—	—	—
Issuance of convertible promissory notes	27,000	—	—	—	—
Changes in fair value	128	7,646	1,024	—	—
Foreign currency translation adjustment	—	—	(153)	—	—
Balance at December 31, 2021	$ 27,128	$ 15,821	$ 2,416	$ —	$ —
Assumed upon Business Combination	—	—	—	—	8,140
Recognized upon Business Combination	—	—	—	58,871	—
Issuance of convertible promissory notes	25,000	—	—	—	—
Changes in fair value	2,559	926	(1,462)	(58,308)	(8,010)
Foreign currency translation adjustment	—	—	(280)	—	—
Conversion and exchange upon Business Combination	—	(16,747)	—	—	—
Settlement	(27,284)	—	—	—	—
Balance at December 31, 2022	$ 27,403	$ —	$ 674	$ 563	$ 130

There were no transfers into or out of level 3 instruments and/or between level 1 and level 2 instruments during the years ended December 31, 2022 and 2021, respectively. The fair value of the interest rate swap contract is determined based on quoted prices in markets that are not active for which significant inputs are observable either directly or indirectly and thus represents a level 2 measurement. The fair value measurement of the convertible promissory notes, Legacy Gelesis preferred stock warrant liability, One

S.r.l. call option liability, earnout liability and private placement warrant liability utilized inputs not observable in the market and thus represents a Level 3 measurement.

5. Product Revenue and Reserve and Allowances

The Company sells the Product principally to a limited number of customers consisting of telemedicine and online pharmacies, that in turn resell the Product to consumers.

Revenue for the years ended December 31, 2022 and 2021 consisted of the following (in thousands):

	Years Ended December 31,	
	2022	2021
Roman Health Pharmacy LLC	$ 19,957	$ 9,630
GoGoMeds	5,601	$ 1,437
CMS	—	118
Total	$ 25,558	$ 11,185

Roman Health Pharmacy LLC ("Ro")

In August 2019, the Company entered into a two-year exclusive supply and distribution agreement with Ro, giving Ro exclusive distributor rights to sell the Product via telehealth platforms in the United States. The Company began shipping products to Ro in May 2020 on consignment basis, under which the Company retained legal title to the units shipped on consignment and recognized revenue based on units subsequently shipped by Ro to end-users.

In January 2021, the Company amended and restated the agreement with Ro ("Ro agreement"). Pursuant to the amended and restated Ro agreement, the Company received $10.0 million of cash as a pre-buy commitment for Product which was recorded to current deferred income in the accompanying consolidated balance sheets. Additionally, the amended and restated agreement ended the consignment arrangement with Ro and the Company no longer retained control of any units shipped to Ro under the amended terms. Henceforth, all products shipped to Ro are immediately recognized as revenue upon the transfer of physical control.

In July 2021, the Company executed a second amended and restated agreement with Ro, under which the Company received $30.0 million of cash as a second pre-buy commitment for the Product, which was recorded to current deferred income in the accompanying consolidated balance sheets. Additionally, the Company extended Ro's exclusive period by approximately one year through July 1, 2023. Upon expiration of the exclusive period as amended, the exclusive right and license under the agreement shall automatically convert to non-exclusive for the remainder of term of the agreement unless further extended. The agreement may be terminated by mutual agreement after the exclusive period expired.

On June 14, 2022, the Company entered into a third Amended and Restated Supply and Distribution Agreement with Ro, pursuant to which the parties amended their previous agreement that granted Ro exclusive telehealth distributor rights to sell Plenity in the United States in the mail order/online pharmacy channel. Pursuant to the amendment, the Company received $15.0 million in cash from Ro as a pre-buy commitment to purchase units of Plenity, which was recorded to deferred income upon receipt in the accompanying consolidated balance sheets.

During the years ended December 31, 2022 and 2021, the Company recognized net product revenue of $20.0 million and $9.6 million, respectively, under the Ro agreement as amended. At December 31, 2022 and December 31, 2021, the Company recorded current deferred income with respect to the Ro agreement aggregated $25.9 million and $31.0 million, respectively, in the accompanying consolidated balance sheets.

GoGoMeds ("GGM")

In February 2020, the Company entered into a two-year exclusive distribution agreement with GGM, giving GGM exclusive distributor rights to all online and mail orders generated in the United States, except those via telehealth. GGM submits purchase orders as needed to Cardinal Health and Cardinal Health ships to GGM. Once GGM has accepted the delivered Product, GGM takes control of the Product and the Company is entitled to payment. The Company began shipping products to GGM in May 2020. The Company recognizes revenue based on units shipped to GGM and upon transfer of physical control.

During the years ended December 31, 2022 and 2021, the Company recognized $5.6 million and $1.4 million net product revenue, respectively. At December 31, 2022 and December 31, 2021, the Company recorded an accounts receivable with respect to GGM aggregated $1.1 million and $0.7 million, net of reserves and allowances, respectively, in the accompanying consolidated balance sheets.

CMS Bridging DMCC ("CMS")

In June 2020, the Company and CMS Bridging DMCC ("CMS") entered into a set of licensing, collaboration, and investing agreements ("CMS Agreements") involving the license of the Company's intellectual property ("IP") to CMS in Singapore and Greater China (the "CMS Territory") and governing the supply of product from the Company to CMS for sale in the CMS Territory, together with an agreement for CMS to invest in the Company's Series Growth 3 & 4 Preferred Shares.

Under the terms of the CMS Agreement, the Company granted CMS an exclusive, transferable, sub-licensable, and royalty-bearing license of the Company's IP to develop, import, register, manufacture, and commercialize the Product, whether through online sales channels or offline sales channels during the term of the agreement. The agreement can be terminated earlier by mutual agreement of the parties. In accordance with the CMS Agreement, all legal and beneficial ownership of (i) all IP rights relating to the Products (including any data generated from the use of the Products and other improvements) and (ii) all of the information provided or generated under the agreement or otherwise related to the Products shall both ultimately belong to and remain vested with the Company. CMS must purchase the Product from the Company at a markup of the Company's cost of goods sold.

As consideration for the rights and licenses granted by the Company to CMS under the agreement, CMS paid the Company a one-time, non-refundable and non-creditable upfront fee of $15.0 million and is required to pay a one-time, non-refundable, and non-creditable milestone payment of $5.0 million within thirty days after the earlier of (i) the approval of marketing authorization as a prescription product by the National Medical Products Administration, and (ii) the fifth anniversary of the agreement's effective date. The CMS Agreement also contains commercial milestones due to the Company based on the achievement of annual net product revenue thresholds in the CMS Territory. Additionally, CMS shall pay the Company royalties on net sales of all products in the CMS Territory commencing January 1, 2022 through the expiration date of the agreement.

The Company determined that the only performance obligation present was the licensing of the Product in the CMS Territory. The transactions price consisted of the $15.0 million upfront payment and the discounted time-based milestone of $3.7 million with the difference of $1.3 million accreted as interest income over five years with the remaining balance being accreted in full upon the approval of the marketing authorization as a prescription product if achieved prior to the end of the five years. The IP license granted to CMS represents a right to use the IP and therefore was recognized at a point in time, which was determined to be the effective date of the agreements.

On August 4, 2022, the Company amended the CMS Agreement, under which the one-time regulatory approval milestone payment of $5.0 million provided for in the original agreement became immediately payable. Additionally, the amendment expands the CMS Territory to include Brunei, Myanmar, Cambodia, Timor-Leste, Indonesia, Laos, Malaysia, the Philippines, Thailand and Vietnam and provides that the minimum annual royalty term for CMS Territory will commence January 2024 (rather than January 2022 as previously provided under the original CMS Agreement). The Company also issued to CMS a warrant to purchase up to 400,000 shares of common stock, par value $0.0001 per share, at an exercise price of $0.01 per share. The discounted one-time regulatory approval milestone, which had a carrying value of $4.2 million and $4.1 million as of August 4, 2022 and December 31, 2021, was fully collected upon execution of the CMS amendment.

As a result of the 2022 amendment, during the year ended December 31, 2022, the Company recognized licensing revenue of $0.2 million representing incremental consideration received by the Company for the additional territories granted to CMS in the accompanying consolidated statement of operations, and $0.6 million of additional paid-in capital representing the fair value of the common stock warrants in the accompanying consolidated balance sheet. The sales-based royalties and other commercial milestones will only be recognized in the periods in which the applicable subsequent sales occur.

Reserves and Allowances

The following table summarizes the activity in the product revenue reserve and allowances during the years ended December 31, 2022 and 2021 (in thousands):

	2022	2021
Balance at January 1,	$ 82	$ 14
Provision related to product sales	1,889	522
Credits and payments made	(1,949)	(454)
Balance at December 31,	$ 22	$ 82

At December 31, 2022 and 2021, product related reserve and allowances comprised solely contractual adjustments owed to the Company's telehealth and online pharmacy partners, which were netted to accounts receivable in the Company's consolidated balance sheets for the year. Through December 31, 2022, there had been no product related reserves or allowances owed to other parties, including the federal and state governments or their agencies.

6. Inventories

Inventories consisted of the following (in thousands):

	December 31,	
	2022	2021
Raw materials	$ 9,549	$ 8,074
Work in process	4,695	2,643
Finished goods	5,955	2,786
Inventories, gross	20,199	13,503
Less: inventory reserves	(13,334)	—
Total inventories	$ 6,865	$ 13,503

In January 2023, the Company submitted a 510(k) application with the FDA to change the classification of Plenity from prescription only to OTC, which, if cleared by the FDA, would make Plenity available to consumers without the need for a prescription. If Plenity is approved by the FDA as an OTC weight management aid, a portion of finished goods and raw material inventories with Rx labeling and marking information would become obsolete. Additionally, finished goods and work-in-process inventories with expiration dates ranging between July 2023 and March 2024 are subject to shelf-life limitations.

As of December 31, 2022, the Company estimated that approximately $5.0 million finished goods, $4.5 million work-in-progress and $3.8 million raw material inventories wouldn't be sold or utilized. Therefore, the Company recorded an aggregate $13.3 million excess and obsolescence inventory reserves as a component of inventories on the accompanying consolidated balance sheet as of December 31, 2022.

7. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following (in thousands):

	December 31,	
	2022	2021
Prepaid expenses	$ 314	$ 982
Prepaid insurance	268	55
Prepaid manufacturing expenses	—	2,624
Prepaid contract research costs	189	262
Research and development tax credit	567	579
Value added tax receivable	2,036	5,633
Deferred financing costs	—	3,855
Income tax receivable	203	213
Investment tax credit	1,050	—
Prepaid expenses and other current assets	$ 4,627	$ 14,203

8. Property and Equipment, Net

Property and equipment, net, consisted of the following (in thousands):

	December 31,	
	2022	2021
Laboratory and manufacturing equipment	$ 29,944	$ 28,101
Land and buildings	10,673	10,404
Leasehold improvements	1,525	1,614
Computer equipment and software	811	463
Capitalized software	232	228
Construction in process	24,287	22,097
Property and equipment – at cost	67,472	62,907
Less accumulated depreciation	(8,137)	(4,392)
Property and equipment – net	$ 59,335	$ 58,515

The Company owns and operates commercial manufacturing and research and development facilities in Italy, including a 51,000 square foot facility, which the Company expects to further expand to an 88,600 square foot facility, as well as approximately 12 acres of land, where the Company owns land to develop an additional 207,000 square foot facility. Both facilities are near the Town of Lecce in the Puglia region of Italy. Property and equipment classified as construction in process at December 31, 2022 and December 31, 2021 are related to the development of manufacturing lines that have not yet been placed into service at December 31, 2022 and December 31, 2021, respectively.

Depreciation expense was approximately $3.2 million and $1.5 million for the years ended December 31, 2022 and 2021, respectively.

9. Accrued Expenses

Accrued expenses and other current liabilities consisted of the following (in thousands):

	December 31,	
	2022	2021
Accrued payroll and related benefits	$ 1,550	$ 1,384
Accrued professional fees and outside contractors (including due to related party of $153 and $60, respectively)	3,521	4,359
Accrued property, plant and equipment additions	378	1,257
Accrued inventory and manufacturing expense	1,020	128
Unpaid portion of One S.r.l. equity acquisition (see Note 11)	2,656	5,604
Tax payables	543	145
Deferred legal fees	738	738
Accrued interest	62	45
Total accrued expenses	$ 10,468	$ 13,660

10. Other Long-Term Liabilities

Other long-term liabilities consisted of the following (in thousands):

	December 31,	
	2022	2021
Long-term tax liabilities	$ 224	$ 182
One S.r.l. call option (see Note 11)	674	2,416
Contingent loss for research and development tax credits	—	2,990
Total other long-term liabilities	$ 898	$ 5,588

11. Significant Agreements

Puglia 1 Grant

In May 2020, the Company was awarded a grant by the Puglia region of Italy as an incentive to manufacture and carry out research and development activities in Italy ("PIA 1 Grant"). with the key underlying activity being the development of the commercial facility to expand production capacity for the Product. The PIA 1 Grant provides funding of up to €5.3 million (approximately $5.7 million at December 31, 2022) as reimbursement for certain facility and equipment investments in the Company's manufacturing facility in Calimera, Italy, and up to €3.9 million (approximately $4.2 million at December 31, 2022) as reimbursement for certain research and development expenditures over a three-year period. The Company is required to adhere to standard workplace safety regulations and local laws in Italy and is not permitted to physically move the reimbursed assets from the Puglia region for five years from the project completion date of May 2023. The Company has concluded that income recognition is appropriate as it is reasonably assured that it will comply with all the conditions of the grant and the proceeds from the grant for costs incurred to date will be received.

The following table represents amounts recognized on the consolidated statements of operations for the years ended December 31, 2022 and 2021 and on the consolidated balance sheets at December 31, 2022 and 2021 in relation to the Puglia 1 Grant (in thousands):

	December 31,	
	2022	2021
PIA 1 Grant income	$ 756	$ 465
Income attributable to R&D expense	71	220
Income attributable to investments in facilities and equipment	694	246
Proceeds	6,261	—
Grant receivable	3,237	5,439
Deferred income	5,001	6,449
Current portion of deferred income	771	858

Puglia 2 Grant

In November 2020, the Company was awarded a second grant by the Puglia region of Italy as an incentive to manufacture and carry out research and development activities in Italy ("PIA 2 Grant"), with the key underlying activity being the development of a second manufacturing line at the commercial facility to expand production capacity for the Product, and research and development activities targeting new gastrointestinal health indications. The PIA 2 Grant provides funding of up to €3.3 million (approximately $3.5 million at December 31, 2022) as reimbursement for certain facility and equipment investments in the Company's manufacturing facility in

Calimera, Italy, and up to €8.3 million (approximately $8.9 million at December 31, 2022) as reimbursement for certain research and development expenditures over a three-year period. The Company is required to adhere to standard workplace safety regulations and local laws in Italy and is not permitted to physically move the reimbursed assets from the Puglia region for five years from the project completion date of November 2023. The Company has concluded that income recognition is appropriate as it is reasonably assured that it will comply with all the conditions of the grant and the proceeds from the grant for costs incurred to date will be received.

The following table represents amounts recognized on the consolidated statements of operations for the years ended December 31, 2022 and 2021 and on the consolidated balance sheets at December 31, 2022 and 2021 in relation to the Puglia 2 Grant (in thousands):

	December 31,	
	2022	2021
PIA 2 Grant Income	$ 1,411	$ 1,054
Income attributable to R&D expense	1,411	1,135
Income attributable to investments in facilities and equipment	—	—
Proceeds	1,751	1,855
Grant receivable	122	3,631
Long-term grant receivable	4,732	—
Deferred income	3,502	3,711
Current portion of deferred income	420	445

One S.r.l. ("One") Amended Patent License and Assignment Agreement

In October 2008 and December 2008, the Company entered into a patent license and assignment agreement and master agreement with One, the original inventor and owner of the Company's core patents and a related party to the Company (see Notes 19 and 20), to license and subsequently purchase certain intellectual property to develop hydrogel-based product candidates. In December 2014, the Company amended and restated the patent license agreement and the master agreement into a single agreement, referred to as the amended and restated master agreement (the "2014 One Amendment"). The amended and restated master agreement would remain in effect until the expiration of the last patents covered by the agreement or until all obligations under the amended and restated master agreement with respect to payments have terminated or expired.

In June 2019, the Company further amended and restated the master agreement with One (the "2019 One Amendment"). Under the 2019 One Amendment, the Company eliminated certain future commercial milestone obligations and received a reduction in the percentage of royalties the Company was required to pay on future net sales. In return, One received additional consideration consisting of new future milestones upon the commercial success of new medical indications and a contingently issuable warrant for redeemable convertible preferred stock. Additionally, the Company acquired a 10% equity interest in One in exchange for cash consideration.

The Company accounted for the reduction in royalties the Company is required to pay on future net revenues that resulted from the 2019 One Amendment as an intangible asset under ASC 350, Intangibles – Goodwill and Other, which shall be amortized over its useful life, which was determined to be the earliest expiration of patents related to the underlying intellectual property in November 2028. The Company accounted for the acquisition of the 10% equity interest in One under ASC 323, Investments – Equity Method and Joint Ventures. The Company initially allocated consideration in the June 2019 transaction on a relative fair value basis in the following manner (in thousands):

Consideration	
Cash	$ 12,668
Warrants for redeemable convertible preferred stock	4,706
Fair value of total consideration	$ 17,374
Assets acquired at relative fair value	
Intangible asset related to reduction in royalty	$ 15,564
Equity-method investment	1,810
Total assets acquired	$ 17,374

The Company accounted for tax impact of the acquisition of the intangible asset under ASC 740, Income Taxes, which resulted in the recognition of a deferred tax liability of $5.8 million, to account for the book-to-tax basis difference, that was applied to the initial carrying value of the intangible asset acquired.

In October 2020, the Company amended and restated the agreement with One (the "2020 One Amendment") to cancel its obligation to issue to One the warrant for redeemable convertible preferred stock agreed to in the 2019 One Amendment . In return for cancelling the warrant, One received additional consideration consisting of a commercial milestone of €6.5 million (approximately $7.0 million at December 31, 2022) upon a weight loss product reaching €2.0 billion in cumulative net sales, and certain shareholders of One were

granted warrants to purchase 522,009 shares of the Company's common stock. The warrant for redeemable convertible preferred stock was remeasured prior to settlement. Additionally, the Company granted One a contingent call option to buy back the 10% ownership that the Company acquired in the 2019 One Amendment at an exercise price of €6.0 million (approximately $6.4 million at December 31, 2022). The call option is only exercisable upon (1) a change of control or a deemed liquidation event by the Company, as defined in the Company's Restated Certification of Incorporation or (2) the date in which the Company's current Chief Executive Officer is no longer affiliated with the Company in his capacity as either an executive officer or a member of the board of directors.

On August 9, 2022, the Company amended the exercise price of the One warrant holders' 1,353,062 previously issued common stock warrants from $4.26 to $1.45, in consideration for deferring payment of the remaining purchase price totaling €2.5 million (approximately $2.7 million at December 31, 2022) to acquire the 10% equity interest in One until March 31, 2023.

The Company recorded intangible asset amortization cost aggregated $2.3 million during each of the years ended December 31, 2022 and 2021. The Company recognized a loss attributable to the amendment to the Warrant Purchase Agreement of $0.3 million during the year ended December 31, 2022.

In connection with the acquisition of the 10% equity interest in One, the Company paid €2.5 million ($2.7 million) to One shareholders during the year ended December 31, 2022. The Company had remaining undiscounted payment obligations of €2.5 million and €5.0 million at December 31, 2022 and December 31, 2021, respectively ($2.7 million and $5.7 million at December 31, 2022 and December 31, 2021, respectively). The remaining payment obligation balance at December 31, 2022 and December 31, 2021 was recorded in accrued expenses in the accompanying consolidated balance sheet as it was expected to be settled within the next twelve months from the respective consolidated balance sheet dates. None of the future milestones under the amended and restated master agreement, have been met, or are deemed to be probable of being met, from inception of the One agreement, as amended and restated, through December 31, 2022.

The One S.r.l. call option was recorded as a liability held at fair value at the date of issuance and is remeasured at each subsequent reporting date with changes in fair value recorded in other income (expense) in the accompanying consolidated statements of operations. Fair value is determined using a Black-Scholes option pricing model. The significant inputs used in estimating the fair value of call option liability include the estimated fair value of the underlying stock price, expected term, risk free interest rate, and expected volatility.

The following represents a summary of the changes to the Company's One S.r.l. call option liability during the years ended December 31, 2022 and 2021, respectively (in thousands):

	Years Ended December 31,	
	2022	**2021**
Balance at Beginning of Period	$ 2,416	$ 1,545
Change in fair value	(1,462)	1,024
Foreign currency translation gain	(280)	(153)
Balance at the End of Period	$ 674	$ 2,416

The following weighted average assumptions were used to determine the fair value of the One S.r.l. call option liability at December 31, 2022 and December 31, 2021:

	December 31,	
	2022	**2021**
Expected term	4.0 years	2.0 years
Expected volatility	86.0%	62.0%
Expected dividend yield	0.0%	0.0%
Risk free interest rate	4.2%	0.70%
Estimated fair value of ownership interest	$ 1,772	$ 6,922
Exercise price of call option	$ 6,422	$ 6,806

Research Innovation Fund ("RIF") Financing

In August 2020, the Gelesis S.r.l. entered into a loan and equity agreement with RIF, an investment fund out of the EU, whereby Gelesis S.r.l. received €10.0 million (approximately $10.7 million at December 31, 2022) from RIF as an equity investment and €15.0 million (approximately $16.1 million at December 31, 2022) as a loan with a fixed interest rate of 6.35% per annum (see Note 12). The equity investment can be called by the Company, beginning in December 2023 and ending in December 2026, by paying the investment plus 15% percent annual interest. If the Company does not exercise this call option, beginning in January 2027 and ending in December 2027, RIF may put the investment to the Company at a cost of the investment amount plus 3.175% percent annual interest. The loan has a termination date of December 31, 2030 and is repayable over 8 years starting 24 months subsequent to its issuance. Any unpaid principal and interest must be repaid upon exercise of the call option by the Company, or subsequent exercise of a put option by RIF. At December 31, 2022, RIF holds approximately 20% of the equity of Gelesis S.r.l.

The Company concluded that Gelesis Inc. is the only equity investment at risk as RIF's investment is not considered equity due to the call and put options. The Company further evaluated the sufficiency of the equity at risk and concluded that given the fact that Gelesis S.r.l. had to receive the RIF investment, which represents subordinated financial support but not equity, the fair value of Gelesis Inc. equity is not sufficient to absorb its expected losses resulting from its research and development operations and business plan, rather some of its expected losses will have to be absorbed by the RIF investment.

The RIF investment is equity held by a noncontrolling interest. Since the put option does not make the equity mandatorily redeemable, and the call option is held by the Company, the noncontrolling interest is not considered mandatorily redeemable and as such, is not presented as a liability. The noncontrolling interest is therefore classified as temporary equity – noncontrolling interest, and is accounted for in accordance with ASC 810, *Consolidation*.

The noncontrolling interest is initially recorded at €10.0 million (approximately $11.3 million at transaction date, net of issuance costs of $0.4 million), the consideration allocated to the shareholder investment based on its fair value. The Company has applied ASC 810 to subsequently remeasure the noncontrolling interest, which results in no losses being attributed to the noncontrolling interest, rather, only earnings of the Gelesis S.r.l. entity based on the shareholder rights as a whole instrument. However, the noncontrolling interest shall not be reduced below the current redemption value of the put option, which represents the initial investment plus the accrued rate of return of 3.175% per annum. Adjustments to the noncontrolling interest that result from accreting the put option to its redemption value are recorded to accumulated deficit in the accompanying consolidated balance sheets.

The Company recorded the following noncontrolling interest components in the consolidated statements of noncontrolling interest, redeemable convertible preferred stock and stockholders' deficit (in thousands):

	Years Ended December 31,	
	2022	2021
Balance at Beginning of Period	$ 11,855	$ 12,429
Accretion of put option	253	376
Income allocated to noncontrolling interest holder	1,095	—
Foreign currency translation adjustment	(613)	(950)
Balance at the End of Period	$ 12,590	$ 11,855

12. Debt

The Company's non-convertible debt outstanding at December 31, 2022 and December 31, 2021, respectively, is summarized as follows (in thousands):

	December 31,	
	2022	2021
Italian Economic Development Agency Loan	331	525
Intesa Sanpaolo Loan 1	7,094	8,507
Intesa Sanpaolo Loan 2	5,352	5,672
Horizon 2020 Loan	389	486
RIF Shareholders Loan	16,055	17,015
UniCredit Loan	4,421	5,630
Total debt obligation	$ 33,642	$ 37,835
Unamortized loan discount and issuance costs	(346)	(754)
Total debt obligation carrying amount	$ 33,296	$ 37,081
Current portion	$ 7,954	$ 1,950
Long-term portion	$ 25,342	$ 35,131

Italian Economic Development Agency Loan

In May 2014, the Company entered into a loan agreement with an Italian economic development agency in connection with a grant. In February 2016, the Company received a second transfer of financing under this loan agreement. Borrowings under the loan totaled €1.2 million (approximately $1.3 million at December 31, 2022), and the loan bears interest at 0.332% per annum The Company is required to make annual principal and interest payments from January 2017 through January 2024.

Intesa Sanpaolo Loan 1

In November 2019, the Company entered into a loan agreement with Intesa Sanpaolo. Initial borrowings under the loan totaled €2.4 million (approximately $2.6 million at December 31, 2022), net of transaction costs of €0.1 million (approximately $0.1 million at December 31, 2022), and the loan bears interest at base rate of 2.3% plus the 3-month Euribor rate per annum. The Company was required to make payments of interest only on borrowings under the loan agreement on a quarterly basis through and including

October 31, 2021 (the interest only termination date), after which payments of principal in equal quarterly installments and accrued interest will be due until the loan matures on October 31, 2029. The Company pledged certain manufacturing facilities, excluding equipment, as collateral under this loan agreement.

During 2020, the Company borrowed an additional €5.0 million (approxfimately $5.4 million at December 31, 2022), net of transaction costs of less than €0.1 million. The additional borrowings under the loan had the same terms and repayment schedule as the November 2019 loan.

Intesa Sanpaolo Loan 2

In March 2021, the Company entered into another loan agreement with Intesa Sanpaolo for aggregate borrowings of up to €5.0 million. Borrowings under the second loan agreement upon closing and at December 31, 2022, totaled €4.8 million (approximately $5.1 million at December 31, 2022), net of transaction costs of €0.2 million (approximately $0.2 million at December 31, 2022), and the loan bears interest at a base rate of 2.75%. The Company is required to make payments of interest only on borrowings under the loan agreement on a monthly basis through March 2023 (the interest only termination date), after which payments of principal in equal monthly installments and accrued interest will be due until the loan matures on March 26, 2024.

Horizon 2020 Loan

In December 2019, as part of the Horizon 2020 Grant (see Note 11), the Company entered into a loan agreement with the Italian Finance Ministry. Borrowings under the loan totaled €0.3 million (approximately $0.3 million at December 31, 2022), net of transaction costs and discounts of less than €0.1 million, and the loan bears interest at 0.171% per annum. The Company is required to make payments of interest only on borrowings under the loan agreement on a semiannual basis through and including June 30, 2020 (the interest only termination date), after which payments of principal in equal semiannual installments and accrued interest will be due until the loan matures on June 30, 2028.

In October 2020, the Company borrowed an additional €0.2 million (approximately $0.2 million at December 31, 2022), net of transaction costs of less than €0.1 million. The additional borrowings under the loan had the same terms and repayment schedule as the December 2019 loan.

RIF Shareholders Loan

In August 2020, as part of the RIF financing transaction (see Note 11), the Company entered into a loan agreement with the shareholders of RIF. Borrowings under the loan totaled €14.5 million (approximately $15.5 million at December 31, 2022), net of transaction costs of €0.5 million (approximately $0.5 million at December 31, 2022), and the loan bears interest at 6.35% per annum. The Company is required to make payments of interest only on borrowings under the loan agreement on an annual basis starting December 31, 2020 and through and including December 30, 2022 (the interest only termination date), after which payments of principal in equal annual installments and accrued interest will be due until the loan matures on December 31, 2030. If either party exercises its call option or put option on the equity investment as part of the RIF Transaction, the unpaid principal and accrued interest as of that date must be paid by the Company.

UniCredit Loan

In November 2020, the Company entered into a loan agreement with UniCredit. Borrowings under the loan totaled €4.9 million (approximately $5.2 million at December 31, 2022), net of transaction costs and discounts of €0.1 million (approximately $0.1 million at December 31, 2022), and the loan bears interest at 2.12% per annum. The Company is required to make payments of principal and accrued interest on a semiannual basis starting December 10, 2021 until the loan matures on December 10, 2027.

2021 Bridge Financing

In December 2021, the Company issued convertible promissory notes to related parties in the principal amount of $27.0 million (see Note 20). At December 31, 2021, the outstanding balance under the 2021 convertible promissory notes was $27.1 million, recorded at fair value in the accompanying consolidated balance sheet. On January 19, 2022 the Company settled the convertible promissory notes in cash for principal plus accrued interest in the aggregate amount of $27.3 million. During the years ended December 31, 2022 and 2021, the Company recognized a fair value adjustment of $0.2 million and $0.1 million, respectively, relating to the 2021 convertible promissory notes on the accompanying consolidated statements of operations.

2022 Promissory Notes

In the third quarter of 2022, the Company issued three term promissory notes in the aggregate principal amount of $25.0 million to existing investor CMS, and existing investors and related parties PureTech Health LLC and SSD2 LLC, for an aggregate cash proceeds of $25.0 million. Each of the 2022 promissory notes is unsecured and bears interest at a rate of 15% per annum. Each promissory note matures on the earlier of (a) December 31, 2023 or (b) five (5) business days following a qualified financing. Upon a payment default under any promissory note that has not been cured after five days (i) the Company will be required to issue certain warrants to the holders as defined by the promissory note agreements and (ii) the holders will have the option to convert outstanding principal and accrued interest into a number of shares of Gelesis common stock as defined by the promissory note agreements.

At December 31, 2022, the aggregate outstanding balance of the 2022 promissory notes was $27.4 million recorded at fair value in the accompanying consolidated balance sheet. During the year ended December 31, 2022, the Company recognized a fair market adjustment of $2.4 million relating to the 2022 promissory notes.

The Company applied the provisions of ASC 815-15, *Embedded Derivatives,* elected to account for the 2022 promissory notes at fair value, and to not bifurcate the embedded derivative. The fair value of the promissory notes is determined using a multiple scenario-based valuation method. The fair value of the hybrid instrument was determined by calculating the value of the instrument in each scenario "with" the respective conversion feature and "without". The significant inputs used in estimating the fair value of the convertible promissory notes include the estimated discount rate, expected term, and the outcome probability with respect to each scenario.

The following assumptions were used to determine the fair value of the 2022 promissory notes at December 31, 2022:

Expected term	1 year
Weighted average discount rate	26.0%
Probability of repayment after qualified financing	50.0%
Probability of holder electing conversion option	50.0%

Interest Rate Swap Contract on Intesa Sanpaolo Loan 1

In November 2019, the Company entered into an interest rate swap ("IRS") contract with Intesa Sanpaolo S.p.A. concurrently with the execution of the Intesa Sanpaolo loan 1 agreement. The IRS contract covered the same period as the underlying Intesa Sanpaolo loan 1 and expires on October 31, 2029.

Fair value of the interest rate swap contract is determined based on quoted price in markets that are not active for which significant inputs are observable either directly or indirectly and thus represents a level 2 measurement.

The Company reported a fair value of $0.8 million for the IRS contract included other assets at December 31, 2022, and $0.1 million included in other long-term liabilities at December 31, 2021 in the accompanying consolidated balance sheets. Net gain attributable to the change in fair value of the IRS contract was $0.9 million for the year ended December 31, 2022. Net loss attributable to the change in fair value of the IRS contract was $0.1 million for the year ended December 31, 2021.

Future maturities with respect to non-convertible debt obligations outstanding at December 31, 2022 are as follows (in thousands):

	At December 31, 2022
2023	8,101
2024	5,445
2025	3,962
2026	3,983
2027	3,964
More than 5 years	8,186
Total maturities	$ 33,642

13. Warrant Liabilities

The following represents a summary of the warrant liabilities activity during the years ended December 31, 2022 and 2021 (in thousands):

	Legacy Gelesis Warrants	Private Placement Warrants	Total
Balance at December 31, 2020	$ 12,099	$ —	$ 12,099
Exercise of warrants	(3,924)	—	(3,924)
Change in fair value	7,646	—	7,646
Balance at December 31, 2021	$ 15,821	$ —	$ 15,821
Assumed upon Business Combination	—	8,140	8,140
Changes in fair value	926	(8,010)	(7,084)
Conversion and exchange upon Business Combination	(16,747)	—	(16,747)
Balance at December 31, 2022	$ —	$ 130	$ 130

Legacy Gelesis Redeemable Preferred Stock Warrants

The Legacy Gelesis warrants were evaluated under ASC 480 – *Distinguishing Liabilities from Equity* and it was determined that they met the requirements for separate accounting as freestanding financial instruments and should be classified as liabilities, as they relate to an obligation to issue shares that are potentially redeemable. The related liability is remeasured at each reporting date up to the exercise or expiration with increases or decreases in fair value being recorded in the consolidated statements of operations.

In connection with the Business Combination, Legacy Gelesis redeemable preferred stock warrants were reclassified from liability treatment to equity treatment pursuant to the terms of their exchange to New Gelesis warrants (see Note 15).

The following assumptions were used to determine the fair value of the warrant liability at December 31, 2021:

Expected term		0.1 years
Expected volatility		48.0%
Expected dividend yield		0.0%
Risk free interest rate		0.6%
Estimated fair value of the redeemable convertible preferred stock	$	22.36
Exercise price of warrants	$	0.04

Private Placement Warrants

At December 31, 2022, there were 7,520,000 Private Placement Warrants outstanding exercisable at $11.50 per share for common stock at the same terms as the Public Warrants. However, the warrants will not be redeemable by the Company for cash so long as they are held by the initial stockholders or their permitted transferees. The initial purchasers of the Private Placement Warrants, or their permitted transferees, also have the option to exercise the Private Placement Warrants on a cashless basis. If Private Placement Warrants are held by holders other than the initial purchasers thereof or their permitted transferees, the Private Placement Warrants will be redeemable by the Company and exercisable by the holders on the same basis as the Public Warrants.

The warrants were initially recorded at fair value with subsequent changes in fair value being recorded in the accompanying consolidated statements of operations. The warrants at issuance and at December 31, 2022, were valued utilizing a modified Monte Carlo Simulation value model and significant unobservable Level 3 inputs.

The following weighted-average assumptions were used to determine the fair value of the Private Placement Warrant liability at December 31, 2022:

		Private Placement Warrants
Expected term		4.0 years
Expected volatility		86.0%
Expected dividend yield		0.0%
Risk free interest rate		4.0%
Price of Gelesis Common Stock	$	0.29
Exercise price of warrants	$	11.50

14. Earnout Liability

The following represents a summary of the earnout liability activity during the year ended December 31, 2022 (in thousands):

		Earnout Liability
Balance at December 31, 2021	$	—
Recognized upon Business Combination		58,871
Changes in fair value		(58,308)
Balance at December 31, 2022	$	563

At Business Combination close and at December 31, 2022, there were 18,758,241 earnout shares underlying the liability, which were unissued and unvested. At December 31, 2022, none of the triggering events had been met.

The earnout liability was initially recorded at fair value with subsequent changes in fair value being recorded in the accompanying consolidated statements of operations. The earnout liability at issuance and at December 31, 2022, were valued utilizing a Monte Carlo Simulation and significant unobservable Level 3 inputs.

The following weighted-average assumptions were used to determine the fair value of the earnout liability at December 31, 2022:

		Earnout Liability
Expected term		4.0 years
Expected volatility		86.0%
Expected dividend yield		0.0%
Risk free interest rate		4.0%
Price of Gelesis Common Stock	$	0.29

15. Stockholders' Equity (Deficit)

Common Stock

The Company's authorized capital stock consists of (a) 900,000,000 shares of common stock, par value $0.0001 per share; and (b) 250,000,000 shares of preferred stock, par value $0.0001 per share. At December 31, 2022, there were 73,325,022 shares of common stock issued and outstanding.

Common Stock Purchase Agreement

On August 11, 2022, the Company entered into a Common Stock Purchase Agreement and a Registration Rights Agreement (the "Purchase Agreement") with B. Riley Principal Capital II, LLC ("B. Riley"). Pursuant to the agreement, the Company will have the right, but not the obligation, to sell to B. Riley up to the lesser of (i) $50,000,000 of newly issued shares of common stock, and (ii) 14,506,475 shares of common stock (which is the number of shares equal to approximately 19.99% of the aggregate number of shares of the Company's common stock issued and outstanding immediately prior to the execution of the agreement) at 97% of the volume weighted average price ("VWAP") of the Company's common stock calculated in accordance with the Purchase Agreement, from time to time during the 24-month term commencing from the effectiveness date of the corresponding Form S-1 registration statement on September 6th, 2022. Sales and timing of any sales of Class A common stock are solely at the election of the Company, and the Company is under no obligation to sell any securities to B. Riley under the Purchase Agreement. As consideration for B. Riley's commitment to purchase shares of the Company's common stock, the Company issued 355,361 shares of its common stock as commitment shares. The Company incurred an aggregate cost of approximately $1.2 million in connection with the Purchase Agreement, including $0.5 million for the fair value of the 355,361 commitment shares issued to B. Riley.

The Company recorded $1.2 million legal and professional costs in the accompanying consolidated statement of operations during the year ended December 31, 2022, and recorded $0.5 million of additional paid-in capital in the accompanying consolidated balance sheets as of December 31, 2022 with respect to the fair value of the 355,361 common stock commitment shares issued to B. Riley.

The Company issued a total of 34,246 shares of its common stock and raised less than $0.1 million gross proceeds under the Purchase Agreement for the year ended December 31, 2022.

Legacy Redeemable Convertible Preferred Stock

At December 31, 2021 and immediately prior to the Business Combination, Legacy Gelesis had outstanding redeemable convertible preferred stock which are collectively referred to as "redeemable convertible preferred stock." Immediately prior to the closing of the Business Combination, Legacy Gelesis redeemable convertible preferred stock converted into Legacy Gelesis common stock and was subsequently split according to the exchange ratio of 2.59. Upon closing of the Business Combination, holders received shares of common stock of the Company on a one-to-one basis.

Public Warrants

In connection with the Business Combination the Company assumed 13,800,000 Public Warrants, which entitle the holder to acquire common stock, which are exercisable at an exercise price of $11.50 per share. The Public Warrants will expire at on the earlier to occur of five years after the completion of the Business Combination or redemption.

Once the Public Warrants become exercisable, the Company may call the Public Warrants for redemption for cash:

- in whole and not in part;
- at a price of $0.01 per warrant;
- upon not less than thirty (30) days' prior written notice of redemption (the "30-day redemption period") to each warrant holder; and
- if, and only if, the closing price of the Common Stock equals or exceeds $18.00 per share (as adjusted for stock splits, stock capitalizations, reorganizations, recapitalizations and the like) for any twenty(20) trading days within a thirty (30)-trading day period ending three (3) business days before the Company sends the notice of redemption to the warrant holders.

If the Company calls the Public Warrants for redemption, the Company will have the option to require all holders that wish to exercise the Public Warrants to do so on a cashless basis, as described in the warrant agreement. Additionally, in no event will the Company be required to net cash settle.

At December 31, 2022, there were 13,800,000 Public Warrants outstanding.

Rollover Warrants

Immediately prior to the closing of the Business Combination, Legacy Gelesis redeemable preferred stock warrants were converted into Legacy Gelesis common warrants and were subsequently split according to the exchange ratio of 2.59. Upon closing of the

Business Combination, holders received rollover common stock warrants of the Company on a one-to-one basis. At close of the Business Combination and December 31, 2022, there were 1,836,429 and 1,660,303 rollover warrants outstanding, respectively, with an exercise price of $0.02. During the year ended December 31, 2022, 176,126 rollover warrants were exercised for proceeds of less than $0.1 million.

Immediately prior to the closing of the Business Combination, existing Legacy Gelesis common warrants were also split according to the exchange ratio of 2.59. Upon closing of the Business Combination, holders received warrants to purchase shares of common stock of the Company on a one-to-one basis. At close of the Business Combination and at December 31, 2022, respectively, there were 1,353,062 of these warrants outstanding with an exercise price of $4.26.

The Company's common stock reserved for future issuances are summarized as follows:

	December 31,	
	2022	2021
Common stock issued upon option exercise and RSUs vesting	16,881,549	13,486,708
Conversion of all classes of redeemable convertible preferred stock	—	48,566,655
Issuances upon exercise of Legacy Gelesis warrants	—	1,836,429
Issuances upon exercise of common stock warrants	24,733,365	1,353,062
Earnout shares	23,482,845	—
Total common stock reserved for future issuance	65,097,759	65,242,854

16. Stock-Based Compensation

2021 Stock Option Plan

In January 2022, the Company's Board of Directors approved the 2021 Stock Option and Incentive Plan (the "2021 Plan"), which supersedes the 2016 Stock Option and Grant Plan and the 2006 Stock Incentive Plan and provides for the grant of incentive stock options, nonqualified stock options, restricted stock awards and restricted stock units to employees, directors, and nonemployees of the Company. The 2021 Plan was authorized initially to issue 9,583,570 shares, plus on January 1, 2023 and each January 1 thereafter, the number of shares of Common Stock reserved and available for issuance under the Plan shall be cumulatively increased by 4 percent of the number of shares of Common Stock issued and outstanding on the immediately preceding December 31. Under the 2021 Plan, 3,977,252 shares remained available for issuance at December 31, 2022.

Options and restricted stock awards generally vest based on the grantee's continued service with the Company during a specified period following a grant as determined by the Board of Directors and expire ten years from the grant date. In general, awards typically vest in three to four years, but vesting conditions can vary based on the discretion of the Company's Board of Directors.

The fair value of the options is estimated at the grant date using Black-Scholes and recognized over the vesting period, taking into account the terms and conditions upon which options are granted. The fair value of restricted stock awards is the fair value at the date of grant reduced by the exercise price of the award, if any. The fair value of both options and restricted stock awards are amortized on a straight-line basis over the requisite service period of the awards.

Stock-based compensation expense is summarized for employees and nonemployees, by category in the accompanying consolidated statements of operations as follows (in thousands):

	Years Ended December 31,	
	2022	2021
Research and development	$ 9,698	$ 1,565
Selling, general and administrative	20,079	3,967
Total	$ 29,777	$ 5,532

Stock Option Activity

The following table summarizes the Company's stock option activity during the year ended December 31, 2022:

	Number of Options	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2021	4,889,820	$ 10.39	6.17	$ 54,449
Retroactive application of reverse recapitalization	7,784,666	(6.38)		
Adjusted and Outstanding at December 31, 2021	12,674,486	$ 4.01	6.17	$ 54,449
Granted	2,658,185	$ 3.35		
Exercised	(207,033)	$ 0.58		
Forfeited - unvested	(972,349)	$ 4.64		
Forfeited - vested	(63,718)	$ 4.31		
Expired	(1,291,092)	$ 3.13		
Outstanding at December 31, 2022	12,798,479	$ 3.97	5.80	$ 25
Exercisable at December 31, 2022	9,664,164	$ 3.92	4.84	$ 25
Vested and Expected to Vest at December 31, 2022	12,798,479	$ 3.97	5.80	$ 25

The aggregate intrinsic value of stock options is calculated as the difference between the exercise price of the stock options and the fair value of the common stock. The total fair value of options vested during the year ended December 31, 2022 was $4.8 million.

The fair value of each option issued was estimated at the date of grant using Black-Scholes with the following weighted-average assumptions:

	Years Ended December 31,	
	2022	2021
Market price of common stock	$ 3.35	$ 20.02
Expected volatility	72.4%	60.1%
Expected term (in years)	6.1	5.8
Risk-free interest rate	1.7%	1.1%
Expected dividend yield	0.0%	0.0%

The weighted-average grant date fair value of stock options granted during the years ended December 31, 2022 and 2021 were $2.17 and $11.25 per share, respectively. At December 31, 2022 and December 31, 2021, there was $6.6 million and $8.7 million, respectively, of unrecognized compensation cost related to unvested stock option grants under the 2021 Plan, which was expected to be recognized over a weighted-average period of 2.1 and 1.7 years, respectively.

Restricted Stock Unit ("RSU") Activity

During the year ended December 31, 2022, the Company issued 4,555,197 RSUs at a weighted-average fair value of $3.46 per unit.

The following table summarizes the Company's RSU activity during the year ended December 31, 2022:

	Number of RSUs	Weighted-Average Grant Date Fair Value
Outstanding and Unvested at December 31, 2021	313,354	$ 21.41
Retroactive application of reverse recapitalization	498,868	$ (13.15)
Adjusted and Outstanding and Unvested at December 31, 2021	812,222	$ 8.26
Granted	4,555,197	$ 3.46
Vested	(337,969)	$ 4.81
Forfeited	(946,380)	$ 3.44
Outstanding and Unvested at December 31, 2022	4,083,070	$ 4.31

Each RSU entitles the holder to one share of common stock on vesting and the RSU awards are based on a cliff vesting schedule over requisite service periods in which the Company recognizes compensation expense for the RSUs. Vesting of the RSUs is subject to the satisfaction of certain service and or certain performance conditions. The Company recognizes the estimated grant date fair value of these awards as stock-based compensation expense over the service and/or performance periods based upon its determination of whether it is probable that the service and or performance conditions will be achieved. The Company assesses the probability of achieving the service and or performance conditions at each reporting period. Cumulative adjustments, if any, are recorded to reflect subsequent changes in the estimated or actual outcome of service and or performance-related conditions.

At December 31, 2022 and December 31, 2021, unrecognized compensation cost for RSU awards granted totaled $7.9 million and $6.7 million, respectively, which was expected to be recognized over a weighted-average period of 3.1 and 0.9 years, respectively.

17. Income Taxes

Consolidated (loss) income before income taxes on a geographic basis during the years ended December 31, 2022 and 2021 are as follows (in thousands):

	Years Ended December 31,	
	2022	2021
United States	$ (63,850)	$ (86,693)
Non-U.S.	8,550	(6,637)
Total	$ (55,300)	$ (93,330)

The provision for income taxes consists of the following components during the years ended December 31, 2022 and 2021 (in thousands):

	Years Ended December 31,	
	2022	2021
Current tax expense:		
U.S. federal	$ —	$ —
Foreign	480	17
Total current tax expense	480	17
Deferred tax expense:		
U.S. federal	—	—
State	—	—
Foreign	—	—
Total deferred tax expense	—	—
Total provision for income taxes	$ 480	$ 17

A reconciliation setting forth the differences between the effective tax rates of the Company for the years ended December 31, 2022 and 2021 and the U.S. federal statutory tax rate is as follows:

	Years Ended December 31,	
	2022	2021
U.S. Federal income tax provision expense at statutory rate	21.0%	21.0%
Effect of nondeductible stock-based compensation	(0.8)%	0.8%
Foreign rate differential	(1.2)%	0.2%
Mark to market of warrant liabilities	24.0%	(1.7)%
State taxes net of federal benefit	10.7%	4.3%
Non-deductible financing expenses	0.4%	(0.3)%
Valuation allowance	(53.6)%	(24.2)%
Investment transfer	—	—
Other differences	0.9%	(0.4)%
US federal and state research credits	0.6%	0.4%
Uncertain tax positions	(0.1)%	(0.1)%
Foreign earnings includible in US	—	—
Transaction Costs	(0.9)%	—
GILTI	(1.9)%	—
Effective income tax rate	(0.9)%	0.0%

Significant components of the Company's consolidated deferred tax assets and liabilities at December 31, 2022 and 2021 are as follows at (in thousands):

	At December 31,	
	2022	2021
Deferred tax assets:		
Federal net operating loss carryforwards	$ 54,005	$ 40,469
State net operating loss carryforwards	13,705	10,643
Equity compensation	12,331	5,620
Accruals and reserves	16	-
Uncollected grants	993	998
Investment in subsidiaries	3,766	3,820
Research credits	1,823	1,578
Other assets	1,549	152
Deferred income	—	239
Interest	—	257
Lease liabilities	411	547
Inventory reserve	3,430	—
Section 174 adjustment	3,572	—
Total deferred tax assets	95,601	64,323
Valuation allowance	(91,842)	(59,841)
Total deferred tax assets net of valuation allowance	3,759	4,482
Deferred tax liabilities:		
Intangible assets and amortization	(3,332)	(3,932)
Right-of-use asset	(400)	(536)
Other liabilities	(27)	(14)
Total deferred tax liabilities	(3,759)	(4,482)
Net deferred tax assets	$ —	$ —

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amount used for income tax purposes. At December 31, 2022 and 2021, the Company has federal net operating loss carryforwards totaling $254.7 million and $184.6 million, respectively, of which $63.5 million expire in 2027 through 2037 and $191.2 million do not expire as of December 31, 2022. At December 31, 2022 and 2021, the Company has state net operating loss carryforwards totaling $221.2 million and $168.4 million, respectively, which expire in 2030 through 2041, as well as other temporary differences and attributes that will be available to offset regular taxable income during the carryforward period. At December 31, 2022, the Company has foreign net operating loss carryforwards of $2.2 million which do not expire.

The Company files income tax returns in Italy, the United States and in various state jurisdictions with varying statutes of limitations. Due to net operating losses incurred, the Company's tax returns from inception to date are subject to examination by taxing authorities.

The Company has evaluated the positive and negative evidence bearing upon the realizability of its net deferred tax assets and determined that it is not more likely than not that the Company will recognize the benefits of the net deferred tax assets. Therefore, a full valuation allowance has been recorded against the balance of net deferred tax assets in the United States. Additionally, the Company has determined that it is not more likely than not that the Company will recognize the benefits of the net deferred tax assets in Italy, primarily due to uncertainty regarding continued funding of the operations of Italy and from the restructuring of the intercompany services agreement between Gelesis, Inc., and Gelesis S.r.l., in connection with the RIF financing (see Note 11). As a result, the Company maintained a full valuation allowance against the balance of net deferred tax assets in Italy as of December 31, 2022 and December 31, 2021, respectively. The Company will continue to evaluate all positive and negative evidence each period.

The change in the valuation allowance during the years ended December 31, 2022 and 2021 was an increase of $32.2 million and $22.4 million, respectively. The increase in the valuation allowance during the years ended December 31, 2022 and December 31, 2021, respectively, was primarily due to the increase in net operating losses generated by the U.S. and foreign operations, net.

The Company generally considers all earnings generated in Italy to be indefinitely reinvested. Therefore, the Company does not accrue U.S. taxes on the repatriation of the foreign earnings it considers to be indefinitely reinvested outside of the U.S. At December 31, 2022, the Company had not provided for federal income tax on $0.8 million of accumulated undistributed deficit of its foreign subsidiaries. In the event the Company were to repatriate the foreign earnings, the Company does not estimate the repatriation being subject to taxation.

The Company follows the provisions of ASC 740-10, Accounting for Uncertainty in Income Taxes, which specifies how tax benefits for uncertain tax positions are to be recognized, measured, and recorded in financial statements; requires certain disclosures of uncertain tax matters; specifies how reserves for uncertain tax positions should be classified on the balance sheet; and provides transition and interim period guidance, among other provisions. At December 31, 2022 and 2021, the Company has not recorded any liability for uncertain tax positions which relate primarily to certain federal and state research tax credits. The Company presents the uncertain tax positions as a reduction to the gross deferred tax assets with respect to research credits. The Company's policy is to recognize interest and penalties accrued on any uncertain tax positions as a component of income tax expense, if any, in its consolidated statements of operations. For the years ended December 31, 2022 and 2021, no estimated interest or penalties were recognized on uncertain tax positions. The Company does not expect that the amounts of uncertain tax positions will change significantly within the next twelve months. A reconciliation of the beginning and ending amount of uncertain tax positions is as follows (in thousands):

	Years Ended December 31,	
	2022	2021
Unrecognized tax benefits at the beginning of year	$ (352)	$ (281)
Increase for current year positions	(65)	(71)
Increase for prior year positions	—	—
Expiration of statute of limitations	—	—
Unrecognized tax benefits at the end of year	(417)	(352)
Gross research credit tax assets	2,240	1,930
Net research credit tax assets	$ 1,823	$ 1,578

18. Earnings (Loss) per Share

The weighted-average common shares outstanding and thus the net loss per share calculations and potentially dilutive security amounts for all periods prior to the Business Combination have been retrospectively adjusted to the equivalent number of shares outstanding immediately after the Business Combination to effect the reverse recapitalization. Historically reported weighted average shares outstanding have been multiplied by the exchange ratio of approximately 2.59. See Note 3 for further information.

Basic and diluted loss per share attributable to common stockholders was calculated as follows (in thousands, except share and per share data):

	Years Ended December 31,	
	2022	2021
Numerator:		
Net loss	$ (55,780)	$ (93,347)
Accretion of redeemable convertible preferred stock to redemption value	(37,934)	(94,134)
Accretion of noncontrolling interest put option to redemption value	(253)	(376)
Income allocated to noncontrolling interest holder	(1,095)	—
Net loss attributable to common stockholders	$ (95,062)	$ (187,857)
Denominator:		
Weighted average common shares outstanding, basic and diluted	70,300,772	5,712,042
Net loss per share, basic and diluted	$ (1.35)	$ (32.89)

The Company's potential dilutive securities, which include stock options, RSUs, warrants and earnout shares have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted-average number of common stock outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same for all periods presented. The Company excluded the following potential common stock, presented based on amounts outstanding at December 31, 2022 and 2021 from the computation of diluted net loss per share attributable to common stockholders because including them would have had an anti-dilutive effect.

	December 31,	
	2022	2021
Convertible preferred stock	—	48,566,655
Warrants on convertible preferred stock	—	1,836,429
Options and RSUs to acquire common stock	16,881,549	13,555,474
Warrants on common stock	24,733,365	1,353,062
Earnout shares	—	—
Total	41,614,914	65,311,620

Total potentially dilutive common share equivalents for the year ended December 31, 2022, excludes 23,482,845 shares related to the earnout liability as these shares are contingently issuable upon meeting certain triggering events.

19. Commitments and Contingencies

Operating Leases

In June 2019, the Company entered into an operating lease agreement with PureTech Health LLC, or PureTech, for office space located in Boston, Massachusetts. The lease expires in August 2025, with total lease payments of $3.2 million over the term. The remaining noncancelable term of the Company's operating leases was 2.6 years at December 31, 2022, and the weighted average discount rate was 5.3%.

The following table summarizes the Company's operating lease activity (in thousands):

	Years Ended December 31,	
	2022	2021
Lease liabilities, current	597	541
Lease liabilities, net of current portion	967	1,519
Total operating lease liabilities	$ 1,564	2,060
Operating lease rental expense	$ 656	$ 434

Future maturities of the lease liability under the Company's noncancelable operating leases at December 31, 2022 are as follows (in thousands):

	At December 31, 2022
2023	669
2024	579
2025	388
2026	34
2027	16
More than 5 years	-
Total undiscounted lease maturities	$ 1,686
Imputed interest	(122)
Total lease liability	$ 1,564

Royalty Agreements

Expenses from royalty agreements on net product sales and sublicense income is recognized as a cost of goods sold in the accompanying consolidated statements of operations during the period in which the associated revenues are recognized.

PureTech

In December 2009, the Company entered into a royalty and sublicense income agreement with PureTech, a significant stockholder in the Company, whereby the Company is required to pay PureTech a 2.0% royalty on net product sales received as a result of developing products and technology using the intellectual property purchased from One.

One S.r.l

Under the amended and restated master agreement with One, the Company is required to pay a 2.0% royalty on net product sales and an aggregate of €17.5 million (approximately $18.7 million at December 31, 2022) upon the achievement of certain commercial milestones of new medical indications as well as Plenity and pay royalties on net product sales and/or a percentage of sublicense income. At December 31, 2022, none of the milestones have been met.

Grant Agreements

The Company has been awarded grants from governmental agencies, which are recognized as income as the qualifying expenses are incurred (see Note 11). The grant agreements contain certain provisions, including, among others, maintaining a physical presence in the region for defined periods. Failure to comply with these covenants would require either a full or partial refund of the grant to the granting authority.

Research and Development Tax Credits

The Company's subsidiary, Gelesis S.r.l., which conducts core manufacturing and research and development activities on behalf of the Company, is eligible to receive a non-income based and non-refundable tax credits for qualified research and development activities. The Company has earned research and development tax credits in Italy for qualifying expenses incurred by performing certain research and development activities.

In December 2018, the Italian government passed a new budget law, effective January 1, 2019, that amended the eligibility criteria for recognizing qualifying research and development tax credits ("2019 Budget Law"). The 2019 Budget Law requires retroactive application for research and development tax credits earned during the year ended December 31, 2019. Under the 2019 Budget Law, research and development tax credits claimed in prior periods under previous interpretations of the research and development tax credit law may potentially be repaid by the Company.

The Company evaluated the potential loss under ASC 450, *Contingencies*. The Company concluded that the likelihood of a potential loss arising from this matter is probable.

The Company has recorded $0.0 million and $3.0 million as a component of other long-term liabilities in the accompanying consolidated balance sheets at December 31, 2022 and December 31, 2021, respectively. In October 2021, the Italian federal tax authority initiated an audit of the research and development tax credits for the calendar years 2017 through 2019. The Company concluded the audit with the Italian tax authorities by the end of 2022 which did not result in any material impact on the accompanying consolidated statement of operations.

Litigation

In connection with the Business Combination, the Company received a litigation demand letter from certain purported stockholders alleging that the Company was required to provide holders of Class A Common Stock a separate class vote in connection with proposed amendments of the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares, such that separate votes can be cast on the proposed increase in the number of shares of Class A common stock and the proposed increase in the number of shares of preferred stock. During the year ended December 31, 2022, the Company reached an agreement to resolve the claim and settled for an immaterial cash payment.

20. Related Party Transactions

The Company had the following transactions with related parties:

PureTech

In June 2019, PureTech executed a sublease agreement with the Company (see Note 19). With respect to the sublease, the Company incurred lease expense of $0.5 million and $0.5 million during the years ended December 31, 2022 and 2021, respectively, recorded in general and administrative expenses in the accompanying consolidated statements of operations. The Company incurred royalty expense of $0.5 million and $0.2 million in connection with the PureTech royalty agreement (see Note 19) during the years ended December 31, 2022 and 2021, respectively, recorded in cost of goods sold in the accompanying consolidated statements of operations. The Company had an accounts payable balance to PureTech of $0.1 million and $0.1 million at December 31, 2022 and December 31, 2021, respectively, in the accompanying consolidated balance sheets.

On December 13, 2021, the Company issued a convertible promissory note to PureTech in the principal amount of $15.0 million (see Note 12). At December 31, 2021, the outstanding balance was $15.1 million, recorded at fair value in the accompanying consolidated balance sheets. On January 19, 2022 the Company settled the convertible promissory notes in cash for principal plus accrued interest in the aggregate amount of $15.2 million. During the years ended December 31, 2022 and 2021, the Company recognized a loss of $0.1 million with respect to the change in fair value of the PureTech 2021 convertible promissory notes on the accompanying consolidated statements of operations.

On July 25, 2022, the Company issued a promissory note to PureTech in the principal amount of $15.0 million (see Note 12). At December 31, 2022, the outstanding balance of the promissory note was $16.6 million recorded at fair value in the accompanying consolidated balance sheets. During the year ended December 31, 2022, the Company recognized a loss of $1.6 million with respect to the change in the fair value of the promissory notes.

SSD2

On December 13, 2021, the Company issued a convertible promissory note to SSD2 in the principal amount of $12.0 million (see Note 12). At December 31, 2021, the outstanding balance was $12.1 million, recorded at fair value in the accompanying consolidated balance sheets. On January 19, 2022 the Company settled the convertible promissory notes in cash for principal plus accrued interest in the aggregate amount of $12.1 million. During the years ended December 31, 2022 and 2021, the Company recognized a loss of $0.1 million and less than $0.1 million, respectively, with respect to the change in fair value of the SSD2 2021 convertible promissory notes on the accompanying consolidated statements of operations.

On July 25, 2022, the Company issued a promissory note to SSD2 in the principal amount of $5.0 million (see Note 12). At December 31, 2022, the outstanding balance of the promissory note was $5.5 million recorded at fair value in the accompanying consolidated balance sheets. During the year ended December 31, 2022, the Company recognized a loss of $0.5 million with respect to the change in the fair value of the promissory notes.

One S.r.l

Consulting Agreement with Founder of One

The Company and one of the founders of One, who is also a stockholder of the Company, entered into a consulting agreement for the development of the Company's science and technology. The Company incurred costs for consulting services received from the founder of One totaling $0.2 million and $0.3 million during the years ended December 31, 2022 and 2021, respectively, recorded in research and development expense in the accompanying consolidated statements of operations. The Company recorded an accounts payable balance to the founder of less than $0.1 million at both December 31, 2022 and December 31, 2021, respectively, in the accompanying consolidated balance sheets.

Acquisition of One

In connection with the amended and restated master agreement with One (see Note 11), the Company acquired a 10.0% equity interest in One in exchange for cash consideration. During the year ended December 31, 2022 the Company made a payment of $2.9 million to One shareholders with respect to the acquisition. The Company had remaining undiscounted payments of €2.5 million and €5.0 million due to One at December 31, 2022 and December 31, 2021, respectively (approximately $2.7 million and $5.7 million due to One at December 31, 2022 and December 31, 2021, respectively). The balance at December 31, 2021and December 31, 2022 was recorded in accrued expenses in the accompanying consolidated balance sheets as it is expected to be settled within the next twelve months.

Additionally, the Company incurred royalty expense of $0.5 million and $0.2 million with One (see Note 19) during the years ended December 31, 2022 and 2021, respectively, recorded in cost of goods sold in the accompanying consolidated statements of operations. The Company had an accrued expense balance of $2.7 million and $6.7 million at December 31, 2022 and December 31, 2021, respectively, relating to the One acquisition payment obligations and accrued royalties in the accompanying consolidated balance sheets.

RIF Transaction

In connection with the RIF transaction entered into in August 2020, the Company received $12.3 million from RIF as an equity investment that can be called by the Company beginning in December 2023 and ending in December 2026 by paying the investment plus 15.0% percent annual interest or put by RIF starting in January 2027 and ending in December 2027 for the investment amount plus 3.175% percent annual interest. RIF holds approximately 20% of the equity of Gelesis S.r.l. at December 31, 2022 (see Note 11). In addition, the shareholders of RIF provided the Company with a loan of €14.5 million ($15.5 million at December 31, 2022) with a fixed interest rate of 6.35% per annum (see Note 12).

21. Employee Benefit Plan

The Company has a 401(k) retirement plan in which substantially all U.S. employees are eligible to participate. Eligible employees may elect to contribute up to the maximum limits, as set by the Internal Revenue Service, of their eligible compensation. The Company made discretionary plan contributions of $0.2 million and $0.2 million during the years ended December 31, 2022 and 2021, respectively.

22. Subsequent Events

The Company has evaluated subsequent events which may require adjustment to or disclosure in the consolidated financial statements through the date of issuance of these consolidated financial statements.

In November 2022, the Company received letters from the NYSE indicating that the Company was not in compliance with its continued listing standards of (1) average closing price of a security of not less than $1.00 over a consecutive 30 trading-day period and (2) average market capitalization of not less than $50 million over a 30 trading-day period and stockholders' equity of not less than $50 million. The Company is closely monitoring the closing share price of its common stock and intends to regain compliance. The Company has had correspondence with the NYSE regarding this matter, and its business plan to comply with the NYSE listing standards was accepted by the NYSE in February 2023. If the Company is unable to satisfy the NYSE listing requirements by their respective deadlines, the Company will be subject to the NYSE's suspension and delisting procedures.

Effective January 20, 2023, the Company's Public Warrants, which were previously listed under the symbol "GLS WS", were delisted from the NYSE due to "abnormally low" price levels.

On February 21, 2023, the Company entered into a Note and Warrant Purchase Agreement with PureTech, pursuant to which the Company issued a short term convertible senior secured note in the aggregate principal amount of $5.0 million and warrants to purchase 23,688,047 shares of Common Stock. The warrants have an exercise price of $0.2744 and may not be exercised prior to the receipt of stockholder approval. The short term convertible senior secured note bears interest at a rate of 12% per annum, and matures on July 31, 2023, unless earlier converted or the maturity is extended as described within the definitive agreements. The Company may issue an additional $5.0 million to PureTech upon mutual acceptance of the Company meeting certain conditions.

On March 18, 2023, NYSE notified the Company that they had considered the closing price of $0.11 of the Company's Common Stock on March 17, 2023 to be close to an "abnormally low selling price" and that continued trading at such low price could result in immediate delisting of the Company's Common Stock. On March 18, 2023, NYSE also indicated that there is a potential for the Company to fall below the $15 million 30-trading-day average market capitalization standard which could result in immediate delisting of the Company's Common Stock.