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As filed with the Securities and Exchange Commission on November 9, 2020.

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

Amendment No. 1
to
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 _____

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 _____
Commission file number

PURETECH HEALTH PLC

(Exact name of registrant as specified in its charter and translation of Registrant's name into English)

England and Wales
(Jurisdiction of incorporation or organization)

20 Farringdon Street, 8th Floor
London, EC4A 4AB, United Kingdom
(Address of principal executive offices)

Daphne Zohar
Chief Executive Officer
6 Tide Street, Suite 400
Boston, Massachusetts 02210
Tel: (617) 482-2333
(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:	Name of each exchange on which registered:
American Depositary Shares, each representing 10 ordinary shares, par value £0.01 per share	**The Nasdaq Global Market**
Ordinary shares, par value £0.01 per share*	

* Listed not for trading, but only in connection with the registration of the American Depositary Shares, pursuant to the requirements of the Securities & Exchange Commission.

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: N/A.

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. ☐

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 registration statement contains forward-looking statements that involve substantial risks and uncertainties. All statements contained in this registration statement, 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 registration statement 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-210, LYT-300, our discovery programs (Glyph, Orasome and our meningeal lymphatics discovery research program) and other potential product candidates within our Wholly Owned Programs;
- our ability to obtain and maintain regulatory approval of our Wholly Owned product candidates, and any related restrictions, limitations or warnings in the label of any of our Wholly Owned product candidates, if approved;
- our ability to compete with companies currently marketing or engaged in the development of treatments for indications that our Wholly Owned product candidates or those of our Founded Entities are designed to target;
- our plans to pursue research and development of other future product candidates;
- the potential advantages of our Wholly Owned product candidates and those being developed by our Founded Entities;
- the rate and degree of market acceptance and clinical utility of our product candidates;
- the success of our collaborations and partnerships with third parties;
- our estimates regarding the potential market opportunity for our Wholly Owned product candidates and those being developed by our Founded Entities;
- our sales, marketing and distribution capabilities and strategy;
- our ability to establish and maintain arrangements for manufacture of our Wholly Owned product candidates and those 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, including but not limited to our preclinical studies and future clinical trials;
- 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 section of this registration statement titled “Item 3.D.—Risk Factors” 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 registration statement and the documents that we have filed as exhibits to the registration statement 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 registration statement includes 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.

EXPLANATORY NOTE

We are a clinical-stage biotherapeutics company dedicated to discovering, developing and commercializing highly differentiated medicines for devastating diseases, including inflammatory and immunological conditions, intractable cancers, lymphatic and gastrointestinal diseases and neurological and neuropsychological disorders, among others. The product candidates within our Wholly Owned Pipeline and the products and product candidates being developed by our Founded Entities were initiated by our experienced research and development team and our extensive network of scientists, clinicians and industry leaders and consist of 24 products and product candidates, of which 12 are clinical-stage and two have been cleared by the U.S. Food and Drug Administration and granted marketing authorization in the European Economic Area.

Our Founded Entities are comprised of our Controlled Founded Entities and our Non-Controlled Founded Entities. References in this registration statement to our "Controlled Founded Entities" refer to Follica, Incorporated, Vedanta Biosciences, Inc., Sonde Health, Inc. Alivio Therapeutics, Inc. and Entrega, Inc. References in this registration statement to our "Non-Controlled Founded Entities" refer to Gelesis, Inc., Akili Interactive Labs, Inc., Karuna Therapeutics, Inc. and Vor Biopharma 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 each of our Controlled Founded Entities, we continue to maintain majority voting control. With respect to our Non-Controlled Founded Entities, we may benefit from appreciation in our investment as a shareholder of such companies.

PART I

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

A. *Directors and Senior Management*

The following table sets forth the names, ages as of October 27, 2020 and positions of our senior management and directors:

NAME	AGE	POSITION
Senior Management		
Joseph Bolen, Ph.D.	67	Chief Scientific Officer
Bharatt Chowrira, J.D., Ph.D.	55	President and Chief of Business and Strategy
Eric Elenko, Ph.D.	48	Chief Innovation Officer
Joep Muijrers, Ph.D.	48	Chief of Portfolio Strategy
Stephen Muniz, J.D.	50	Chief Operating Officer, Company Secretary, Director
Daphne Zohar	50	Chief Executive Officer, Director
Non-Employee Directors		
Raju Kucherlapati, Ph.D.(1)(2)	77	Director
John LaMattina, Ph.D.(2)	70	Director
Robert Langer, Sc.D.(3)	72	Director
Kiran Mazumdar-Shaw(2)(3)	67	Director
Dame Marjorie Scardino(1)(3)	73	Director
Christopher Viehbacher(1)	60	Chairman

(1) Member of the Audit Committee.
(2) Member of the Remuneration Committee.
(3) Member of the Nomination Committee.

Executive Officers

Joseph Bolen, Ph.D. has served as our chief scientific officer since October 2015. Prior to his appointment as chief scientific officer, 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. degree 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, J.D., Ph.D. has served as our president and chief of business and strategy since March 2017. 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 is currently a member of the board of directors of Vedanta Biosciences, Inc., or Vedanta. 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. 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, Gelesis, Karuna Therapeutics and Sonde Health. Dr. Elenko serves on the board of directors of Sonde and Alivio. 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.

Joep Muijrers, Ph.D. has served as our chief portfolio strategy since May 2020, and previously served as our chief financial officer from April 2018 to May 2020. Prior to joining PureTech, he was a portfolio manager and partner at Life Science Partners, or LSP, a specialist investor group with sole focus on investing in healthcare and life sciences, in The Netherlands and in Boston for 11 years. Prior to joining LSP, he held the position of director corporate finance and capital markets at Fortis Bank, currently part of ABN AMRO. Dr. Muijrers is currently a member of the board of directors of Alivio, Entrega, Follica and Sonde. Dr. Muijrers received a M.S. degree from the University of Nijmegen and a Ph.D. from EMBL Heidelberg.

Stephen Muniz, J.D. has served as our chief operating officer and a member of our board of directors since June 2015, and previously served as executive vice president of legal, finance and operations since 2007. Prior to joining PureTech, Mr. Muniz was a partner in the Corporate Department of Locke Lord LLP, where he practiced law for 10 years. Mr. Muniz's practice at Locke Lord LLP focused on the representation of life science venture funds as well as their portfolio companies in general corporate matters and in investment and liquidity transactions. He was also a Kauffman entrepreneur fellow, a program sponsored by the Kauffman Foundation. Mr. Muniz also sits on the board of directors of Entrega, Follica and Alivio. Mr. Muniz received a B.A. in Economics and Accounting from The College of the Holy Cross and a J.D. from the New England School of Law where he graduated summa cum laude.

Daphne Zohar 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 PureTech's substantial pipeline of 24 products and product candidates to date, including two products that have been cleared by the U.S. Food and Drug Administration and granted marketing authorization in the European Economic Area, or EEA. Ms. Zohar has been recognized as a top leader and innovator in biotechnology by a number of sources, including BioWorld, MIT's Technology Review, the Boston Globe, and Scientific American. She is an editorial advisor to Xconomy, a U.S. news company, and is a founding faculty member of The BioPharma Hub. Previously, Ms. Zohar has served on a number of private company boards. Ms. Zohar received a Bachelor of Science degree from Northeastern University.

Non-Employee Directors

Raju Kucherlapati, Ph.D. has served as a member of our board of directors since 2014. 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, Cell Genesys and Millennium Pharmaceuticals. He is a fellow of the American Association for the Advancement of Science and a member of the Institute of Medicine of NAS. 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. 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.

John LaMattina, Ph.D. has served as a member of our board of directors 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 and is chairman of the board of directors of Alivio. 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" 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.

Robert Langer, Sc.D. has served as a member of our board of directors since our founding and is our co-founder. 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, Alivio 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 has served as a member of our board of directors 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 The 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 has served as a member of our board of directors since 2015. She served as chairman of The MacArthur Foundation from 2012 to 2017. Dame Scardino previously served as chief executive officer of The Economist and as the chief executive officer of Pearson plc, the world's leading education company and the owner of Penguin Books and The Financial Times Group. She is a member of the non-profit board of directors of Oxfam, The Royal College of Art, the MacArthur Foundation and The Carter Center. She was previously a member of the board of directors of Twitter and International Airlines Group. 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 has served as a member of our board of directors since 2015 and as chairman since September 2019. He has been the managing partner of Gurnet Point Capital since October 2014. 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 Vedanta Biosciences as chairman, BEFORE Brands, Crossover Health, Boston Pharmaceuticals, Zikani and Gurnet Point Capital LLC. Mr. Viehbacher previously served on the board of directors of 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 L´egion d'Honneur. Mr. Viehbacher received his bachelor's degree in Commerce from Queen's University in Ontario, Canada in 1983.

B. *Advisers*

Our principal United States, legal adviser is Goodwin Procter LLP, located at 100 Northern Avenue, Boston, Massachusetts 02210 and our principal United Kingdom legal adviser is DLA Piper LLP, located at 160 Aldersgate Street, London EC1A 4HT, United Kingdom.

C. *Auditors*

KPMG LLP has been our auditor since 2015. The address for KPMG LLP is 15 Canada Square, London E14 5GL, United Kingdom.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

A. SELECTED FINANCIAL DATA

We derived the selected consolidated financial data as of and for the years ended December 31, 2019, 2018 and 2017 from our audited consolidated financial statements included elsewhere in this registration statement. We have derived the selected consolidated financial data as of and for the six months ended June 30, 2020 and 2019 from our unaudited condensed consolidated financial statements included elsewhere in this registration statement. The unaudited condensed consolidated financial statements have been prepared on the same recognition and measurement basis as the audited financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to state fairly our financial position as of June 30, 2020 and the results of operations for the six months ended June 30, 2020 and 2019. We present our consolidated financial statements in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board.

The summary consolidated financial data below should be read together with those consolidated financial statements as well as the Item 5. "Operating and Financial Review and Prospects." Our historical results for any prior period are not necessarily indicative of results to be expected in any future period, and our interim period results are not necessarily indicative of results to be expected for a full year or any other interim period.

Consolidated Income Statement Data

	December 31,	December 31,		June 30,	June 30,
	2019	2018	2017	2020	2019
(in thousands, except per share data)					
Contract revenue	$ 8,688	$ 16,371	$ 650	$ 5,465	$ 3,955
Grant revenue	1,119	4,377	1,885	1,379	432
Total Revenue	**9,807**	**20,748**	**2,535**	**6,844**	**4,387**
Operating expenses:					
General and administrative expenses	(59,358)	(47,365)	(46,283)	(21,376)	(29,196)
Research and development expenses	(85,848)	(77,402)	(71,672)	(38,250)	(45,507)
Operating income/(loss)	**(135,399)**	**(104,019)**	**(115,420)**	**(52,782)**	**(70,317)**
Other income/(expense):					
Gain on deconsolidation	264,409	41,730	85,016	—	108,395
Gain/(loss) on investments held at fair value	(37,863)	(34,615)	57,334	276,910	52,375
Loss realized on sale of investment	—	—	—	(44,539)	—
Loss on impairment of intangible asset	—	(30)	—	—	—
Gain/(loss) on disposal of assets	(82)	4,060	—	—	—
Gain on loss of significant influence	445,582	10,287	—	—	—
Other income/(expense)	121	(278)	14	482	(41)
Other income/(loss)	**672,167**	**21,154**	**142,364**	**232,852**	**160,729**
Finance income/(costs):					
Finance income	4,362	3,358	1,750	1,032	2,383
Finance income/(costs) – subsidiary preferred shares	(1,458)	(106)	(9,509)	—	(1,425)
Finance income/(costs) – contractual	(2,576)	34	(553)	(1,213)	(2,106)
Finance income/(costs) – fair value accounting	(46,475)	22,631	(71,735)	1,866	(32,978)
Net finance income/(costs)	**(46,147)**	**25,917**	**(80,047)**	**1,685**	**(34,126)**
Share of net gain/(loss) of associates accounted for using the equity method	30,791	(11,490)	(17,608)	(7,271)	—
Impairment of investment in associate	(42,938)	—	—	—	—
Income/(loss) before income taxes	**478,474**	**(68,438)**	**(70,711)**	**174,483**	**56,287**
Taxation	(112,409)	(2,221)	(4,383)	(50,775)	(25,142)
Net income/(loss) including non-controlling interest	**366,065**	**(70,659)**	**(75,094)**	**123,708**	**31,145**
Net (loss)/income attributable to the Company	**$ 421,144**	**$ (43,654)**	**$ 26,472**	**$123,957**	**$ 73,506**
Earnings/(loss) per share:					
Basic earnings/(loss) per share	$ 1.49	$ (0.16)	$ 0.11	$ 0.43	$ 0.26
Diluted earnings/(loss) per share	$ 1.44	$ (0.16)	$ 0.11	$ 0.42	$ 0.26

Consolidated Balance Sheet Data

(in thousands)	As of December 31, 2019	2018	2017	As of June 30, 2020
Cash and cash equivalents	$132,360	$ 117,051	$ 72,649	$ 340,120
Working capital (1)	29,643	(5,978)	(75,753)	190,832
Total assets	941,178	441,763	339,846	1,105,523
Retained earnings/(accumulated deficit)	254,444	(167,692)	(132,270)	378,400
Total equity	650,398	166,972	59,600	766,879

(1) We define working capital as current assets less current liabilities. We rely on working capital to fund future operations and advance our research and development activities. Our working capital as of December 31, 2019, 2018 and 2017 is calculated as follows (in thousands): December 31, 2019, $168,845-$139,201=$29,643; December 31, 2018, $259,786–$265,764=$(5,978); December 31, 2017, $198,109-$273,862=$(75,753). Our working capital as of June 30, 2020 is calculated as follows (in thousands): $346,871–$156,039=$190,832.

B. CAPITALIZATION AND INDEBTEDNESS

The table below sets forth our cash and cash equivalents and shows our capitalization as of June 30, 2020. You should read this table in conjunction with our unaudited condensed consolidated financial statements included in this registration statement, together with the accompanying notes and the other information appearing under the heading “Item 5. Operating and Financial Review and Prospects”.

(in thousands, except share and per share data)	As of June 30, 2020
Cash and cash equivalents	$ 340,120
Debt:	
Notes payable	1,455
Shareholders’ equity:	
Share capital, nominal value £0.01 par value per ordinary share; 285,512,461 shares issued and outstanding	5,411
Merger reserve	138,506
Share premium	288,225
Other reserve	(26,776)
(Accumulated deficit)/retained earnings	378,400
Equity attributable to the owners of the Company	**783,766**
Equity attributable to the non-controlling interests	(16,887)
Total Capitalization	**766,879**
Total Capitalization and Indebtedness	**$ 768,334**

C. REASONS FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

D. RISK FACTORS

Our business faces significant risks. You should carefully consider all of the information set forth in this registration statement, including the following risk factors which we face and which are faced by our industry. Our business, financial condition or results of operations could be materially and adversely affected if any of

these risks occurs. This registration statement also contains forward-looking statements that involve risks and uncertainties. See "Special Note Regarding Forward-Looking Statements." 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 in this registration statement. See "Special Note Regarding Forward-Looking Statements."

Risks Related to our Financial Position, Need for Additional Capital and Growth Strategy

We are a clinical-stage biopharmaceutical 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 product development, as well as medical device development, is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will be unable to demonstrate effectiveness or an acceptable safety profile, gain regulatory approval and become commercially viable. To date, only two of our Founded Entities' products, Gelesis, Inc.'s Plenity and Akili Interactive Labs, Inc.'s EndeavorRx, have received marketing clearance from the U.S. Food and Drug Administration, or the FDA. All of our Wholly Owned Programs and the majority of our Founded Entities' product 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 or approvals and begin generating revenue from product sales.

Since our inception, we have invested most of our resources in developing our technology and product 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 losses in each year since our inception. Our operating losses for the years ended December 31, 2017, 2018, and 2019 and the six months ended June 30, 2020 were $115.4 million, $104.0 million, $135.4 million, and $52.8 million, respectively. We have no products developed in our Wholly Owned Programs approved for commercial sale and have not generated any revenues from product 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 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 product candidates and any other product candidates that we may identify. Even if our existing product candidates or any future product candidates that we may identify are approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product and ongoing compliance efforts.

As of June 30, 2020, we had never generated revenue from 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 clearance for Plenity and EndeavorRx, respectively, from the FDA, we may never be able to develop or commercialize marketable products or achieve operational profitability. Revenue from the sale of any product candidate for which regulatory clearance or approval is obtained will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory clearance or approval, the accepted price for the product, 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 or approved by regulatory authorities 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 products, even if cleared or approved. Even if we are able to generate revenue from the sale of any approved products, 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 would depress the value of our company and could impair our ability to raise capital, expand our business, diversify our R&D pipeline, market our Wholly Owned product candidates, 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 product development efforts. Certain of our Founded Entities will similarly require substantial additional funding to achieve their business goals.

We are currently advancing a pipeline of four Wholly Owned product candidates, three of which are in preclinical development and one of which is conducting a Phase 1 clinical trial. Our Controlled Founded Entities are advancing nine product candidates, including one that is expected to enter a Phase 3 study and three that are in Phase 2 development. Our Non-Controlled Founded Entities are advancing 10 products and product candidates, including two that are expected to enter Phase 3/Pivotal studies and two FDA-cleared products. Developing biopharmaceutical products is expensive and time-consuming, and with respect to our Wholly Owned Programs, 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 clearances and approvals for our Wholly Owned product candidates and launch and commercialize any products for which we receive regulatory clearance or 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 process and potential commercialization of our Wholly Owned product candidates and any future product candidates we may identify.

As of June 30, 2020, we had cash, cash equivalents and short-term investments of $340.1 million. 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 product 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 product 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, including our planned Phase 2 trial in serious respiratory complications that persist following the resolution of COVID-19 and our proof-of-concept trial in breast cancer-related, upper limb secondary lymphedema for LYT-100, our anticipated Phase 1 clinical trial for LYT-200 and our anticipated first-in-human trial for LYT-300;
- 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 our Wholly Owned product candidates, as applicable, and any other product 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 our Wholly Owned product candidates that receive marketing approval, including the costs and timing of establishing product 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 our Wholly Owned product candidates, 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 product candidates;
- the time and cost necessary to respond to technological and market developments, including other products that may compete with one or more of our Wholly Owned product candidates;
- the costs of acquiring, licensing or investing in intellectual property rights, products, product 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; and
- the costs of operating as a public company in the United Kingdom and the United States and maintaining listings on both the London Stock Exchange, or the LSE, and The Nasdaq Global Market, or Nasdaq.

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 products 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 product candidates or to any future product 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 our Wholly Owned product candidates 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 product 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 product 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 products, 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, products and product candidates of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing product 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 products or product candidates and regulatory approvals; and
- our inability to generate revenue from acquired intellectual property, technology and/or products 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.

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.

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 Vor Biopharma, Inc., or Vor, investors' rights agreements with Akili, Karuna Therapeutics, Inc., or Karuna, Follica, Incorporated, or Follica, Vedanta Biosciences, Inc., or Vedanta, Entrega, Sonde and Vor, and a stockholders' agreement with Gelesis, 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 one 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' product 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 product candidates could have an adverse effect on our business, financial condition, results of operation and prospects. The information included in this registration statement 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, (iii) information provided to us by our Non-Controlled Founded Entities. Where a date is provided, the information included in this registration statement 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 product 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 product 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.

Certain of our and our Founded Entities' products candidates represent novel therapeutic approaches and negative perception of any product candidate that we or they develop could adversely affect our ability to conduct our business, obtain regulatory approvals or identify alternate regulatory pathways to market for such product candidate.

Certain of our and our Founded Entities' products 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 product candidates, biologics or medical devices prescribing potential treatments that involve the use of our and their product candidates 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 products 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 product 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' product candidates or demand for any products we or they may develop.

For example, in the United States and the European Union, no products 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-IND human clinical studies and clinical trials of Vedanta's product candidates or in clinical trials of other companies developing similar products and the resulting publicity, as well as any other AEs in the field of the microbiome, could result in a decrease in demand for any product 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 product 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 product candidates.

Risks Related to the Clinical Development, Regulatory Review and Approval of our and our Founded Entities' Product Candidates

Our Wholly Owned Programs and most of our Founded Entities' product 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' product candidates will receive regulatory approval, which is necessary before they can be commercialized.

Before obtaining marketing approval from regulatory authorities for the sale of our or our Founded Entities' product candidates, we or our Founded Entities must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans. To date, we have focused substantially all of our efforts and financial resources on identifying, acquiring, and developing product 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' product candidates, Gelesis' Plenity and Akili's EndeavorRX, have received marketing clearance from the FDA, and we cannot be certain that any of our internal or our Founded Entities' other product candidates will receive regulatory clearance or approval, the timing of such clearance 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 approval for, and then successfully commercialize product candidates. We and our Founded Entities, with the exceptions of Gelesis and Akili, currently have no drugs approved or devices cleared or approved for sale and have not generated any revenue from sales of drugs

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 product candidates. Additionally, there is no FDA approved live biological therapeutic 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 come to an agreement with the FDA on requirements for approval.

Other than Gelesis' Plenity and Akili's EndeavorRx, all of our Wholly Owned Programs and our Founded Entities' product candidates require additional development; management of preclinical, clinical, and manufacturing activities; and/or regulatory clearances 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 product sales, if ever. Many of our Wholly Owned Programs and our Founded Entities' product 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 our Wholly Owned Programs or our Founded Entities' product candidates will be successful in clinical trials or receive regulatory approval or clearance. Further, our Wholly Owned Programs or our Founded Entities' product candidates may not receive regulatory clearance or approval even if we believe they are successful in clinical trials. If we or our Founded Entities do not receive regulatory approval for our or their product 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 approvals or commercialize these programs on a timely basis or at all, which would have an adverse effect on our business.

All but one of our Wholly Owned product candidates, LYT-100, are still in the preclinical stage, and their risk of failure is high. Before we can commence clinical trials for a product candidate, we must complete extensive preclinical testing and studies that support our planned investigational new drug applications, or 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, the EMA or other regulatory authorities allowing clinical trials to begin.

Clinical trials of our or our Founded Entities' product 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 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 product 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, approval 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 product candidates with the same targets or related modalities as our or our Founded Entities' product candidates conducted by competitors that raise regulatory or safety concerns about risk to patients of the treatment, or if the FDA finds 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 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 product 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 product candidates that we may identify and pursue being greater than we anticipate;
- clinical trials of any product 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 product 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; and
- delays in manufacturing, testing, releasing, validating, or importing/exporting sufficient stable quantities of product candidates that we may identify for use in clinical trials or the inability to do any of the foregoing.

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 product candidates, we may be required to or we may elect to conduct additional preclinical studies or clinical trials

to bridge data obtained from our modified product candidates to data obtained from preclinical and clinical research conducted using earlier versions. Clinical trial delays could also shorten any periods during which our products have patent protection and may allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize product 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, the EMA 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, the EMA 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 product 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, the EMA or comparable foreign regulatory authorities. The FDA, the EMA 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, the EMA 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, the EMA 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 or our Founded Entities' product candidates.

Delays in the initiation, conduct or completion of any clinical trial of our Wholly Owned product candidates will increase our costs, slow down the product candidate development and approval process and delay or potentially jeopardize our ability to commence product 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 our Wholly Owned or our Founded Entities' product candidates. In the event we identify any additional product 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.

Our clinical trials may fail to demonstrate substantial evidence of the safety and effectiveness of product candidates that we may identify and pursue for their intended uses, which would prevent, delay or limit the scope of regulatory approval and potential commercialization.

Before obtaining regulatory approvals for the commercial sale of any of our drug or biological product candidates, we must demonstrate through lengthy, complex and expensive preclinical studies and clinical trials that the applicable product candidate is both safe and effective for use in each target indication, and in the case of our Wholly Owned and Founded Entities' product candidates regulated as biological products, that the product candidate is safe, pure, and potent for use in its targeted indication. Each product candidate must demonstrate an adequate risk versus benefit profile in its intended patient population and for its intended use. Similarly, before obtaining regulatory clearances or approvals for the commercial sale of any of the device product 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 product candidate meets the regulatory standard of clearance 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 product candidates that begin clinical trials are never approved by regulatory authorities for commercialization. We may be unable to design and execute a clinical trial to support marketing approval.

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 or approval of our product 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 will interpret the results as we do, and more trials could be required before we submit our product candidates for clearance 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. As another example, while there is guidance regarding clinical meaningfulness for outcome measures in the context of acute COVID-19 treatments and potential vaccines, there is no such guidance for treatment of complications that persist following the resolution of COVID-19. Even if we believe that our and our Founded Entities' clinical trials and preclinical studies demonstrate the safety and efficacy of our and their product 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 product candidates or those of our Founded Entities, except for Plenity and EndeavorRx, are safe or effective for use by the general public 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 clearance or approval in one jurisdiction may be deemed inadequate by another regulatory authority to support regulatory clearance or 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 clearance or approval of our Wholly Owned product candidates. Even if regulatory clearance or approval is secured for a product candidate, the terms of such approval may limit the scope and use of the specific product candidate, which may also limit its commercial potential.

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 product 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 product 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 product candidates in additional patient populations or under different treatment conditions before we are able to seek approvals or clearances from the FDA, the EMA or other comparable foreign regulatory authorities to market and sell these product candidates. Our failure to obtain marketing authorization for our Wholly Owned product candidates 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 our Wholly Owned product candidates. 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 our Wholly Owned product candidates. If trial participants are unwilling to participate in our studies because of negative publicity from AEs in our trials or other trials of similar products, 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 products 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. Any delays could result in increased costs, delays in advancing our product candidate development, delays in testing the effectiveness of our Wholly Owned product candidates, 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 product candidate being studied in relation to other available therapies and product 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 products 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 our Wholly Owned product candidates or those 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 or approval, cause us to suspend or discontinue clinical trials, abandon a product candidate, limit their commercial potential, if cleared 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' drugs or biologic product 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 product candidates could cause us, our Founded Entities or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory clearance or approval by the FDA, the EMA or other comparable foreign regulatory authorities. The side effects related to the product 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 our Wholly Owned product candidates 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 product 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 product 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 product candidates and to identify new product candidates, we cannot be certain that later testing or trials of product 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 our Wholly Owned product candidates in larger, longer and more extensive clinical trials, or as the use of these product 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 products 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 product candidates.

In addition to side effects caused by the product 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 caused by the administration process or related procedures, the FDA, the European Commission, the EMA, or other regulatory authorities could order us to cease further development of, or deny clearance or approval of, a product candidate for any or all targeted indications. Even if we can demonstrate that all future serious adverse events, or SAEs, are not product-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 product candidates, the commercial prospects of such product candidates may be harmed and our ability to generate product revenues from any of these product candidates may be delayed or eliminated. Any of these occurrences may harm our ability to develop other product candidates, and may harm our business, financial condition and prospects significantly.

Additionally, if any of our Wholly Owned product candidates receives marketing authorization, the FDA could impose contraindications or a boxed warning in the labeling of our product. For any of our drug or biologic product 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 product outweigh its risks, which may include, among other things, a Medication Guide outlining the risks of the product for distribution to patients and a communication plan to health care practitioners. Furthermore, if we or others later identify undesirable side effects caused by our Wholly Owned product candidates once approved, several potentially significant negative consequences could result, including:

- regulatory authorities may suspend or withdraw approvals of such product candidate, or seek an injunction against its manufacture or distribution;
- regulatory authorities may require additional warnings on the label, including “boxed” warnings, or issue safety alerts, Deal Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product;
- we may be required by the FDA to implement a REMS for a marketed drug or biologic;
- we may be required to change the way a product 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 product candidate, if approved, and may harm our business, financial condition and prospects significantly.

Even if we complete the necessary preclinical studies and clinical trials, the marketing approval process is expensive, time-consuming and uncertain and may prevent us from obtaining approvals for the potential commercialization of product candidates.

Any product 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, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA, the EMA and other comparable foreign regulatory authorities. Failure to obtain marketing authorization for a product candidate will prevent us from commercializing the product candidate in a given jurisdiction. For

example, although Gelesis and Akili have received marketing clearance for Plenity and EndeavorRX, respectively, from the FDA, we and our Founded Entities have not received clearance or approval to market any of our or their other product candidates from regulatory authorities in any jurisdiction and it is possible that none of the other product candidates we and our Founded Entities may seek to develop in the future will ever obtain regulatory approval. We have no experience in filing and supporting the applications necessary to gain marketing authorizations and expect to rely on third-party CROs or regulatory consultants to assist us in this process. Securing regulatory clearance 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 product candidate's safety, purity, efficacy and potency. Securing regulatory clearance or approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the relevant regulatory authority. Any product 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 or approval or prevent or limit commercial use, if cleared or approved.

The process of obtaining marketing authorizations, both in the United States and abroad, is expensive, may take many years if additional clinical trials are required, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product 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 product application, may cause delays in the approval or rejection of an application. The FDA and comparable authorities in other countries have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for 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 of a product candidate. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

If we experience delays in obtaining clearance or approval or if we fail to obtain clearance or approval of any product candidates we may develop, the commercial prospects for those product candidates may be harmed, and our ability to generate revenues will be materially impaired.

Even if any current or future product 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 product, and even if any current or future product 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 products 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 product candidates' 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 our Wholly Owned product candidates may require significant resources, including management time and financial resources, and may not be successful. The degree of market acceptance of our Wholly Owned product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety of the product;
- the potential advantages of the product compared to competitive therapies;

- the prevalence and severity of any side effects;
- whether the product 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 product for sale at competitive prices;
- the product'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 product;
- limitations or warnings, including distribution or use restrictions contained in the product's approved labeling;
- the strength of sales, marketing and distribution support;
- changes in the standard of care for the targeted indications for the product; and
- availability and adequacy of coverage and reimbursement from government payors, managed care plans and other third-party payors.

Sales of medical products 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 products are safe, therapeutically effective and cost effective. In addition, the inclusion or exclusion of products 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 product is safe, therapeutically effective and cost effective as compared with competing treatments. If any product candidates we develop do not achieve an adequate level of acceptance, we may not generate significant product revenue, and we may not become profitable.

Any failure by any current or future product 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 product candidates marketed or commercialized by them may adversely affect our reputation in the marketplace or among industry participants and our business prospects.

We have conducted, and may continue to conduct in the future, clinical trials for product 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 for LYT-100 in Australia and currently plan to conduct future clinical trials for LYT-100 in additional locations outside the United States, including without limitation Australia, Romania, Spain and the Phillipines. 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. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval 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. Additionally, the FDA's clinical trial requirements, including sufficient size of patient populations and statistical powering, must be met. 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 product candidates that we may develop not receiving approval or clearance for commercialization in the applicable jurisdiction.

If we are unable to obtain regulatory clearance or approval in one or more jurisdictions for any product candidates that we may identify and develop, our business could be substantially harmed.

We cannot commercialize a product until the appropriate regulatory authorities have reviewed and cleared or approved the product candidate. Approval by the FDA, the EMA and comparable foreign regulatory authorities is lengthy and unpredictable, and depends upon numerous factors, including substantial discretion of the regulatory authorities. Approval policies, regulations, or the type and amount of preclinical or clinical data necessary to gain approval may change during the course of a product candidate's development and may vary among jurisdictions, which may cause delays in the approval or the decision not to approve an application. Gelesis and Akili have obtained marketing clearance from the FDA for Plenity and EndeavorRx, respectively, but we and our Founded Entities have not obtained regulatory clearance or approval for any other product candidates, and it is possible that our current product candidates and any other product candidates which we and our Founded Entities may seek to develop in the future will not ever obtain regulatory clearance or approval. We cannot be certain that any of our Wholly Owned or our Founded Entities' product candidates will receive regulatory clearance or approval or be successfully commercialized even if we or our Founded Entities receive regulatory clearance or approval.

Obtaining marketing approval is an extensive, lengthy, expensive and inherently uncertain process, and regulatory authorities may delay, limit or deny clearance or approval of our Wholly Owned or our Founded Entities' product 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 product candidate is safe and effective as a treatment for our targeted indications or otherwise meets the applicable regulatory standards for 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 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 product 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 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 product 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 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 approval to market product

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 or approval by the FDA in the United States, if obtained, does not ensure approval by regulatory authorities in other countries or jurisdictions. In order to market any products 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 in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval processes vary among countries and can involve additional product 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 in other jurisdictions. In many jurisdictions outside the United States, a product 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 products is also subject to approval. Seeking foreign regulatory approval 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' products in those countries. The foreign regulatory approval process involves all of the risks associated with FDA approval. We do not have any product candidates approved for sale in international markets. 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 in international markets are delayed, our target market will be reduced and our ability to realize the full market potential of our products will be harmed.

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. Interim data from 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 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 product candidate or product 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 product candidate or our business.

Certain of the product 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' product 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 GMP manufacturing facilities for certain product candidates, including VE303, VE800 and VE416. Creating defined consortia of live microbial therapeutics for these product candidates is inherently complex, and therefore can be vulnerable to delays. The expertise required to manufacture these product 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 LYT-100, LYT-200, and LYT-300 are dependent on third party CMOs, and manufacturing such product candidates is inherently complex. As another example, we are advancing LYT-100 for potential treatment of complications that persist following the resolution of COVID-19 infection. COVID-19 has been widespread, and any approved treatments related to COVID-19 could face issues manufacturing sufficient quantities to meet demand.

Some of our and our Founded Entities' product 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 product 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 product 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 product defects or manufacturing failures that result in lot failures, product 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, the EMA and other foreign regulatory authorities may require us or our Founded Entities to submit samples of any lot of any approved product together with the protocols showing the results of applicable tests at any time. Under some circumstances, the FDA, the EMA 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 product that could result in lot failures or product recalls. Lot failures or product recalls could cause us or our Founded Entities to delay product 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 products.

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 our Wholly Owned product candidates 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 product candidates that we may develop must be successfully inspected by the applicable regulatory authorities, including the FDA, after we submit our NDA to the FDA.

We are currently completely dependent on our third-party manufacturers for the production of LYT-100 and LYT-200 in accordance with cGMPs, 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 of LYT-100 and LYT-200, our third-party manufacturers may not perform as agreed, may be unable to comply with these cGMP 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, or pass regulatory inspection, our NDA will not be approved. In addition, although we are ultimately responsible for ensuring product 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 products, or if our suppliers or third-party manufacturers decide they no longer want to manufacture our products, we may 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 products. 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. Currently, our contract manufacturer for the API for LYT-100 is located outside the United States and the FDA has recently increased the number of foreign drug manufacturers that it inspects as well as the frequency of such inspections. 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 products, which could materially harm our business.

The manufacture of pharmaceutical products 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 regulations and guidelines. Manufacturers of pharmaceutical products 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 products or in the manufacturing facilities in which our products 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 products 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 product 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 products may result in shipment delays, inventory shortages, lot failures, product withdrawals or recalls, or other interruptions in the supply of our products or product candidates. We may also have to take inventory write-offs and incur other charges and expenses for products or product 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 products or product candidates and could have a material adverse effect on our business, prospects, financial condition and results of operations.

The complexity of a combination product 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 approval of our Wholly Owned or our Founded Entities' product candidates.

We or our Founded Entities, such as Follica, may decide to pursue marketing authorization of a combination product. A combination product includes, 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 approval for combination products pose unique challenges because they involve components that are regulated under different types of regulatory requirements, and by different FDA centers. As a result, such products 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 product candidates that are combination products comprised of drug or biologics and devices, the regulatory review and approval process for these products may be lengthened. In addition, differences in regulatory pathways for each component of a combination product can impact the regulatory processes for all aspects of product development and management, including clinical investigation, marketing applications, manufacturing and quality control, adverse event reporting, promotion and advertising, user fees and post-approval modifications. Similarly, the device components of our Founded Entities' product candidates will require any necessary clearances or approvals or other marketing authorizations in other jurisdictions, which may prove challenging to obtain.

Certain modifications to our Founded Entities' device products may require new 510(k) clearance or other marketing authorizations and may require our Founded Entities to recall or cease marketing their products.

Gelesis received marketing clearance for Plenity 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 product 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 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* classification, 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 reclassified products for which they have concluded that new clearances or approvals are unnecessary, they may be required to cease marketing or to recall the modified product until they obtain clearance or approval, and they may be subject to significant regulatory fines or penalties.

The regulatory landscape that will apply to development of therapeutic product candidates by us or our Founded Entities or collaborators is rigorous, complex, uncertain and subject to change, which could result in delays or termination of development of such product candidates or unexpected costs in obtaining regulatory approvals.

We or our Founded Entities or collaborators may develop product candidates that use genome or cell editing technologies. Regulatory requirements governing products created with genome editing technology or involving gene therapy treatment have changed frequently and will likely continue to change in the future. Approvals by one regulatory agency may not be indicative of what any other regulatory agency may require for approval, and there is substantial, and sometimes uncoordinated, overlap in those responsible for regulation of gene therapy

products, cell therapy products and other products created with genome editing technology. For example, the FDA established the Office of Tissues and Advanced Therapies within its Center for Biologics Evaluation and Research, or CBER, to consolidate the review of gene therapy and related products, and the Cellular, Tissue and Gene Therapies Advisory Committee to advise CBER on its review. These and other regulatory review agencies, committees and advisory groups and the requirements and guidelines they promulgate may lengthen the regulatory review process, require us or our Founded Entities to perform additional preclinical studies or clinical trials, increase our or our Founded Entities' development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of these treatment candidates or lead to significant post-approval limitations or restrictions.

Additionally, under the National Institutes of Health, or NIH, Guidelines for Research Involving Recombinant DNA Molecules, or NIH Guidelines, supervision of human gene transfer trials includes evaluation and assessment by an institutional biosafety committee, or IBC, a local institutional committee that reviews and oversees research utilizing recombinant or synthetic nucleic acid molecules at that institution. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment, and such review may result in some delay before initiation of a clinical trial. While the NIH Guidelines are not mandatory unless the research in question is being conducted at or sponsored by institutions receiving NIH funding of recombinant or synthetic nucleic acid molecule research, many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them.

In the European Union, the EMA has a Committee for Advanced Therapies, or CAT, that is responsible for assessing the quality, safety and efficacy of advanced therapy medicinal products. Advanced-therapy medical products include gene therapy medicine, somatic-cell therapy medicines and tissue-engineered medicines. The role of the CAT is to prepare a draft opinion on an application for marketing authorization for a gene therapy medicinal candidate that is submitted to the EMA. In the European Union, the development and evaluation of a gene therapy medicinal product must be considered in the context of the relevant European Union guidelines. The EMA may issue new guidelines concerning the development and marketing authorization for gene therapy medicinal products and require that we or our Founded Entities comply with these new guidelines. Similarly complex regulatory environments exist in other jurisdictions in which we or our Founded Entities might consider seeking regulatory approvals for our Wholly Owned or our Founded Entities' product candidates, further complicating the regulatory landscape. As a result, the procedures and standards applied to gene therapy products and cell therapy products may be applied to any of our or our Founded Entities' gene therapy or genome editing product candidates, but that remains uncertain at this point.

Changes in applicable regulatory guidelines may lengthen the regulatory review process for our Wholly Owned or our Founded Entities' product candidates, require additional studies or trials, increase development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of such product candidates, or lead to significant post-approval limitations or restrictions. Additionally, adverse developments in clinical trials conducted by others of gene therapy products or products created using genome editing technology, or adverse public perception of the field of genome editing, may cause the FDA, the EMA and other regulatory bodies to revise the requirements for approval of any product candidates we or our Founded Entities may develop or limit the use of products utilizing genome editing technologies, either of which could materially harm our or our Founded Entities' business. Furthermore, regulatory action or private litigation could result in expenses, delays or other impediments to our research programs or the development or commercialization of current or future product candidates.

As we advance product candidates alone or with collaborators, we will be required to consult with these regulatory and advisory groups and comply with all applicable guidelines, rules and regulations. If we fail to do so, we or our collaborators may be required to delay or terminate development of such product candidates. Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a product candidate to market could decrease our ability to generate sufficient product revenue to maintain 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 product 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 or our Founded Entities' product candidates in the future, although we cannot be certain that our Wholly Owned or our Founded Entities' product 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.

Breakthrough therapy designation is intended to expedite the development and review of drug product candidates that are designed to treat serious or life-threatening diseases when preliminary clinical evidence indicates that the drug 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 of a product candidate as a breakthrough therapy provides potential benefits that include more frequent meetings with FDA to discuss the development plan for the product candidate and ensure collection of appropriate data needed to support approval; more frequent written correspondence from FDA about such things as the design of the proposed clinical trials and use of biomarkers; intensive guidance on an efficient drug development program, beginning as early as Phase 1; organizational commitment involving senior managers; and eligibility for rolling review and priority review.

Fast track designation is designed for drug product candidates intended for the treatment of a serious or life-threatening disease or condition, where preclinical or clinical data demonstrate the potential to address an unmet medical need for this disease or condition. Accordingly, even if we believe a particular product 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 product approval, and there is no assurance that such designation or eligibility will result in expedited review or approval or that the approved indication will not be narrower than the indication covered by the breakthrough therapy designation or fast track designation. Thus, even if we or our Founded Entities do receive breakthrough therapy or fast track designation, we or our Founded Entities may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw breakthrough therapy or fast track designation if it believes that the product 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.

If we or our Founded Entities are unable to successfully validate, develop and obtain regulatory 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 our Wholly Owned or Founded Entities' product 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 and LYT-210. 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, the EMA 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 or approval prior to commercialization.

We or our Founded Entities may rely on third parties for the design, development and manufacture of companion diagnostic tests for our Wholly Owned or our Founded Entities' product 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 approval processes. Moreover, even if data from preclinical studies and early clinical trials appear to support development of a companion diagnostic for a product 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 approval for, manufacturing and commercializing companion diagnostics similar to those we face with respect to our Wholly Owned product candidates themselves, including issues with achieving regulatory clearance 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 product candidates, or experience delays in doing so, the development of these product candidates may be adversely affected, these product candidates may not obtain marketing approval, and we may not realize the full commercial potential of any of these product 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 or our Founded Entities' product 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 or our Founded Entities' product 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 approved product, 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 our Wholly Owned or our Founded Entities' product candidates.

Gelesis' Plenity and Akili's EndeavorRx are, and any of our Wholly Owned or our Founded Entities' product candidates that are cleared 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, regulations. As such, we and our CMOs are subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any marketing clearance, such as for Plenity, and any future 510(k), premarket approval, or PMA, application, 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 product and product 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 clearance for Plenity and EndeavorRx, respectively, are and any regulatory clearances or approvals that we may receive for our Wholly Owned or our Founded Entities' product candidates will be, subject to limitations on the cleared or approved indicated uses for which the product may be marketed and promoted or to the conditions of

approval. Any regulatory clearances or approvals that we may receive for our Wholly Owned product candidates 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 product. We are required to report certain adverse reactions and production problems, if any, to the FDA, the EMA and other comparable foreign regulatory authorities. Any new legislation addressing drug or medical safety issues could result in delays in product development or commercialization, or increased costs to assure compliance.

The FDA and other agencies, including the U.S. Department of Justice, and for certain products, the Federal Trade Commission, closely regulate and monitor the post-approval marketing, labeling, advertising and promotion of products to ensure that they are manufactured, marketed and distributed only for the cleared or approved indications and in accordance with the provisions of the approved label. We are, and will be, required to comply with requirements concerning advertising and promotion for our Wholly Owned product candidates, if 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 product's label or labeling. We may not promote our products for indications or uses for which they do not have approval or clearance.

The holder of a cleared 510(k) or an approved NDA, BLA, PMA, MAA or equivalent marketing authorization must submit new or supplemental applications and obtain approval for certain changes to the approved product, product labeling, or manufacturing process. For example, any modification to Plenity that would significantly affect its safety or effectiveness or that would constitute a major change in its intended use would require a new 510(k) clearance or approval of PMA application. Delays in obtaining required clearances or approvals would harm our ability to introduce new or enhanced product 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 for certain changes prior to marketing the modified product may require a recall or to stop selling or distributing the marketed product as modified, and may lead to significant enforcement actions.

In the European Economic Area, or the EEA, any medical devices will need to comply with the Essential Requirements set forth in Medical Device Regulation. Compliance with these requirements is a prerequisite to be able to affix the CE mark to a product, without which a product cannot be marketed or sold in the EEA. To demonstrate compliance with the Essential Requirements and obtain the right to affix the CE mark, we or our Founded Entities must undergo a conformity assessment procedure, which varies according to the type of medical device and its classification. The conformity assessment procedure requires the intervention of a Notified Body, which is an organization designated by a competent authority of an EEA country to conduct conformity assessments. The Notified Body issues a CE Certificate of Conformity following successful completion of a conformity assessment procedure and quality management system audit conducted in relation to the medical device and its manufacturer and their conformity with the Essential Requirements. This Certificate entitles the manufacturer to affix the CE mark to its medical products after having prepared and signed a related EC Declaration of Conformity. In June 2020, Gelesis received a CE Mark 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 CE Mark 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' products 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' products. An unsuccessful post-marketing study or failure to complete such a study could result in the withdrawal of marketing approval.

If a regulatory agency discovers previously unknown problems with a product, such as AEs of unanticipated severity or frequency, or problems with the facility where the product is manufactured, or disagrees with the

promotion, marketing or labeling of a product, such regulatory agency may impose restrictions on that product or us, including requiring withdrawal of the product 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;
- 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 products; or
- require a product 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 products. If regulatory sanctions are applied or if regulatory clearance 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 or approval of our Wholly Owned or our Founded Entities' product candidates. For example, following new guidance from the FDA recognizing the need for access to certain low-risk clinically-validated digital health devices for psychiatric conditions during the COVID-19 pandemic, in April 2020 Akili announded that EndeavorRx (AKL-T01) would be available for use by children with ADHD and their families

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. For example, certain policies of the Trump administration may impact our business and industry. Namely, the Trump administration has taken several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine regulatory and oversight activities such as implementing statutes through rulemaking, issuance of guidance and review and approval of marketing applications. If these executive 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.

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 product candidates that are cleared or approved, we are found to have improperly promoted off-label uses of those products, we may become subject to significant liability. The FDA and other regulatory agencies strictly regulate the promotional claims that may be made about prescription products, if approved. In particular, while the FDA permits the dissemination of truthful and non-misleading information about an approved product, a manufacturer may not promote a product for uses that are not approved by the FDA or such other regulatory agencies as reflected in the product's 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 our Wholly Owned product candidates, if approved, we could become subject to significant liability, which would materially adversely affect our business and financial condition.

Our or our Founded Entities' products 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 products of our Founded Entities, including Gelesis, Akili, Follica and Sonde, must comply with the FDA's cGMPs for medical devices, known as Quality System Regulation, or 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' products 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 products. In addition, failure to comply with applicable FDA requirements or later discovery of previously unknown problems with our or our Founded Entities' products or manufacturing processes could result in, among other things: warning letters or untitled letters; customer civil penalties; suspension or withdrawal of approvals or clearances; seizures or recalls of our or our Founded Entities' products; total or partial suspension of production or distribution; administrative or judicially imposed sanctions; the FDA's refusal to grant pending or future clearances or approvals for our or our Founded Entities' products; clinical holds; refusal to permit the import or export of our or our Founded Entities' products; and criminal prosecution of us or our employees. Any of these actions could significantly and negatively impact supply of our or our Founded Entities' products. 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 product candidates we may develop, we may not be successful in commercializing those product 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 products. To achieve commercial success for any approved product 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 our Wholly Owned product candidates, 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 product 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 product launch. If the commercial launch of a product 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 product 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 products;
- the inability of reimbursement professionals to negotiate arrangements for formulary access, reimbursement, and other acceptance by payors;
- the inability to price products 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 products to segments of the patient population;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product 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 product revenue or the profitability of product revenue may be lower than if we were to market and sell any products we may develop internally. In addition, we may not be successful in entering into arrangements with third parties to commercialize our Wholly Owned product candidates 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 products 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 products, 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 our Wholly Owned product candidates, if approved.

The insurance coverage and reimbursement status of newly-approved products is uncertain. Our Wholly Owned product candidates 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 products could limit our ability to market those products and decrease our ability to generate revenue.

The regulations that govern marketing approvals, pricing, coverage, and reimbursement for new drugs and other medical products 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 product before it can be marketed. In many countries, the pricing review period begins after marketing or product 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 product in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenue we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more products or product candidates, even if any product candidates we may develop obtain marketing approval.

Our ability to successfully commercialize our products and product candidates also will depend in part on the extent to which coverage and adequate reimbursement for these products 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 products. Sales of these or other product candidates that we may identify will depend substantially, both domestically and abroad, on the extent to which the costs of our Wholly Owned product candidates 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 products or product 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 products 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 our Wholly Owned product candidates. Accordingly, in markets outside the United States, the reimbursement for products 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 products 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 products exists among third-party payors and coverage and reimbursement levels for products 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 products 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 products such as ours, as there is no body of established practices and precedents for these new products. 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 products we may develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize product candidates, and our overall financial condition. Further, due to the COVID-19 pandemic, millions of individuals have lost/will be losing employer-based insurance coverage, which may adversely affect our ability to commercialize our products, As noted above, in the United States, we plan to have various programs to help patients afford our products, 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 products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products 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 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. Reimbursement may impact the demand for, or the price of, any product or product 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 products 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 our Wholly Owned product candidates, 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 products. Additionally, we may develop companion diagnostic tests for use with our Wholly Owned or our Founded Entities' product 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 or our Founded Entities' product 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 or our Founded Entities' product 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 product candidate or companion diagnostic for which we receive approval.

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 products. 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 products. 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. In addition, 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 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. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution;

- 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 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. When an entity is determined to have violated the federal civil False Claims Act, the government may impose civil fines and penalties for each false claim, plus treble damages, and exclude the entity from participation in Medicare, Medicaid and other federal healthcare programs;
- 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;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose, among other things, requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions;
- 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), and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Effective January 1, 2022, these reporting obligations will extend to include transfers of value made to certain non-physician providers such as physician assistants and nurse practitioners;

- 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; 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; state and local laws requiring the registration of pharmaceutical sales representatives; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and are often not pre-empted by HIPAA, thus complicating compliance efforts.

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 our Wholly Owned product candidates 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 health and 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 by HITECH. 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.

Compliance with U.S. and international data protection laws and regulations, including the General Data Protection Regulation 2016/679, or GDPR, in the European Union, 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. 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 our Wholly Owned or our Founded Entities' product candidates or any future product candidates, restrict or regulate post-approval activities and affect our or our Founded Entities' ability to profitably sell any product 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 product labeling; (iii) the recall or discontinuation of our products; 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 products 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 50 percent (increased to 70% as of 2019 pursuant to subsequent legislation) 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 product 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. For the 2018 and 2019 fiscal years, CMS altered the reimbursement formula from Average Sale Price (ASP) plus 6 percent to ASP minus 22.5 percent on specified covered outpatient drugs ("SCODs"), but did so without issuing a formal notice of proposed rulemaking. On December 27, 2018, the District Court for the District of Columbia invalidated that formula change, ruling the change was not an "adjustment" which was within the Secretary's discretion to make, but was instead a fundamental change in the reimbursement calculation, and such a dramatic change was beyond the scope of the Secretary's authority. On July 31, 2020, the Court of Appeals for the District of Columbia reversed the District Court's decision, stating that HHS's decision to lower drug reimbursement rates for 340B hosptials rests on a reasonable interpretation of the Medicare statute.

Since its enactment, there have been numerous judicial, administrative, executive, and legislative challenges to certain aspects of the ACA, and we expect there will be additional challenges and amendments to the ACA in the future. The Tax Cuts and Jobs Act of 2017, or the Tax Act, includes a provision that repealed effective January 1, 2019 the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." On December 14, 2018, a U.S. District Court Judge in the Northern District of Texas, or the Texas District Court Judge, ruled that the individual mandate is a critical and inseverable feature of the ACA, and therefore, because it was repealed as part of the Tax Act, the remaining provisions of the ACA are invalid as well. The Trump Administration and CMS have both stated that the ruling will have no immediate effect, and on December 30, 2018 the Texas District Court Judge issued an order staying the judgment pending appeal. On December 18, 2019, the U.S. Court of Appeals for the 5th Circuit ruled that the individual mandate was unconstitutional but remanded the case back to the District Court to determine whether the remaining provisions of the ACA are invalid as well. On March 2, 2020, the U.S. Supreme Court granted the petitions for writs of certiorari to review the case, although it is unclear when a decision will be made or how the Supreme Court will rule. Litigation and legislation over the ACA are likely to continue, with unpredictable and uncertain results. We will continue to evaluate the effect that the ACA and its possible repeal and replacement has on our business. According to the Congressional Budget Office, the repeal of the individual mandate will cause 13 million fewer Americans to be insured in 2027 and premiums in insurance markets may rise.

Since January 2017, President Trump has signed various Executive Orders designed to delay the implementation of certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. On January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the ACA to waive, defer, grant exemptions from, or delay the implementation of any provision of the ACA that would impose a fiscal burden on states or a cost, fee, tax, penalty or regulatory burden on individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. On October 13, 2017, President Trump signed an Executive Order terminating the cost-sharing subsidies that reimburse insurers under the ACA. The Trump administration has concluded that cost-sharing reduction, or CSR, payments to insurance companies required under the ACA have not received necessary appropriations from Congress and announced that it will discontinue these payments immediately until those appropriations are made. The loss of the CSR payments is expected to increase premiums on certain policies issued by qualified health plans under the ACA. Several state Attorneys General filed suit to stop the administration from terminating the subsidies, but their request for a restraining order was denied by a federal judge in California on October 25, 2017. On June 14, 2018, U.S. Court of Appeals for the Federal Circuit ruled that the federal government was not required to pay more than $12 billion in ACA risk corridor payments to third-party payors who argued were owed to them. This decision was appealed to the U.S. Supreme Court, which on April 27, 2020, reversed the U.S. Court of Appeals for the Federal Circuit's decision

and remanded the case to the U.S. Court of Federal Claims, concluding the government has an obligation to pay these risk corridor payments under the relevant formula. The U.S. federal government has since started sending third-party payors owed payments. It is not clear what effect this result will have on our business, but we will continue to monitor any developments.

Moreover, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain ACA-mandated fees, including the so called "Cadillac" tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. However, on December 20, 2019, the U.S. President signed into law the Further Consolidated Appropriations Act (H.R. 1865), which repeals the Cadillac tax, the health insurance provider tax, and the medical device excise tax. The Bipartisan Budget Act of 2018, also amended the ACA, effective January 1, 2019, by increasing the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and closing the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole." In December 2018, CMS issued 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. Since then, the ACA risk adjustment program payment parameters have been updated annually. In addition, CMS published a final rule on April 25, 2019 that gave states greater flexibility, starting in 2020, in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the ACA for plans sold through such marketplaces.

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 of 2 percent per fiscal year, which went into effect in 2013, and, due to subsequent legislative amendments, will remain in effect through 2030 unless additional Congressional action is taken. However, pursuant to the Coronavirus Aid, Relief and Economic Security Act, or CARES Act, these Medicare sequester reductions will be suspended from May 1, 2020 through December 31, 2020 due to the COVID-19 pandemic. 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.

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. At the federal level, the Trump administration's budget for fiscal year 2021 includes a $135 billion allowance to support legislative proposals seeking to reduce drug prices, increase competition, lower out-of-pocket drug costs for patients, and increase patient access to lower-cost generic and biosimilar drugs. On March 10, 2020, the Trump administration sent "principles" for drug pricing to Congress, calling for legislation that would, among other things, cap Medicare Part D beneficiary out-of-pocket pharmacy expenses, provide an option to cap Medicare Part D beneficiary monthly out-of-pocket expenses, and place limits on pharmaceutical price increases. Additionally, the Trump administration released a "Blueprint" to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out of pocket costs of drug products paid by consumers. The U.S. Department of HHS, has already started the process of soliciting feedback on some of these measures and, at the same time, is immediately implementing others under its existing authority. For example, in May 2019, CMS issued a final rule to allow Medicare Advantage Plans the option of using step therapy for Part B drugs beginning January 1, 2020. This final rule codified CMS's policy change that was effective January 1, 2019.

In addition, 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, but the manufacturer must develop an internal policy and respond to patient requests according to that policy.

Lastly, on July 24, 2020, President Trump signed four Executive Orders aimed at lowering drug prices. The Executive Orders direct the Secretary of the Department of Health and Human Services to: (1) eliminate protection under an Anti-Kickback Statute safe harbor for certain retrospective price reductions provided by drug manufacturers to sponsors of Medicare Part D plans or pharmacy benefit managers that are not applied at the point-of-sale; (2) allow the importation of certain drugs from other countries through individual waivers, permit the re-importation of insulin products, and prioritize finalization of FDA's December 2019 proposed rule to permit the importation of drugs from Canada; (3) ensure that payment by the Medicare program for certain Medicare Part B drugs is not higher than the payment by other comparable countries (depending on whether pharmaceutical manufacturers agree to other measures); and (4) allow certain low-income individuals receiving insulin and epinephrine purchased by a Federally Qualified Health Center, or FQHC, as part of the 340B drug program to purchase those drugs at the discounted price paid by the FQHC. On September 13, 2020, President Trump signed an Executive Order directing HHS to implement a rulemaking plan to test a payment model, pursuant to which Medicare would pay, for certain high-cost prescription drugs and biological products covered by Medicare Part B, no more than the most-favored-nation price (i.e., the lowest price) after adjustments, for a pharmaceutical product that the drug manufacturer sells in a member country of the Organization for Economic Cooperation and Development that has a comparable per-capita gross domestic product. Although a number of these, and other proposed measures will require authorization through additional legislation to become effective, Congress and the current administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs.

At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological 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.

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 product. Such reforms could have an adverse effect on anticipated revenue from product 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 product 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 our Wholly Owned or our Founded Entities' product candidates, if approved;
- our ability to receive or set a price that we believe is fair for our products;
- 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.

We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, 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 product. 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 our Wholly Owned or our Founded Entities' product candidates, if approved. Litigation and legislative efforts to change or repeal the ACA are likely to continue, with unpredictable and uncertain results.

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 product candidates we may develop and ultimately harm our financial condition.

The development and commercialization of new drug products is highly competitive. We may face competition with respect to any product 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 the Brain-Immune-Gut. If any of our competitors receive FDA approval before we do, our Wholly Owned product candidates 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 products 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 products;
- more extensive resources for preclinical testing, conducting clinical trials, obtaining regulatory approvals, and in manufacturing, marketing, and selling drug products;
- products 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 products that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any products that we may develop. Furthermore, currently approved products could be discovered to have application for treatment of our targeted disease indications or similar indications, which could give such products significant regulatory and market timing advantages over our Wholly Owned product candidates. Our competitors may also obtain FDA, EMA or other comparable foreign regulatory approval for their products more rapidly than we may obtain approval for ours and may obtain orphan product 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, products or technologies developed by our competitors may render our potential product candidates uneconomical or obsolete and we may not be successful in marketing any product 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' products and our competitors may allege that our products infringe, misappropriate or otherwise violate their intellectual property. The availability of our competitors' products could limit the demand, and the price we are able to charge, for any products that we may develop and commercialize.

Our Wholly Owned or our Founded Entities' product candidates for which we or our Founded Entities intend to seek approval as biologic products may face competition sooner than anticipated.

If we or our Founded Entities are successful in achieving regulatory approval to commercialize any biologic product candidate we or our Founded Entities develop alone or with collaborators, it may face competition from biosimilar products. In the United States, certain of our Wholly Owned and our Founded Entities' product candidates are regulated by the FDA as biologic products 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 products 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 product. Under the BPCIA, an application for a biosimilar product may not be submitted 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 after the reference product was first licensed by the FDA. 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 the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty. While it is uncertain when such processes intended to implement BPCIA may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for biological product candidates.

We believe that any of our Wholly Owned or our Founded Entities' product candidates that are approved as a biological product 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 product candidates to be reference products for competing products, 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 product, once approved, will be substituted for any one of our, our Founded Entities' or our collaborators' reference products in a way that is similar to traditional generic substitution for non-biologic products 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 products that we or our Founded Entities develop alone or with collaborators that may be approved, such products 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 our Wholly Owned product candidates 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 products or their internal development of competitive products, 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 product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates;
- a collaborator with marketing, manufacturing and distribution rights to one or more products 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 product 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 product candidates;
- collaborators may own or co-own intellectual property covering products 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 our Wholly Owned product candidates, due to capital costs required to develop or commercialize the product candidate or manufacturing constraints. We may not be successful in our efforts to establish such collaborations for our Wholly Owned product candidates because our R&D pipeline may be insufficient, our Wholly Owned product candidates may be deemed to be at too early of a stage of development for collaborative effort or third parties may not view our Wholly Owned product candidates 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 product candidate is delayed, the safety of a product candidate is questioned or sales of an approved product 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 our Wholly Owned product candidates, 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 our Wholly Owned product candidates, could delay the development and commercialization of our Wholly Owned product candidates 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 product candidates, and we may rely even more on strategic collaborations for R&D of other product candidates or discoveries. We may sell product 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 product 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 product 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 products 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 product candidates or the generation of sales revenue. To the extent that we enter into collaborative arrangements, the related product revenues are likely to be lower than if we directly marketed and sold products. Such collaborators may also consider alternative product 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 product 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 product 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 our Wholly Owned product candidates, 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 requires us to comply with requirements, commonly referred to as Good Clinical Practices, or 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 enforces 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 may require us to perform additional clinical trials before approving our Wholly Owned product candidates, which would delay the regulatory approval process. We cannot be certain that, upon inspection, the FDA 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 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 our Wholly Owned product candidates. If that occurs, we will not be able to, or may be delayed in our efforts to, successfully commercialize our Wholly Owned product candidates. In such an event, our financial results and the commercial prospects for any product 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 our Wholly Owned or our Founded Entities' product candidates and other product 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' product candidates, products, or necessary quantities of such materials on time or at an acceptable cost.

With respect to certain of our Wholly Owned or our Founded Entities' product 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 product 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' product candidates or other product candidates that we or our Founded Entities may identify for clinical trials, as well as for commercial manufacture if any product 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 product candidate to complete the trial, any significant delay or discontinuity in the supply of a product 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 our Wholly Owned or our Founded Entities' product 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 products for such companies, which exposes our manufacturers to regulatory risks for the production of such materials and products. The facilities used by our contract manufacturers to manufacture our drug, or medical device product 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 products. 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 our Wholly Owned or our Founded Entities' product candidates manufactured at these manufacturing facilities. 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, the EMA or another comparable foreign regulatory agency does not approve these facilities for the manufacture of our Wholly Owned or our Founded Entities' product 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 for or market our Wholly Owned or our Founded Entities' product candidates, if cleared or approved.

Our Wholly Owned or our Founded Entities' product candidates may compete with other product candidates and marketed products 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 or commercialization. Our and certain of our Founded Entities' current and anticipated future dependence upon others for the manufacturing of our Wholly Owned or our Founded Entities' product candidates may adversely

affect our future profit margins and our ability to commercialize any product 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 product candidates for clinical trials or commercial sale, including our and certain of our Founded Entities' existing CMOs for our Wholly Owned or our Founded Entities' product candidates, are subject to extensive regulation. Components of a finished drug or biologic product 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 products and products approved for sale. Similarly, medical devices manufactured under an IDE must be manufactured in accordance with select provisions the FDA QSR requirements, and devices cleared or approved by FDA for commercial sale must be manufactured in accordance with QSR. 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 product candidates or our Wholly Owned product candidates. 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, license revocation, suspension of production, seizures or recalls of product candidates or marketed drugs or devices, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect clinical or commercial supplies of our Wholly Owned or our Founded Entities' product candidates.

We 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 product 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 our Wholly Owned or our Founded Entities' product candidates or any of our other potential products. In addition, the regulatory authorities may, at any time, audit or inspect a manufacturing facility involved with the preparation of our Wholly Owned or our Founded Entities' product candidates or our other potential products 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 products 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 also may, at any time following clearance or approval of a product 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 product 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 products, 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 device, 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 our Wholly Owned or our Founded Entities' product 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.

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 products, 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 products 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 products, if any, and we are unable to develop the necessary marketing capabilities on our own, we may be unable to generate sufficient product 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 Our Intellectual Property

If we or our Founded Entities are unable to obtain and maintain sufficient intellectual property protection for our or our Founded Entities' existing product candidates or any other product 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 product candidates similar or identical to ours, and our ability to successfully commercialize our existing product candidates and any other product 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 or our Founded Entities' product 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 product candidates, our various proprietary technologies, and any other product 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 or our Founded Entities' product candidates, in whole or in part, or which effectively prevent others from commercializing competitive product 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 product 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 product candidates to ours, or limit the duration of the patent protection of our Wholly Owned or our Founded Entities' product 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 or our Founded Entities' product 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 product 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 and LYT-210 product candidates 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. Additionally, our Founded Entities Akili, Follica, Vedanta, Sonde, Alivio and Vor, are party to license agreements with academic institutions pursuant to which such Founded Entities have in-licensed certain intellectual property underlying the product candidates AKL-T01, AKL-T02, AKL-T03, AKL-T04, FOL-004, VE303, Sonde, ALV-306, ALV-304, ALV-107 and VOR33. 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 products 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.

Our or our Founded Entities' rights to develop and commercialize our Wholly Owned or our Founded Entities' product 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 or our Founded Entities' product 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 and our Founded Entities' product 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 product 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 product 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 product 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 or our Founded Entities' product 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 product candidates may be adversely affected and we may be unable to prevent competitors from making, using and selling competing products.

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 products, 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 product candidates that we successfully develop and commercialize, if any. Therefore, even if we or our Founded Entities successfully develop and commercialize product 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 or our Founded Entities' product 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 product 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 products 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 or our Founded Entities' product 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 product 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, our Wholly Owned or our Founded Entities' product 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 product candidates and any other product 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 product candidates and any other product 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 product candidates and any other product 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 product candidates and any other product candidates that we or they may identify, any molecules formed during the manufacturing process, or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product 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 or our Founded Entities' product 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 product 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 our Wholly Owned or our Founded Entities' product 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 product 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 product candidates and any other product 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 products 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.

Patent terms may be inadequate to protect our competitive position on product 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 or our Founded Entities' product candidates are obtained, once the patent life has expired, we or our Founded Entities may be open to competition from competitive products, including generics or biosimilars. Given the amount of time required for the development, testing and regulatory review of new product 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 products 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 our Wholly Owned or our Founded Entities' product candidates, our business may be materially harmed.

Depending upon the timing, duration and specifics of FDA marketing approval of our Wholly Owned or our Founded Entities' product candidates, one of the U.S. patents covering each of such product 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 FDA approved product 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 product approval and only those claims covering such approved drug product, 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 our Wholly Owned or our Founded Entities' product 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 product may be shortened and our competitors may obtain approval of competing products 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 our Wholly Owned or our Founded Entities' product 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 our Wholly Owned or our Founded Entities' product candidates is approved and a patent covering that product 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 product candidate.

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 our Wholly Owned or our Founded Entities' product 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 product candidates and any future product 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' products 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.

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 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 products and services. Moreover, it may be difficult or impossible to obtain

evidence of infringement in a competitor's or potential competitor's product 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 or our Founded Entities' product candidates, the defendant could counterclaim that the patent covering our or our Founded Entities' product 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 product 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 or our Founded Entities' product 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 or our Founded Entities' product 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.

Issued patents covering our Wholly Owned or our Founded Entities' product 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 or our Founded Entities' product candidates, the defendant could counterclaim that the patent covering the relevant product 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 or our Founded Entities' product 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 or our Founded Entities' product candidates. Such a loss of patent protection would have a material adverse impact on our business.

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.

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.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on our Wholly Owned or our Founded Entities' product 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 products 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 products and may also export infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our or our Founded Entities' products 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 products, which could make it difficult for us to stop the infringement of our or our Founded Entities' patents or marketing of competing products 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.

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 products.

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 or our Founded Entities' product 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 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.

Our or our Founded Entities' proprietary rights may not adequately protect our technologies and product 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 products that are the same as or similar to our Wholly Owned or our Founded Entities' product 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 products 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 Business and Industry

The outbreak of, and the long term effects of the outbreak of, the novel strain of coronavirus, SARS-CoV-2, which causes COVID- 19, could adversely impact our business, including our clinical trials and preclinical studies.

Public health crises such as pandemics or other global emergencies could adversely impact our business. In December 2019, a novel strain of coronavirus, SARS-CoV-2, which causes coronavirus disease 2019, or COVID-19, surfaced in Wuhan, China. Since then, COVID-19 has spread globally. In response to the spread of COVID-19 and governmental shelter-in-place orders, we have encouraged our administrative employees to work outside of our offices and allowed staff in our laboratory facilities to operate under applicable government orders and protocols designed to protect their health and safety.

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 and comparable foreign regulatory agencies, which may impact review and approval timelines;
- interruption of, or delays in receiving, supplies of our product 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.

These and other factors arising from the COVID-19 pandemic could worsen in countries that are already afflicted with COVID-19, could continue to spread to additional countries, or could return to countries where the pandemic has been partially contained, each of which could further adversely impact our ability to conduct clinical trials and our business generally, and could have a material adverse impact on our operations and financial condition and results.

In addition, the trading prices for biopharmaceutical companies have been highly volatile 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 COVID-19 outbreak continues to rapidly evolve. The extent to which the outbreak may impact our business, preclinical studies and clinical trials will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the ultimate geographic spread of the disease, the duration of the outbreak, travel restrictions and actions to contain the outbreak or treat its impact, such as social distancing and quarantines or lock-downs in the United States and other countries, business closures or business disruptions and the effectiveness of actions taken in the United States and other countries to contain and treat the disease.

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 product candidates.

We may not be successful in our efforts to develop LYT-100 for the treatment of Long COVID respiratory complications and related sequelae.

We plan to conduct a global, randomized, placebo-controlled Phase 2 trial to evaluate the efficacy, safety and tolerability of LYT-100 in non-critical COVID-19 patients with respiratory complications. As currently designed, patients will receive treatment for up to three months and the trial is expected to enroll up to 168 patients.

The timing and success of this proposed clinical trial will depend on our ability to enroll patients in the trial. Many other companies are pursuing the development of product candidates for the treatment of COVID-19, and

patient enrollment may be affected by availability of commercially available treatment. Our ability to enroll a sufficient number of patients could also be impacted by a decrease in COVID-19 hospitalization rates or a decrease in COVID-19 infection rate. Our inability to enroll a sufficient number of patients could result in significant delays or could require us to abandon the trial and development of LYT-100 for the treatment of these patients altogether.

Given the rapidity of the onset of the COVID-19 pandemic, scientific and medical research on the SARS-CoV-2 virus is ongoing and evolving. Results from ongoing clinical trials and discussions with regulatory authorities may raise new questions and require us to redesign proposed clinical trials, including revising proposed endpoints or adding new clinical trial sites or cohorts of subjects. Any such developments could delay the development timeline for and materially increase the cost of LYT-100. Furthermore, we cannot be certain that the evidence that we believe suggests that LYT-100 may be beneficial to these patients will be established in a clinical trial. The failure of LYT-100 to demonstrate safety and efficacy in these patients could negatively impact the perception of us and LYT-100 by investors and it is possible that unexpected safety issues could occur in these COVID-19 patients. Any such safety issues could affect our development plans for LYT-100 in other indications.

We attempt to distribute our scientific, execution and financing risks across a variety of therapeutic areas, indications, programs and modalities that relate to the brain, immune system and gastrointestinal system and the interface between them. 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 creating medicines for serious diseases involving the brain, immune system and gastrointestinal, or BIG, system and the interface between those systems, or the BIG Axis. We have made investments in our Founded Entities, R&D infrastructure, and clinical capabilities that have enabled us to establish the underlying programs and platforms that have resulted in 24 products and product candidates that are being advanced within our Wholly Owned Programs or by our Founded Entities. Of these products and product candidates, 12 are clinical-stage, and two have been cleared by the FDA and granted marketing authorization in the EEA. Our Non-Controlled Founded Entities are advancing eight of these product candidates, including two that are expected to enter Phase 3/Pivotal studies, as well as two FDA-cleared products. Our Controlled Founded Entities are advancing nine of these product candidates, including one that is expected to enter a Phase 3 study, and three that are in Phase 2 development, and we are advancing four of these product candidates within our Wholly Owned Pipeline. As our and certain of our Founded Entities' product 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 product candidates across the BIG Axis. Delay or failure to advance our programs could adversely impact our business.

We are developing new medicines based on the lymphatic system, the BIG systems and the BIG Axis. Over time, our and our Founded Entities' preclinical and clinical work led us to identify potential synergies across target therapeutic indications in the BIG Axis, generating a broad portfolio of product 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 in the BIG Axis 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 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 of business and strategy, Stephen Muniz, our chief operating officer, Joep Muijrers, our chief of portfolio strategy, Eric Elenko, our chief innovation officer, and Joseph Bolen, our chief scientific 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 product 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 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 our Wholly Owned product candidates. 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 product 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 product candidates and compete effectively will depend, in part, on our ability to effectively manage any future growth.

Because we are developing multiple programs and product candidates and are pursuing a variety of target indications and treatment modalities, we may expend our limited resources to pursue a particular product candidate and fail to capitalize on development opportunities or product 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 product candidates that later prove to have greater commercial potential than our current and planned development programs and product candidates. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and other future product candidates for specific indications may not yield any commercially viable future product candidates. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may be required to relinquish valuable rights to that product 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 product candidates.

Additionally, we may pursue additional in-licenses or acquisitions of development-stage assets or programs, which entails additional risk to us. For example, we recently acquired LYT-100, which is our most advanced product candidate and to which we are investing significant resources for its development. Identifying, selecting and acquiring promising product 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 product 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 products, we may spend material amounts of our capital and other resources evaluating, acquiring and developing products 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 product candidates that we may develop.

We face an inherent risk of product liability exposure related to the testing of product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop. If we cannot successfully defend ourselves against claims that our Wholly Owned product candidates or medicines caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product 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 our Wholly Owned product candidates.

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 product 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.

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 our Wholly Owned product candidates. 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 our Wholly Owned product candidates. 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 approval of our Wholly Owned or our Founded Entities' product candidates and begin commercializing those products in the United States, 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 products. 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 production efforts. Our failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Unfavorable global economic conditions, including conditions resulting from the COVID-19 pandemic, 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 our Wholly Owned or our Founded Entities' product 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 our Wholly Owned product candidates. 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.

The COVID-19 pandemic has had, and will 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, volatility in markets, and other negative impacts that have arisen or will arise over the course of the COVID-19 pandemic.

Cyber-attacks 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 cyber-attacks 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. Although to our knowledge we have not experienced any such material system failure or material 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 our Wholly Owned or our Founded Entities' product 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.

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 products 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 to review and approve new products 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. Average review times at the agency have fluctuated in recent years as a result. 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 may also influence the ability of the FDA to take action on regulatory matters, for example the FDA's budget and funding levels and ability to hire and retain key personnel.

Disruptions at the FDA and other agencies 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, including for 35 days beginning on December 22, 2018, 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.

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.

Risks Related to Our International Operations

As a company based in the United Kingdom, we are subject to economic, political, regulatory and other risks associated with international operations.

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:
    - relating to the terms of the future trading arrangement between the United Kingdom and the European Union following the expiry of the Brexit transition period on December 31, 2020;

- a second referendum on Scottish independence from the United Kingdom; and/or
- a snap general election; and

- negative consequences from changes in tax laws;

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.

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 our Wholly Owned or our Founded Entities' product 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 products 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 products, and exposure to foreign currency exchange rate fluctuations;
- natural disasters, political and economic instability, including wars, 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.

European data collection is governed by restrictive regulations governing the use, processing and cross-border transfer of personal information.

In the event we decide to conduct clinical trials or continue to enroll subjects in our ongoing or future clinical trials in the European Union, we may be subject to additional privacy restrictions. The collection and use of personal health data in the European Union is governed by the provisions of the General Data Protection Regulation (EU) 2016/679, or GDPR. This directive imposes several 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 also imposes strict rules on the transfer of personal data out of the European Union to the United States. Failure to comply with the requirements of the Data Protection Directive, which governs the collection and use of personal health data in the European Union, the GDPR, and the related national data protection laws of the European Union Member States may result in fines and other administrative penalties. The GDPR introduced new data protection requirements in the European Union and substantial fines for breaches of the data protection rules. The GDPR regulations may impose additional responsibility and liability in relation to personal data that we process and we may be required to put in place additional mechanisms ensuring compliance with these and/or new data protection rules. This may be onerous and adversely affect our business, financial condition, prospects and results of operations.

We are subject to the U.K. Bribery Act 2010, or the Bribery Act, the 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. The Bribery Act, the FCPA and these other laws generally prohibit us and our employees and intermediaries from authorizing, promising, offering, or providing, directly or indirectly, improper or prohibited payments, or anything else of value, to government officials or other persons to obtain or retain business or gain some other business advantage. Under the Bribery Act, we may also be liable for failing to prevent a person associated with us from committing a bribery offense. In the future, we and our strategic partners may operate in jurisdictions that pose a high risk of potential Bribery Act or FCPA violations, and we may participate in collaborations and relationships with third parties whose corrupt or illegal activities could potentially subject us to liability under the Bribery Act, FCPA or local 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, including applicable export control regulations, economic sanctions and embargoes on certain countries and persons, anti-money laundering laws, import and customs requirements and currency exchange regulations, collectively referred to as the Trade Control laws.

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 and other sanctions and remedial measures, and legal expenses, which 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.

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.

On June 23, 2016, the United Kingdom held a referendum in which a majority of the eligible members of the electorate voted for the United Kingdom to leave the European Union. The United Kingdom's withdrawal from the European Union is commonly referred to as Brexit. In October 2019, a withdrawal agreement, or the Withdrawal Agreement, setting out the terms of the United Kingdom's exit from the European Union, and a political declaration on the framework for the future relationship between the United Kingdom and European Union was agreed between the UK and EU governments. Under the terms of the EU Withdrawal Agreement, the

United Kingdom withdrew from membership of the European Union on 31 January 2020 and entered into a 'transition period' which is due to expire on 31 December 2020, or the Transition Period. During the Transition Period, the majority of rights and obligations associated with membership of the European Union continue to apply to the United Kingdom. The UK Government's intention is to negotiate a trade agreement with the European Union during the Transition Period, but there is no guarantee that the terms of a trading agreement will be ratified by the UK Government or the European Union prior to the end of the transition period. On 12 June 2020, the UK Government announced that it would not seek to extend the transition period. As a result, the trading relationship between the United Kingdom and the European Union will be governed by WTO rules from 31 December 2020 unless a trading arrangement is agreed and ratified by both parties before that date.

These developments have had and may continue to have a significant adverse effect on global economic conditions and the stability of global financial markets, and could significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. In particular, it could also lead to a period of considerable uncertainty in relation to the U.K. financial and banking markets, as well as on the regulatory process in the United Kingdom and Europe. As a result of this uncertainty, global financial markets could experience significant volatility, which could adversely affect the market price of our ADSs. Asset valuations, currency exchange rates and credit ratings may also be subject to increased market volatility.

We may also face new regulatory costs and challenges that could have an adverse effect on our operations. Depending on the terms of the trading agreement to be negotiated between the United Kingdom and the European Union, the United Kingdom could lose the benefits of global trade agreements negotiated by the European Union on behalf of its members, which may result in increased trade barriers that could make our doing business in Europe more difficult. In addition, currency exchange rates in the pound sterling and the euro with respect to each other and the U.S. dollar have already been adversely affected by Brexit. Furthermore, at present, there are no indications of the effect Brexit will have on the pathway to obtaining marketing approval for any of our Wholly Owned product candidates in the United Kingdom, or what, if any, role the EMA may have in the approval process.

Risks Related to Our Equity Securities and ADSs

We do not know whether an active, liquid and orderly trading market will develop for our ADSs or what the market price of our ADSs will be. As a result, it may be difficult for you to sell your ADSs.

While our ordinary shares have traded on the LSE since 2015, the ADSs registered hereunder constitute the first opportunity to purchase our ADSs in the United States, and no public market has previously existed for our ADSs or ordinary shares in the United States. We intend to apply to have our ADSs listed on Nasdaq, and we expect our ADSs to be quoted on Nasdaq, subject to completion of customary procedures in the United States. Any delay in the commencement of trading of the ADSs on Nasdaq would impair the liquidity of the market for the ADSs and make it more difficult for holders to sell the ADSs. If the ADSs are listed and quoted on Nasdaq, there can be no assurance that an active trading market for the ADSs will develop or be sustained after registration is completed.

The market price of our ADSs may be highly volatile, and you may not be able to resell your ADSs at or above the price that you pay for them.

The market price of our ADSs is likely 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' product candidates that target our Wholly Owned or our Founded Entities' product candidates' target indications;
- an inability for us to obtain additional funding on reasonable terms or at all;
- any delay in filing an IND, BLA or NDA for our Wholly Owned or our Founded Entities' product 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 our Wholly Owned or our Founded Entities' product candidates;
- announcements we make regarding our current product candidates, acquisition of potential new product 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 products;
- inability to obtain adequate clinical or commercial supply for our Wholly Owned or our Founded Entities' product 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 our Wholly Owned or our Founded Entities' product candidates;
- regulatory approval or commercialization of new products 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.

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 June 30, 2020, we had 285,512,461 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.

After purchasing 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 American Depositary Shares.”

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 American Depositary Shares.”

ADSs 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 June 30, 2020, Invesco Asset Management Limited, or Invesco, held approximately 29 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 this registration statement 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.

We are an "emerging growth company," and there are reduced disclosure requirements applicable to emerging growth companies.

We are an "emerging growth company" as defined in the SEC's rules and regulations and we will remain an emerging growth company until the earlier to occur of (1) the last day of 2024, (2) the last day of the fiscal year in which we have total annual gross revenues of at least $1.07 billion, (3) the last day of the fiscal year in which we are deemed to be a "large accelerated filer," under the rules of the U.S. Securities and Exchange Commission,

or SEC, which means the market value of our equity securities that is held by non-affiliates exceeds $700 million as of the prior June 30th, and (4) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, or Section 404;
- not being required to comply with any requirement that has or may be adopted by the Public Company Accounting Oversight Board, or PCAOB, regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- being permitted to provide only two years of audited financial statements in this initial registration statement, in addition to any required unaudited interim financial statements, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- reduced disclosure obligations regarding executive compensation; and
- an exemption from the requirement to seek nonbinding advisory votes on executive compensation or golden parachute arrangements.

We may choose to take advantage of some, but not all, of the available exemptions. We have taken advantage of reduced reporting burdens in this registration statement. In particular, we have not included all of the executive compensation information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our ADSs less attractive if we rely on certain or all of these exemptions. If some investors find our ADSs less attractive as a result, there may be a less active trading market for our ADSs and our ADS price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company may take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We are considering whether we will take advantage of the extended transition period for complying with new or revised accounting standards. Since IFRS makes no distinction between public and private companies for purposes of compliance with new or revised accounting standards, the requirements for our compliance as a private company and as a public company are the same.

Even after we no longer qualify as an emerging growth company, we may still qualify as a "smaller reporting company" if the market value of our ordinary shares held by non-affiliates is below $250 million (or $700 million if our annual revenue is less than $100 million) as of June 30 in any given year, which would allow us to take advantage of many of the same exemptions from disclosure requirements, including reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements.

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 will be 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 intend to 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 "Management."

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, 2021.

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.

We will 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 after we are no longer an emerging growth company, we will 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 will be 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. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will 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 within the prescribed timeframe 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.

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.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to

implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404, or any subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our ADSs.

Our management will be required to assess the effectiveness of these controls annually. However, for as long as we are an emerging growth company, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404. We could be an emerging growth company for up to five years. An independent assessment of the effectiveness of our internal controls over financial reporting could detect problems that our management's assessment might not. Undetected material weaknesses in our internal controls over financial reporting could lead to financial statement restatements and require us to incur the expense of remediation.

In connection with the audit of our consolidated financial statements in accordance with the standards of the PCAOB and U.S. securities laws, a material weakness in our internal control over financial reporting was found to exist. If we fail to implement and maintain effective internal control over financial reporting, we may be unable to accurately report our results of operations, meet our reporting obligations or prevent fraud.

We have been a public company on the LSE with limited requirements to implement and test internal controls under a UK framework. As such, we have not been subject to the internal control over financial reporting requirements of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and the standards of the PCAOB and furthermore our independent registered public accounting firm has not conducted an audit of our internal control over financial reporting in accordance with such rules. As a U.S. public company, Section 404 of the Sarbanes-Oxley Act will require that our management assess our internal control over financial reporting and include a report of management on our internal control over financial reporting in our annual report on Form 20-F beginning with our second annual report. Although we have adhered to and will continue to adhere to all internal control requirements made relevant by the governance of the LSE, the requirements pertaining to the design and implementation of internal controls over financial reporting as contemplated under the Sarbanes-Oxley Act had not been considered in the production of financial statements for the years ended December 31, 2019, 2018 and 2017 for our annual report issued in the United Kingdom. In connection with the audits of our consolidated financial statements as of and for each of the years ended December 31, 2019, 2018 and 2017 conducted in connection with this registration statement, we and our independent registered public accounting firm identified a material weakness in our internal control over financial reporting. A material weakness is a deficiency, or combination of control deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. The material weakness relates to several significant deficiencies that were identified which, in aggregate, rise to the level of a material weakness. These significant deficiencies relate to our process around accounting for costs attributed to individual projects, contract and consolidated review, segregation of duties, expense identification, allocation of employee stock compensation expense, and tax provision relating to underlying investments and related party identification. We have taken steps to remediate the material weakness, including increasing the depth and experience within our accounting and finance organization, designing and implementing improved processes and internal controls based on the COSO framework, and internally testing the effectiveness of our internal controls. As with any internal control framework, we cannot be certain that these efforts will be sufficient to remediate our material weaknesses, prevent future material weaknesses or significant deficiencies from occurring. If we are unable to successfully remediate our existing or any future material weaknesses in our internal control over financial reporting, or if we identify any additional material weaknesses, the accuracy and timing of our financial reporting may be adversely affected. In addition, investors could lose confidence in our reported financial information, and we could be subject to regulatory scrutiny and to litigation from shareholders, which could have a material adverse effect on our business and the price of our ADSs.

Once we cease to be an "emerging growth company" as such term is defined in the JOBS Act, our independent registered public accounting firm must attest to and report on the effectiveness of our internal control over financial reporting. Our independent registered public accounting firm, after conducting its own independent testing, may issue a report that is adverse if it is not satisfied with our internal controls or the level at which our controls are documented, designed, operated or reviewed, or if it interprets the relevant requirements differently from us. In addition, after we become a public company in the U.S., our reporting obligations may place a significant strain on our management, operational and financial resources and systems for the foreseeable future. We may be unable to timely complete our evaluation testing for internal control over financial reporting and any required remediation.

If we fail to achieve and maintain an effective internal control environment, we could suffer material misstatements in our financial statements and fail to meet our reporting obligations, which would likely cause investors to lose confidence in our reported financial information. This could in turn limit our access to capital markets, harm our results of operations, and lead to a decline in the trading price of our securities. 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 and civil or criminal sanctions. We may also be required to restate our financial statements from prior periods.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Upon completion of this registration, we will become 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.

Comprehensive tax reform legislation could adversely affect our business and financial condition.

On December 22, 2017, the Tax Act was signed into law. The Tax Act, among other things, contains significant changes to corporate taxation, including (i) reduction of the corporate tax rate from a top marginal rate of 35 percent to a flat rate of 21 percent, (ii) limitation of the tax deduction for interest expense to 30 percent of adjusted earnings (except for certain small businesses), (iii) limitation of the deduction for net operating losses to 80 percent of current year taxable income in respect of net operating losses generated during or after 2018 and elimination of net operating loss carrybacks, (iv) one-time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, (v) immediate deductions for certain new investments instead of deductions for depreciation expense over time, and (vi) modifying or repealing many business deductions and credits. Any federal net operating loss incurred in 2018 and in future years may now be carried forward indefinitely pursuant to the Tax Act. It is uncertain if and to what extent various states will conform to the newly enacted federal tax law. We will continue to examine the impact the Tax Act may have on our business.

On March 27, 2020, the "Coronavirus Aid, Relief, and Economic Security Act" or the CARES Act was singed into law, which included certain changes in tax law intended to stimulate the U.S. economy in light of the COVID-19 coronavirus outbreak, including temporary beneficial changes to the treatment of net operating losses, interest deductibility limitations and payroll 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—Tax Considerations for Non-U.S. Holders") will 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 "Taxation in the United Kingdom" and "Taxation in the United States."

Our ability to use our net operating losses to offset future taxable income may be subject to certain limitations.

As of December 31, 2019, we had U.S. federal and state net operating loss carryforwards, or NOLs, of approximately $243.0 million due to prior period losses, which, subject to the following discussion, are generally available to be carried forward to offset a portion of 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" is subject to limitations on its ability to utilize its NOLs to offset future taxable income. Similar rules may apply under state tax laws. Our existing NOLs may be subject to limitations arising from previous ownership changes, and if we undergo an ownership change, our ability to utilize NOLs could be further limited by Section 382 of the Code. 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. Additionally, we may no longer be able to utilize losses 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, under the Tax Act, the amount of post 2017 NOLs that we are permitted to deduct in any taxable year is limited to 80 percent of our taxable income in such year, where taxable income is determined without regard to the NOL deduction itself. Federal NOLs generated after December 31, 2017 are not subject to expiration and generally may not be carried back to prior taxable years, except that under the CARES Act, NOLs generated in 2018, 2019 and 2020 may be carried back five taxable years. There is also a risk that due to changes under the Tax Act, regulatory changes, such as suspensions on the use of NOLs, or other unforeseen reasons, our existing NOLs could be unavailable to offset future income tax liabilities. For these reasons, 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 exhanage 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.

The rights of our shareholders may differ from the rights typically offered to shareholders of a U.S. corporation.

We are incorporated under the laws of England and Wales. The rights of holders of ordinary shares and, therefore, certain of the rights of holders of ADSs, are governed by English law, including the provisions of the U.K. Companies Act, or the Companies Act, and by our Articles of Association. These rights differ in certain respects from the rights of shareholders in typical U.S. corporations. See "Description of Share Capital and Articles of Association—Differences in Corporate Law" in this registration statement for a description of the principal differences between the provisions of the Companies Act applicable to us and, for example, the Delaware General Corporation Law relating to shareholders' rights and protections.

The principal differences include the following:

- under English law and our articles of association, each shareholder present at a meeting has only one vote when voting by a show of hands unless demand is made for a vote on a poll, in which case each holder gets one vote per share owned. The Company usually conducts all of its shareholder votes on a poll. Under U.S. law, each shareholder typically is entitled to one vote per share at all meetings;
- under English law, it is only on a poll that the number of shares determines the number of votes a holder may cast. You should be aware, however, that the voting rights of ADSs are also governed by the provisions of a deposit agreement with our depositary bank;
- under English law, subject to certain exceptions and disapplications, each shareholder generally has preemptive rights to subscribe on a proportionate basis to any issuance of ordinary shares or rights to subscribe for, or to convert securities into, ordinary shares for cash. Under U.S. law, shareholders generally do not have preemptive rights unless specifically granted in the certificate of incorporation or otherwise;
- under English law and our articles of association, certain matters require the approval of 75 percent of the shareholders who vote (in person or by proxy) on the relevant resolution (or on a poll of shareholders representing 75 percent of the ordinary shares voting (in person or by proxy)), including amendments to the articles of association. This may make it more difficult for us to complete certain corporate transactions deemed advisable by our board of directors. Under U.S. law, generally only majority shareholder approval is required to amend the certificate of incorporation or to approve other significant transactions;
- in the United Kingdom, takeovers may be structured as takeover offers or as schemes of arrangement. Under English law, for so long as we continue to be subject to the Takeover Code, a bidder seeking to acquire us by means of a takeover offer would need to make an offer for all of our outstanding ordinary shares/ADSs. If acceptances are not received for 90 percent or more of the ordinary shares/ADSs under the offer, under English law, the bidder cannot complete a "squeeze out" to obtain 100 percent control of us. Accordingly, acceptances of 90 percent of our outstanding ordinary shares/ADSs will likely be a condition in any takeover offer to acquire us, not 50 percent as is more common in tender offers for corporations organized under Delaware law. By contrast, a scheme of arrangement, the successful completion of which would result in a bidder obtaining 100 percent control of us, requires the approval of a majority of shareholders voting at the meeting and representing 75 percent of the ordinary shares voting for approval;
- under English law and our articles of association, shareholders and other persons whom we know or have reasonable cause to believe are, or have been, interested in our shares may be required to disclose information regarding their interests in our shares upon our request, and the failure to provide the required information could result in the loss or restriction of rights attaching to the shares, including prohibitions on certain transfers of the shares, withholding of dividends and loss of voting rights. Comparable provisions generally do not exist under U.S. law; and
- the quorum requirement for a shareholders' meeting is a minimum of two shareholders entitled to vote at the meeting and present in person or by proxy or, in the case of a shareholder which is a corporation,

represented by a duly authorized officer. Under U.S. law, a majority of the shares eligible to vote must generally be present (in person or by proxy) at a shareholders' meeting in order to constitute a quorum. The minimum number of shares required for a quorum can be reduced pursuant to a provision in a company's certificate of incorporation or bylaws, but typically not below one-third of the shares entitled to vote at the meeting.

ITEM 4. INFORMATION ON THE COMPANY

A. 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. 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 registration statement is not part of hereof.

Unless the context specifically indicates otherwise, references in this to our "Wholly Owned Programs" refer to LYT-100, LYT-200, LYT-210 and LYT-300 as well as our three discovery platforms, and "Wholly Owned product candidates" and "Wholly Owned Pipeline" refer to LYT-100, LYT-200, LYT-210 and LYT-300. References in this registration statement to our "Founded Entities" refer to the entities that we founded and in which we continue to hold equity. Our Founded Entities are comprised of our Controlled Founded Entities and our Non-Controlled Founded Entities. Anywhere our Founded Entities (or subsets thereof) are listed in this registration statement, we have ordered them by stage of development. References in this registration statement to our "Controlled Founded Entities" refer to Follica, Incorporated, Vedanta Biosciences, Inc., Sonde Health, Inc., Alivio Therapeutics, Inc. and Entrega, Inc. References in this registration statement to our "Non-Controlled Founded Entities" refer to Gelesis, Inc., Karuna Therapeutics, Inc., Akili Interactive Labs, Inc., Vor Biopharma 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 each of our Controlled Founded Entities, we continue to maintain majority voting control. With respect to our Non-Controlled Founded Entities, we may benefit from appreciation in our investment as a shareholder of such companies. Additional information regarding the accounting treatment of our Founded Entities is included under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in our consolidated financial statements included in this registration statement. All references to our parent entity refer to PureTech Health plc.

B. BUSINESS OVERVIEW

Overview

We are a clinical-stage biotherapeutics company dedicated to discovering, developing and commercializing highly differentiated medicines for devastating diseases, including inflammatory and immunological conditions, intractable cancers, lymphatic and gastrointestinal diseases and neurological and neuropsychological disorders, among others. The product candidates within our Wholly Owned Pipeline and the products and product candidates being developed by our Founded Entities were initiated by our experienced research and development team and our extensive network of scientists, clinicians and industry leaders. These products and product candidates are protected by a growing intellectual property portfolio of more than 600 patents and patent applications, of which more than 200 are issued.

We established the underlying programs and platforms that have resulted in 24 products and product candidates that are being advanced within our Wholly Owned Programs or by our Founded Entities. Of these products and product candidates, 12 are clinical-stage and two have been cleared by the U.S. Food and Drug Administration, or FDA, and granted marketing authorization in the European Economic Area, or EEA, and in other countries that recognize the CE Mark. Our Non-Controlled Founded Entities are advancing eight of these product

candidates, including two that are expected to enter Phase 3/Pivotal studies, as well as two FDA-cleared products. Our Controlled Founded Entities are advancing nine of these product candidates, including one that is expected to enter a Phase 3 study and three that are in Phase 2 development, and we are advancing four of these product candidates within our Wholly Owned Pipeline. We and our Founded Entities have relationships with several pharmaceutical companies or their investment arms to advance some of the underlying programs and platforms.

All of these underlying programs and platforms were initially identified or discovered and then advanced by our team through key validation points based on our unique insights into the biology of the Brain, Immune and Gut, or BIG, systems and the interface between those systems, which we refer to as the BIG Axis. The architectural framework supporting BIG Axis cross-talk is built on evidence highlighting the presence of 70 percent of the entire immune cell population in the gut, approximately 500 million neurons innervating the gastrointestinal, or GI, tract, enteric neurons as part of the autonomic nervous system and key components such as the gut epithelial barrier, microbiome, metabolites and neurotransmitters that play key roles in protecting and influencing the immune system and central nervous system, or CNS.

We are led by a proven and seasoned management team of business leaders with significant experience in discovering and developing important new medicines, delivering them to market and maximizing shareholder value. Collectively, the members of our management team have overseen research and development of products supporting 23 regulatory approvals and have been in the C-suite of companies acquired for more than $13 billion in the aggregate.

Our team, network and expertise in the BIG Axis enable us to identify and advance the latest scientific discoveries at the interface of the BIG systems. We begin by collaborating with a cross-disciplinary group of experienced clinicians and the world's leading experts in brain, immune and gut biology in a discovery process that breaks down specific diseases and comprehensively identifies, reviews and empirically tests unpublished scientific discoveries in a modality agnostic and unbiased way. Our model, which employs (1) this collaborative process leveraging our biological expertise in the BIG axis and our scientific network, (2) a disciplined approach to program advancement, and (3) a capital efficient approach to driving clinical developments and value creation, has enabled us to rapidly convert these findings into valuable therapeutic product candidates.

Historically, we have developed these programs and product candidates with strategic allies, including equity partners who helped us to advance those programs via our Founded Entities. As these programs have succeeded and our resources have grown, we have increasingly focused on our Wholly Owned Programs. Our Wholly Owned Programs are designed to harness key immunological and lymphatic system mechanisms. They currently consist of LYT-100, a clinical-stage product candidate we are pursuing for conditions involving inflammation and fibrosis and disorders of lymphatic flow, LYT-200 and LYT-210, two preclinical product candidates targeting foundational immunomodulatory mechanisms we are developing to treat cancer and other immunological disorders, and LYT-300, a preclinical product candidate we are developing for a range of neurological and neuropsychological conditions. Our Wholly Owned Programs also include three discovery programs: Glyph™—our synthetic lymphatic targeting chemistry platform—and Orasome™—our oral biotherapeutics platform—both of which leverage absorption of dietary lipids to traffic therapeutics via the lymphatic system, and our meningeal lymphatics discovery research program for treating neurodegenerative diseases.

Components of our Value

The table below depicts the four components of our value: (1) our Wholly Owned Pipeline, (2) Founded Entities that we have a controlling interest in or from which we are entitled to receive royalty payments, (3) Founded Entities where our interest is limited to our equity ownership and (4) our available cash, cash equivalents and short-term investments at the parent level.

We hold majority voting control of our Controlled Founded Entities and continue to play a role in the development of their product candidates through representation on their board of directors, with respect to Follica, Vedanta, Alivio and Sonde. Our board designees represent a majority of the members of the board of directors of Follica, Vedanta and Alivio and a minority of the members of the board of directors of Sonde. 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 product candidates and FDA-cleared products. Our Non-Controlled Founded Entities have independent management teams, and we do not control the day-to-day development of their respective product candidates.

(1) Our Wholly Owned Pipeline. We are focused on the advancement of our Wholly Owned Pipeline and delivering value to our shareholders by driving our Wholly Owned Programs to key clinical and commercial milestones, while continuing cutting edge research and development efforts to discover and advance new product candidates. The table below includes a summary of our Wholly Owned Programs and their development status.

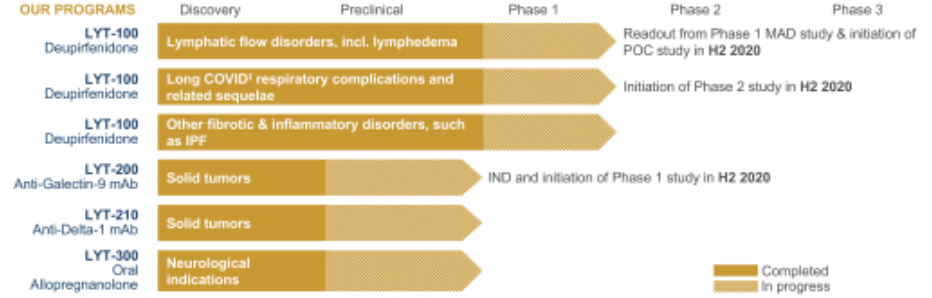
(2) Founded Entities with Controlling Interest or Right to Receive Royalties. The table below summarizes, in order of development stage, the product candidates being developed by our Founded Entities in which we either have a controlling interest or the right to receive royalty payments. We established the underlying programs and platforms that have resulted in the product candidates noted in the table and advanced them through key validation points. Each of these product candidates targets indications related to one or more of the BIG systems, and any value we realize from these product candidates will be through the potential growth and realization of equity and royalty stakes highlighted in the table below.

(3) Founded Entities Limited to Equity Interest. We also hold equity ownership in our Non-Controlled Founded Entities, Akili and Vor. The table below describes these entities, in order of development stage. Our interest in the product candidates of these entities is limited to the potential appreciation of our equity interest in these entities.

(4) Cash, Cash Equivalents and Short-Term Investments. At the parent level, PureTech Health plc had cash, cash equivalents and short-term investments of $387.2 million as of September 30, 2020.

1

Wholly Owned Pipeline



2

Founded Entities with Controlling Interest or Right to Receive Royalties

Founded Entity	PureTech Ownership*	Product Candidate**		Indication	Stage of Development	Royalties*
Non-Controlled Founded Entities with Royalty Interests						
GELESIS	21.0%	Plenity®****	D	Weight management	FDA Cleared, CE Mark	Royalties
		GS100***	D	Adolescent weight management	Preclinical††	
		GS200***	D	Weight management in T2D/prediabetes	Phase 2	
		GS300***	D	NASH/NAFLD	Phase 2 Ready††	
		GS500***	D	Functional constipation	Phase 3 Ready††	
KARUNA	12.8%	KarXT	P	Schizophrenia	Phase 3 Ready	Royalties
				Dementia-related psychosis	Phase 1	
Controlled Founded Entities						
follica	78.3%	FOL-004	P/D	Androgenetic alopecia	Phase 3 Ready	Royalties
VEDANTA	50.4%	VE303	B	High-risk CDI	Phase 2	N/A
		VE416	B	Food allergy	Phase 1/2	
		VE202	B	IBD	Phase 1	
		VE800	B	Solid tumors	Phase 1	
SONDE	45.8%	Sonde One (Depression)***	D	Depression symptom change detection & monitoring	Clinical Trials	N/A
		Sonde One (Respiratory)***	D	Respiratory risk detection & monitoring app	Released	
ALIVIO	78.6%	ALV-107	P	IC/BPS	Preclinical	N/A
		ALV-304	P	IBD	Preclinical	
		ALV-306	P	Pouchitis	Preclinical	

Note: Discovery-stage programs including Entrega, a Controlled Founded Entity, are not included in this table
P = Pharmaceutical Product, B = Biologic, D = Device

3

Founded Entities Limited to Equity Interest

Founded Entity	PureTech Ownership*	Description
AKILI	34.0%	Akili is a leading digital therapeutics company, combining scientific and clinical rigor with the ingenuity of the tech industry with a goal of changing how medicine is developed, delivered and experienced. Akili is pioneering the development of treatments designed to have direct therapeutic activity, delivered not through a traditional pill but via a high-quality video game experience. Akili is evaluating a number of technologies and potential new digital medicines designed to target neural systems to improve associated cognitive functions. Akili received clearance from the FDA for EndeavorRx™ (AKL-T01) as a prescription treatment to improve ADHD and a European CE Mark as a prescription-only digital therapeutic intended for the treatment of attention and inhibitory control deficits in pediatric patients with ADHD.
VOR	11.8%	Vor is a cell therapy company that combines a novel patient engineering approach with targeted therapies to provide a single company solution for patients suffering from hematological malignancies. Vor's proprietary platform leverages its expertise in hematopoietic stem cell, or HSC, biology and genome engineering to remove surface targets expressed by cancer cells by genetically modifying HSCs. Its lead product candidate, VOR33, is in development for acute myeloid leukemia.

4

$387.2M Cash Equivalents and Short-Term Investments at PureTech Parent Level as of September 30, 2020‡‡

* Relevant ownership interests for Founded Entities were calculated on a diluted basis (as opposed to a voting basis) as of June 30, 2020, including outstanding shares, options and warrants, but excluding unallocated shares authorized to be issued pursuant to equity incentive plans. Ownership of Vor is based on the assumption that all future tranches of the most recent financing round are funded. Karuna ownership is calculated on an outstanding voting share basis as of August 26, 2020.

** The letters next to the product candidates denote whether the product candidate is a pharmaceutical product (P), biologic (B), or device (D).

*** These product candidates are regulated as devices and their development has been approximately equated to phases of clinical development.

R PureTech Health has a right to royalty payments as a percentage of net sales. For a description of these agreements, see "Business—Overview."

† Important Safety Information: Plenity is contraindicated in patients who are pregnant or are allergic to cellulose, citric acid, sodium stearyl fumarate, gelatine, or titanium dioxide. Plenity may alter the absorption of medications. Read Sections 6 and 8.3 of the Instructions for Use carefully. Avoid use in patients with the following conditions: esophageal anatomic anomalies, including webs, diverticuli, and rings; suspected strictures (such as patients with Crohn's disease); or complications from prior gastrointestinal (GI) surgery that could affect GI transit and motility. Use with caution in patients with active GI conditions such as gastro-esophageal reflux disease (GERD), ulcers or heartburn. The overall incidence of adverse events (AEs) in the Plenity group was no different than the placebo group. The most common side effects were diarrhea, distended abdomen, infrequent bowel movements, and flatulence. For the safe and proper use of Plenity, U.S. Instructions for Use or the EU Instructions for Use.

† Contingent on FDA review of the research plan.

‡ Long COVID is a term being used to describe the emerging and persistent complications following the resolution of COVID-19 infection.

‡‡ PureTech Level Cash Reserves at September 30, 2020 represent cash balances and short-term investments held at PureTech Health LLC, PureTech Management, Inc., PureTech Health PLC, PureTech Securities Corporation of $372.0 million and held at PureTech LYT Inc., our internal pipeline, of $15.2 million, all of which are wholly owned entities of PureTech, excluding cash balances and short-term investments of $38.3 million held at Controlled Founded Entities which are not wholly owned.

Key Pipeline Components and Expected Milestones Through 2021

Through 2021, we anticipate many significant potential milestones across our Wholly Owned Programs and Founded Entities, including at least nine clinical readouts, at least 12 clinical study initiations and the full commercial rollout of two products. Of these, four clinical readouts and four clinical study initiations are anticipated within our Wholly Owned Programs. Additionally, we expect the continued progress of discovery and preclinical programs, as well as the potential for additional strategic partnerships and transactions and the growth of value through our equity and royalty holdings in our Founded Entities. Our Wholly Owned Programs and certain of our Founded Entities' programs that contribute to our value are as follows:

Our Wholly Owned Programs Harnessing Immunological and Lymphatic System Mechanisms:

- **LYT-100, Our Lead Clinical-Stage Product Candidate Targeting a Range of Inflammatory, Fibrotic, Lymphatic Flow Disorders, and Other Related Indications:** We are advancing our wholly-owned product candidate LYT-100 for the potential treatment of conditions involving inflammation and fibrosis and disorders of lymphatic flow, including lung dysfunction conditions (e.g., idiopathic pulmonary fibrosis, or IPF, unclassifiable interstitial lung diseases, or uILDs, and Long COVID respiratory complications and related sequelae) and lymphedema. LYT-100 is currently being evaluated in a multiple ascending dose Phase 1 clinical trial, which we expect data to readout in the second half of 2020. We intend to commence a proof-of-concept, or POC, study in patients with breast cancer related, upper limb secondary lymphedema in the second half of 2020, with topline results

anticipated in the second half of 2021. We also intend to commence a Phase 2 study in Long COVID respiratory complications and related sequelae in the second half of 2020, with a potential readout in the second half of 2021. We also intend to explore the application of other potential new product candidates from our meningeal lymphatics platform for a range of neurodegenerative diseases. We are conducting a Phase 1 trial and plan to conduct Phase 2 and POC trials for LYT-100 outside of the United States and are following the applicable regulatory requirements in this jurisdiction. We intend to file an Investigational New Drug Application, or IND, with the FDA for LYT-100 prior to initiating a trial in the United States.

- **LYT-200 and LYT-210, Two Preclinical Immuno-Oncology, or IO, Product Candidates Harnessing Key Immune Cell Trafficking and Programming Mechanisms:** The lymphatic system plays a crucial role in programming immune cells for precise functions and trafficking them to specific tissues. By modulating immune cell trafficking and programming, we are developing product candidates for the potential treatment of cancer and other immunological disorders. We are advancing LYT-200, targeting galectin-9, for a range of cancer indications, and LYT-210, targeting immunomodulatory gamma delta-1, or gd1, T cells, for a range of cancer indications and autoimmune disorders. We intend to file an IND for LYT-200 and initiate a Phase 1 clinical trial in solid tumors in the second half of 2020, with results anticipated in 2021. We also intend to advance additional preclinical and biomarker studies for LYT-210 in 2021.
- **LYT-300, Preclinical Product Candidate Developed Using our Glyph™ Technology Platform, Targeting Neurological and Neuropsychological Conditions:** The most advanced product candidate from our Glyph technology platform is LYT-300 (oral allopregnanolone), which is being evaluated in a preclinical setting for a range of neurological and neuropsychological conditions. We expect to initiate a first-in-human clinical trial with LYT-300 by the end of 2021.
- **Our Discovery Platforms – Glyph (Lymphatic Targeting Chemistry Platform) and Orasome™ (Oral Biotherapeutics Platform) – Leveraging Absorption of Dietary Lipids to Traffic Therapeutics via the Lymphatic System:** We are harnessing the role of the lymphatic system in the absorption of dietary lipids to orally administer and traffic therapeutics via the lymphatic system. Our Glyph and Orasome technology platforms are based on this key function of the lymphatic system. We expect preclinical proof-of-concept data in 2021 and results from an additional preclinical non-human primate proof-of-concept study in 2021 for our Orasome technology platform. We also expect to advance additional product candidates from these platforms internally, and to potentially continue to broaden the platforms through strategic collaborations around non-core applications, beyond our existing discovery collaboration with a large pharmaceutical company.

Certain of Our Controlled Founded Entities:

- **Follica:** Follica, Incorporated, or Follica, which is developing a regenerative biology platform designed to treat androgenetic alopecia, epithelial aging and other medical conditions, is advancing FOL-004 for the treatment of hair loss in male androgenetic alopecia. In December 2019, Follica announced topline results from a safety and efficacy optimization study. Follica announced the completion of an End-of-Phase 2 meeting with the FDA in June 2020, which supports the progression into Phase 3 development. The initiation of a Phase 3 registration program is expected in 2021. We are party to a royalty agreement with Follica pursuant to which we are entitled to low single-digit royalties on worldwide net sales of certain commercialized products and a percentage of any sublicense income for certain of its technologies within the range of mid single-digit and mid teen percentages. Our interest in Follica also includes our equity ownership of 78.3 percent at June 30, 2020.

- **Vedanta:** Vedanta Biosciences, Inc., or Vedanta, which is developing a new category of therapies for immune-mediated diseases based on a rationally-defined consortia of human microbiome-derived bacteria, expects topline data from a Phase 2 clinical trial for VE303 in high-risk *C. difficile* infection, or CDI, in 2021; topline data from a first-in-patient clinical trial of VE800 in combination with Bristol-Myers Squibb's checkpoint inhibitor Opdivo® (nivolumab) in patients with selected types of advanced or metastatic cancer in 2021; and topline data from a Phase 1/2 clinical trial for VE416 in food allergy in 2021. Vedanta announced topline data from two Phase 1 studies in healthy volunteers of VE202, a product candidate being developed for inflammatory bowel disease, or IBD, in June 2020 and expects to advance VE202 into a Phase 2 study for IBD in 2021. Our interest in Vedanta is limited to our equity ownership of 50.4 percent at June 30, 2020.

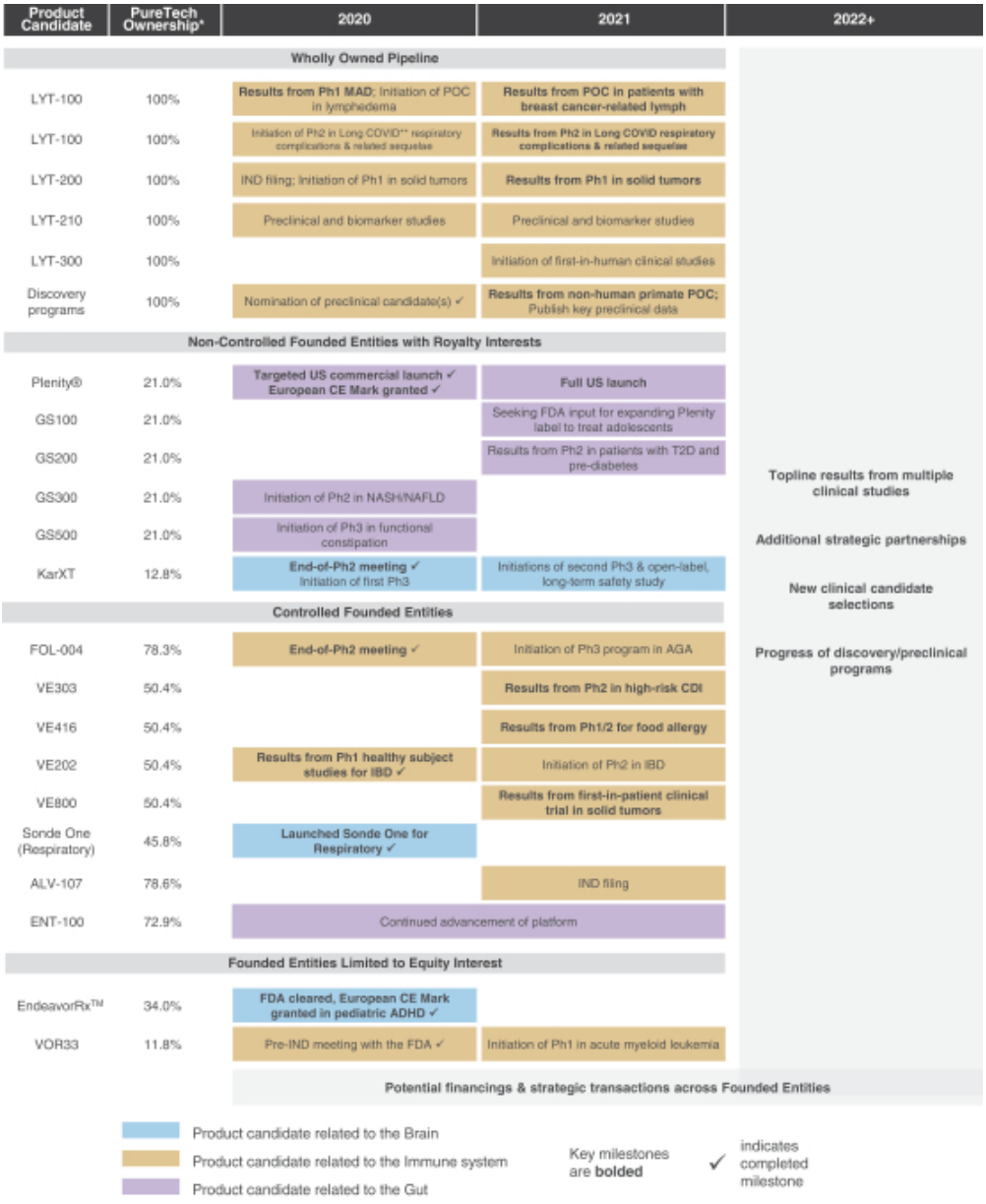
Certain of Our Non-Controlled Founded Entities:

- **Gelesis:** Gelesis, Inc., or Gelesis, which is developing oral therapeutics based on a novel, superabsorbent hydrogel technology platform to treat obesity and other chronic diseases related to the GI pathway, received clearance from the FDA in April 2019 and European marketing authorization in June 2020 to market and sell its lead product Plenity® (formerly known as Gelesis100) as an aid for weight management in adults with a Body Mass Index, or BMI, of 25-40 kg/m^2, when used in conjunction with diet and exercise. Gelesis plans to bring Plenity to the U.S. first, where it is now available to a limited extent while Gelesis ramps up commercial operations and inventory for a full launch in 2021. Gelesis plans to seek FDA input on the requirements for expanding the Plenity label for treating adolescents. Gelesis is also advancing a pipeline of product candidates focused on treating GI disorders. Gelesis expects topline results from a Phase 2 study of GS200 for weight management and glycemic control in adults with type 2 diabetes or pre-diabetes in 2021, to initiate a Phase 2 study of GS300 in non-alcoholic steatohepatitis and non-alcoholic fatty liver disease, or NASH/NAFLD, in the second half of 2020 and to initiate a Phase 3 study for GS500 in functional constipation in the second half of 2020. We have entered into a royalty and sublicense income agreement with Gelesis, pursuant to which we are entitled to low single-digit royalties on the worldwide net sales of certain commercialized products, as well as a low teen percentage of any income Gelesis receives from sublicensing certain of its technology. Our interest in Gelesis also includes our equity ownership of 21.0 percent at June 30, 2020.
- **Akili:** Akili Interactive Labs, Inc., or Akili, is pioneering the development of treatments designed to have direct therapeutic activity, delivered not through a traditional pill but via a high-quality video game experience. Akili has a broad pipeline of programs to target cognitive dysfunction associated with medical conditions across neurology and psychiatry. Akili received clearance from the FDA and European marketing authorization in June 2020 for EndeavorRx™ (formerly known as AKL-T01) as a prescription treatment for children with ADHD. Delivered through a captivating video game experience, EndeavorRx is indicated to improve attention function as measured by computer-based testing in children ages 8-12 years old with primarily inattentive or combined-type ADHD, who have a demonstrated attention issue. Akili expects that the EndeavorRx treatment will be available with a prescription to families soon. Our interest in Akili is limited to our equity ownership of 34.0 percent at June 30, 2020.
- **Karuna:** Karuna Therapeutics, Inc., or Karuna, which is developing novel therapies with the potential to transform the lives of people with disabling and potentially fatal neuropsychiatric disorders, including schizophrenia and dementia-related psychosis, is developing KarXT, an investigational product candidate designed to selectively activate muscarinic acetylcholine receptors in the brain. KarXT is Karuna's proprietary product candidate, which combines xanomeline, a muscarinic receptor agonist, with trospium chloride, an FDA-approved and well established muscarinic receptor antagonist that has been shown not to measurably cross the blood-brain barrier, to preferentially stimulate M1/M4 muscarinic receptors in the brain without stimulating muscarinic receptors in peripheral tissues in order to achieve meaningful therapeutic benefit in patients with psychotic and cognitive disorders. In

November 2019, Karuna announced topline results from EMERGENT-1, its Phase 2 clinical trial of KarXT for the treatment of acute psychosis in patients with schizophrenia, in which KarXT met the trial's primary endpoint with a statistically significant ($p<0.0001$) and clinically meaningful 11.6 point mean reduction in total Positive and Negative Syndrome Scale, or PANSS, over placebo at week five (-17.4 KarXT vs. -5.9 placebo), with similar discontinuation rates between KarXT (20 percent) and placebo (21 percent). The study enrolled 182 schizophrenia patients with acute psychosis, 90 of whom received KarXT. The number of discontinuations due to treatment emergent AEs were equal in the KarXT and placebo arms (n=2 in each group). One SAE was observed in the KarXT treatment group, in which the patient discontinued treatment and subsequently sought hospital care for worsening psychosis, meeting the regulatory definition of an SAE. Karuna held an End-of-Phase 2 meeting with the FDA in June 2020, the outcome of which supports the progression of KarXT into Phase 3 development. Karuna plans to initiate two five-week inpatient trials evaluating the efficacy and safety of KarXT for the treatment of acute psychosis in adults with schizophrenia. The first Phase 3 trial, EMERGENT-2, is expected to commence by the end of 2020. Additionally, Karuna anticipates topline results from a Phase 1b clinical trial in healthy volunteers to assess the safety and tolerability of KarXT early in the second quarter of 2021. This Phase 1b trial is designed to demonstrate safety and tolerability of KarXT in healthy elderly volunteers in order to select the most appropriate dose to carry forward into future studies in patients with dementia-related psychosis. We have entered into an exclusive license agreement with Karuna pursuant to which we are entitled to receive low single-digit royalties and up to $10.0 million in milestone payments on worldwide net sales of any commercialized product covered by the granted license. Our interest in Karuna also includes our equity ownership of 12.8 percent at August 26, 2020.

The chart below depicts milestones that are anticipated to be achieved by our Wholly Owned Programs and our Founded Entities' products and product candidates through 2021 and our progress on previously declared milestones for 2020:

Upcoming milestones



* Relevant ownership interests for Founded Entities were calculated on a diluted basis (as opposed to a voting basis) as of June 30, 2020, including outstanding shares, options and warrants, but excluding unallocated shares authorized to be issued pursuant to equity incentive plans. Ownership of Vor is based on the

assumption that all future tranches of the most recent financing round are funded. Karuna ownership is calculated on an outstanding voting share basis as of August 26, 2020.

** Long COVID is a term being used to describe the emerging and persistent complications following the resolution of COVID-19 infection.

Our Scientific Focus: The Brain-Immune-Gut (BIG) Axis

The product candidates being advanced within our Wholly Owned Programs and by our Founded Entities, and our work in these areas, in close collaboration with leading academic and clinical experts, has led us to focus on the biological interplay among these three systems, which we refer to as the BIG Axis. The architectural framework supporting BIG Axis cross-talk is built on evidence highlighting the presence of 70 percent of the entire immune cell population in the gut, approximately 500 million neurons innervating the GI tract, enteric neurons as part of the autonomic nervous system and key components such as the gut epithelial barrier, microbiome, metabolites and neurotransmitters that play key roles in protecting and influencing the immune system and CNS.

The brain, immune system and gut lymphatic system form an interconnected adaptive network to respond to acute and chronic environmental change. Using the immune system to act as a bridge, the body relies on the bidirectional relationship between the gut and brain to maintain normal homoeostasis. Dysregulation of immune signaling through gut inflammation, microbiome changes and a compromised intestinal barrier all contribute to a range of immunological, GI and neurology and neuropsychological disorders. We have been at the forefront of research and development in the BIG Axis, including the role of gut-immune transport, immune-microbial signaling, gut barrier dysfunction and repair and gut and inflammation selective targeting strategies. In our Wholly Owned Programs, we are pursuing strategies to directly reach the immune system via the mesenteric lymph nodes, addressing lymphatic flow and vessel restoration disorders and targeting immunosuppressive and pathogenic lymphocytes.

Recent scientific advances, including the work of our network of scientific collaborators, have uncovered the lymphatic system as one of the most critical players in the BIG Axis. In addition to maintaining the balance of interstitial fluid that surrounds the body's cells, the lymphatic system plays a key role in conducting surveillance of the immune system through an intricate network of vessels connecting the over 300 lymph nodes, serving as a "superhighway" for programming immune cells for specific functions and trafficking them to specific tissues. The mesenteric lymph node group around the intestines serves as the primary interface between the gut and the immune system and for programming circulating adaptive immune cells. The recent discovery of meningeal lymphatics in the brain, an area once thought to have immune privilege, has shed new light on neurodegenerative diseases and lymphatic vessel aging.

Through our scientific leadership in the BIG systems and the BIG Axis, we have created the underlying programs and product candidates that have the potential to treat inflammatory and immunological conditions, intractable cancers, lymphatic and GI diseases and neurological and neuropsychological disorders, among others.

Our Model

We employ the following process to identify and develop product candidates:

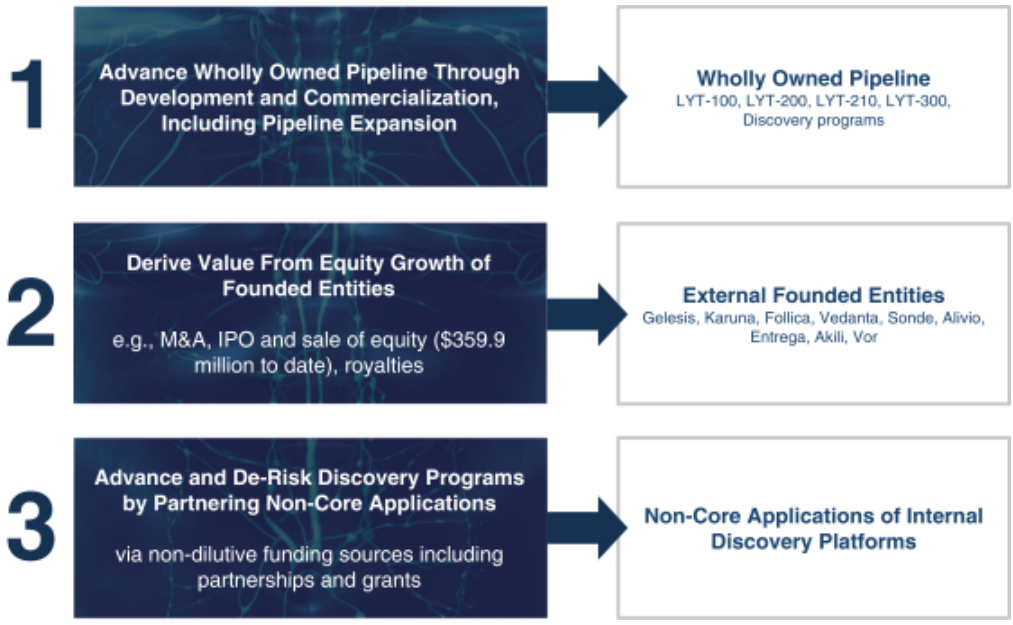
- ***Step 1: A Collaborative Discovery Process Leveraging our Biological Expertise in the BIG Axis and our Scientific Network***: We collaborate with the world's leading domain experts on a disease-specific discovery theme through the lens of BIG Axis biology. All of our Wholly Owned Programs target one or more of the BIG systems and we prioritize programs that have the potential to reduce early development risk based on preliminary signals of activity in humans and promising tolerability profiles. We have proven our ability to efficiently leverage our cross-disciplinary research and discovery efforts across multiple indications and potential therapeutic areas. Our program collaborators

and co-inventors across our Wholly Owned Programs and Founded Entities' programs include leading academic minds; recipients of major awards such as the Nobel Prize, the U.S. National Medal of Science, the Charles Stark Draper Prize and the Priestley Medal; members of prestigious institutions such as the Howard Hughes Medical Institute, all three of the National Academies and world renowned academic institutions such as Harvard, MIT, Yale, Columbia, Johns Hopkins, Imperial College of London and Cornell, among others; and former senior executives and board members at some of the world's largest pharmaceutical companies.

- ***Step 2: A Disciplined Approach to Program Advancement***: We employ a rigorous and disciplined approach to research and development. The breadth and depth of our Wholly Owned Pipeline and our Founded Entities' programs allow us to quickly pivot resources to the more promising therapeutic opportunities, strategically reallocate capital across programs and terminate Wholly Owned Programs we choose not to pursue without adversely impacting the development of other programs. We, through our internal resources and with our extensive expert network and collaboration partners, repeat key academic work and conduct focused experiments both internally and externally to rapidly advance those that we believe hold the greatest promise and deprioritize less attractive programs. Collectively, these activities decrease the risk of any individual program event negatively impacting our Wholly Owned Pipeline and enable us to preserve capital for the programs across our Wholly Owned Pipeline and Founded Entities that we believe have the greatest opportunity for value creation in alignment with our shareholders.
- ***Step 3: A Capital Efficient Approach to Driving Clinical Development and Value Creation***: Our management team has successfully driven these product candidates from early stage research and development, through POC and into clinical trials and has supported dedicated teams at our Non-Controlled Founded Entities through pivotal trials and FDA clearance. We have financed our development efforts through strategic collaborations, pharmaceutical partnerships, non-dilutive funding mechanisms, including through the sale of our Founded Entities' equity and through grants, and public and private equity financings. We leverage shared resources, institutional knowledge and infrastructure between our earlier-stage Founded Entities and development efforts within our Wholly Owned Programs to advance our programs efficiently prior to POC. This approach has enabled the discovery and development of 24 products and product candidates to date, including two that have been cleared by the U.S. FDA and granted marketing authorization in the EEA, between our Wholly Owned Programs and our Founded Entities, in which we retain equity ownership ranging from 78.6 percent to 11.8 percent. At the parent level, PureTech Health plc had cash equivalents and short-term investments of $387.2 million as of September 30, 2020. From January 1, 2017 to June 30, 2020, our Founded Entities strengthened their collective balance sheets by attracting $1.084 billion in investments and non-dilutive funding, including $997.6 million from third parties. As part of our disciplined capital management, we have been able to generate $359.9 million in non-dilutive funding, as of August 26, 2020, through the sales of portions of Founded Entity shares.

Our Strategy

Driving Development of Potential New Medicines and Accretion of Value Via Three Paths



Our goal is to identify, invent, develop and commercialize innovative new categories of therapeutics that are derived from our deep understanding of the BIG Axis to address significant unmet medical needs. To achieve this goal, key components of our strategy include:

- ***Advancing Wholly Owned Programs Through Development and Commercialization, Including Pipeline Expansion:***
  - ***Progressing LYT-100, LYT-200, LYT-210 and LYT-300 through clinical studies:*** We are developing novel classes of immunomodulatory drugs to treat serious diseases, including lung dysfunction, oncology, lymphatic, neurological and neuropsychological disorders. In July 2019, we acquired LYT-100, a small molecule product candidate that was well-tolerated in a Phase 1 clinical trial in healthy volunteers and showed a desirable pharmacokinetic, or PK, profile suitable for oral administration. Due to LYT-100's observed potent anti-fibrotic and anti-inflammatory activity in preclinical models and encouraging Phase 1 clinical trial data, we are advancing our wholly-owned product candidate LYT-100 for the potential treatment of conditions involving inflammation and fibrosis and disorders of lymphatic flow, including lung dysfunction conditions (e.g., IPF, uILDs and Long COVID respiratory complications and related sequelae) and lymphedema. LYT-100 is currently being evaluated in a multiple ascending dose Phase 1 clinical trial, which we expect data to readout in the second half of 2020. We intend to commence a POC study in patients with breast cancer-related, upper limb secondary lymphedema in the second half of 2020, with topline results expected in the second half of 2021. We also plan to commence a Phase 2 study in Long COVID respiratory complications and related sequelae in the second half of 2020, with topline results expected in the second half of 2021. We are developing LYT-200, an investigational, fully human, monoclonal antibody, or mAb, that is designed to target galectin-9, a protein that regulates immunosuppression and is prominently expressed in hard-to-treat cancers such as colorectal cancer, or CRC, cholangiocarcinoma, or CCA, and pancreatic cancer. We believe LYT-200 has shown preliminary POC in both preclinical human and mouse cancer

models. We plan to file an IND for LYT-200 and to initiate a Phase 1 study in solid tumors in the second half of 2020. LYT-210 is an investigational, fully human, mAb targeting immunosuppressive or pathogenic gd1 T cells. We are also developing LYT-300, oral allopregnanolone, and evaluating its potential to address a range of neurological and neuropsychological conditions. We expect to initiate a first-in-human clinical study with LYT-300 by the end of 2021.

- ***Harnessing our proprietary drug discovery and development capabilities to drive pipeline maturation and expansion:*** We are pioneering the development of therapeutic candidates by leveraging our unique insights into the lymphatic system and the BIG Axis. Our Wholly Owned Programs currently comprise four proprietary product candidates and three innovative technology platforms. We intend to leverage our proprietary technology platforms, as well as our extensive network with world-leading scientists in immunology and lymphatics and major pharmaceutical companies, to generate and acquire additional novel product candidates. To do so, we will rely on the track record of our team, which has been instrumental in the generation of 24 products and product candidates to date between our Wholly Owned Programs and our Founded Entities, including two that have been cleared by the U.S. FDA and granted marketing authorization in the EEA, as well as our established internal identification and prioritization approach. We will continue to take advantage of our differentiated model to manage the risk of any single program and quickly redeploy resources towards performing assets.
- ***Maximizing the impact of our Wholly Owned product candidates by expanding development across multiple indications*:** We aim to focus our development efforts on product candidates that have the potential to treat multiple diseases and plan to develop them in additional indications where warranted. For example, we believe that our product candidate LYT-100 has the potential to be evaluated in multiple fibrotic indications beyond our initial target indication of lymphedema, such as Long COVID respiratory complications and related sequelae, IPF, uILD, and focal segmental glomerulosclerosis, or FSGS. We are initially developing our other internal product candidates, LYT-200 and LYT-210, for the treatment of certain cancers, including CCA, CRC and pancreatic cancers, among others, and we are evaluating LYT-210 for the potential treatment of GI autoimmune diseases. Lastly, we are evaluating LYT-300 for a range of neurological and neuropsychological conditions.

- ***Deriving Value from Equity Growth of Our Founded Entities:*** Historically, we have pursued a variety of strategic options to fund and drive the development of our Founded Entities' product candidates, including private and public financings and multiple partnerships and collaborations with selected partners. In the preliminary stages of our growth, we partnered with equity investors, pharmaceutical and biotechnology companies and government and non-governmental organizations for certain of our Founded Entities which are now in advanced stages and have the potential for near-term value creation with significant upside potential. Going forward, we intend to participate in private and public financings, enter into partnerships and collaborations, partner with equity investors, pharmaceutical and biotechnology companies and government and non-governmental organizations for certain of our Founded Entities and strategically monetize certain of our our equity holdings in our Founded Entities after significant value creation has occurred, generating non-dilutive financing. For example, in 2020, PureTech generated cash proceeds of $347.5 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 to derive value from future growth of that entity. We may create additional entities opportunistically based on future strategic imperatives.
- ***Advancing Discovery Programs by Partnering Non-Core Applications via Non-Dilutive Funding Sources, Including Partnerships and Grants, to Enable Retention of Value:*** As we further develop our Wholly Owned Programs through key value inflection points, we may opportunistically enter into strategic partnerships when we believe that such partnerships could add value to the development or

potential commercialization of our Wholly Owned product candidates. We will also continue to pursue government grant funding and discovery partnerships that allow us to maintain most of the value of our platforms while offsetting operational costs.

We believe this combination of development of our Wholly Owned Programs, Founded Entity advancement and non-dilutive partnerships and funding provides us with a unique and multi-pronged engine fueling potential future growth.

Our Focus on the Lymphatic System

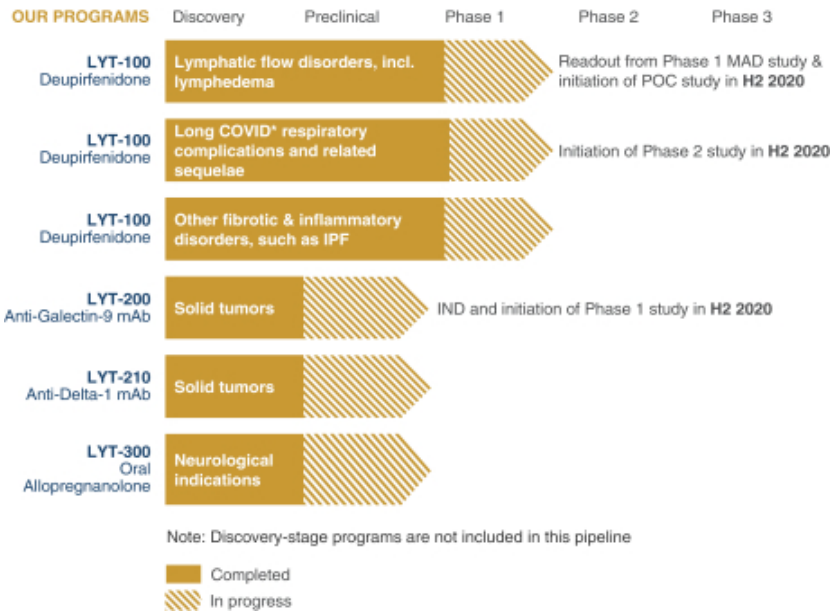
The lymphatic system is a network of tissues and organs in the body that fulfills three essential functions: (1) maintaining the balance of the fluid that surrounds the body's cells, or interstitial fluid, (2) conducting surveillance of the immune system and serving as a "superhighway" for immune cell trafficking and (3) absorbing dietary lipids through an intricate network of vessels in the intestinal tract.

Dysfunction of the lymphatic system is associated with numerous disease states, and we believe that restoring lymphatic function in various disease settings can yield meaningful patient benefit. Our proprietary Wholly Owned Programs leverage these critical functions of the lymphatic system to produce product candidates with the potential to treat serious diseases:

- ***Maintaining balance of fluids***: We are leveraging insights into the lymphatic system by developing clinical-stage product candidate LYT-100 and several discovery-stage programs to address disorders involving impaired lymphatic flow and other conditions involving inflammation and fibrosis, such as lymphedema and certain neurological disorders.
- ***Immune modulation***: The lymphatic system plays a crucial role in programming immune cells for precise functions and trafficking them to specific tissues. By modulating immune cell trafficking and programming, we are developing product candidates for the treatment of cancer and immunological disorders. We are advancing LYT-200, our product candidate targeting galectin-9 in solid tumors and LYT-210, our product candidate targeting immunosuppressive gd1 T cells in solid tumors and autoimmune disorders, for a range of cancer indications and autoimmune disorders.
- ***Driving therapeutics through lymphatics***: We are harnessing the role of the lymphatic system in the absorption of dietary lipids to orally administer and traffic therapeutics via the lymphatic system where immune cells are programmed. LYT-300 and our Glyph (lymphatic targeting) and Orasome (oral biotherapeutics) platforms are based on this key function of the lymphatic system.

Our Wholly Owned Programs

We are advancing our Wholly Owned Programs that are designed to harness immunological and lymphatic system mechanisms for the treatment of lung dysfunction, oncology, lymphatic, neurological and neuropsychological disorders. Our Wholly Owned Programs consist of the programs within our Wholly Owned Pipeline and our three discovery platforms. The following chart summarizes the programs in our Wholly Owned Pipeline and their current status:



* Long COVID is a term being used to describe the emerging and persistent complications following the resolution of COVID-19 infection.

LYT-100: Deupirfenidone, Our Most Advanced Wholly Owned Product Candidate for the Potential Treatment of Conditions Involving Inflammation and Fibrosis and Disorders of Lymphatic Flow

Our lead wholly-owned product candidate, LYT-100, is being advanced for the potential treatment of conditions involving inflammation and fibrosis and disorders of lymphatic flow, including lung dysfunction conditions (e.g., IPF, uILDs and Long COVID respiratory complications and related sequelae) and lymphedema. LYT-100 (deupirfenidone) is a selectively deuterated form of pirfenidone, with anti-inflammatory, antioxidant and antifibrotic properties and superior PK properties and activity compared to pirfenidone. LYT-100 shares pirfenidone's beneficial mechanism of action but is expected to be metabolized slower and with less variability between patients compared with pirfenidone.

There are approximately 130,000 people living with IPF or uILD in the United States. Pirfenidone is effective in slowing fibrotic pulmonary decline in IPF, has been granted "breakthrough" status in uILD, has shown activity in investigational clinical studies in patients with FSGS as well as other indications and has demonstrated activity in a preclinical model of lymphedema and radiation-induced fibrosis. Deuteration of pirfenidone involves substitution of specific hydrogens in a chemical structure for deuterium, a non-toxic, naturally occurring form of hydrogen. A similar modification was determined by the FDA to create a new chemical entity. Deuteration of pirfenidone improves the stability of the resulting drug, attenuates the breakdown of the drug's active metabolite and has shown a differentiated PK profile compared to non-deuterated pirfenidone in clinical studies. We believe this differentiated PK profile could enable potentially improved efficacy, less frequent dosing, improved tolerability, reduced interpatient variability in drug metabolism and reduced drug-drug interactions. LYT-100 is

extensively protected by composition of matter patents, as well as patents covering methods of use and process of manufacture for deupirfenidone as well as other claims.

LYT-100 was originally developed by Auspex Pharmaceuticals, Inc., or Auspex, for the treatment of IPF. We selected and acquired LYT-100 in July 2019 based on insights into the lymphatic system gained internally and via unpublished findings through our network of collaborators, coupled with the relationships of our team members and their insights into the program previously developed at Auspex. These insights led us to an initial target indication of lymphedema, and we also believe that LYT-100 has the potential to be evaluated in multiple fibrotic and inflammatory indications beyond our initial target indication of lymphedema, such as Long COVID respiratory complications and related sequelae, IPF, interstitial lung diseases, and FSGS. Auspex was a leader in deuteration chemistry and was acquired by Teva Pharmaceutical Industries in 2015. Pursuant to an Asset Purchase Agreement by and between Auspex and PureTech Health LLC, dated July 15, 2019, 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.

Following our acquisition of LYT-100, we have conducted preclinical studies to validate the unpublished findings in a lymphedema model and initiated a multiple ascending dose and food effect Phase 1 clinical trial, data from which we expect to readout in the second half of 2020. We intend to progress LYT-100 for the potential treatment of respiratory conditions and secondary lymphedema, followed by other inflammatory, fibrotic and lymphatic disorders.

LYT-100 for Long Covid Respiratory Complications and Related Sequelae

COVID-19 (SARS-CoV-2 infection)

The COVID-19 pandemic has affected tens of millions of people around the world. The virus can be deadly and there are a number of therapeutic approaches that target the acute phase of the disease. There is increasing data around the longer-term complications of COVID-19, referred to as Long COVID, including preliminary data regarding respiratory issues that persist. Survivors of the virus can have lung fibrosis that causes shortness of breath and other problems that could potentially last for years. In survivors, disease and invasive treatment both create fibrosis and the risk of persistently diminished lung function. Lung fibrosis can reduce the function of the lung, as observed by changes in pulmonary function tests, and can cause difficulties with activities of daily living. Clinicians are already documenting rapid progression to lung fibrosis in patients with COVID-19.

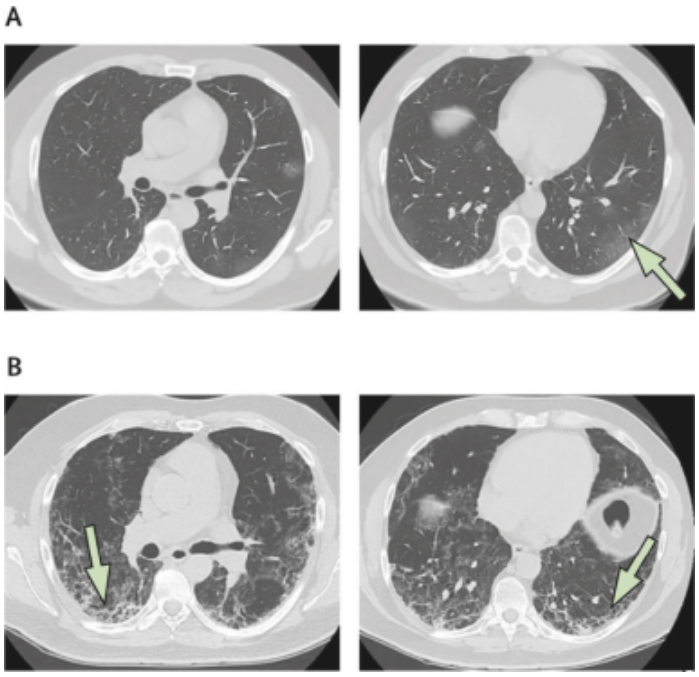


Figure X. Lung CT of a COVID-19 patient. (A) Ground glass opacities (GGO) in the left lower lobe (arrow). (B) Three weeks later, in the same lung zones, the disease has rapidly progressed and fibrotic changes are now evident (arrows). Figure from Spagnolo et al., 2020

The potential for fibrosis-mediated lung damage and the unprecedented scale of the current pandemic creates an enormous public health challenge: some patients who have recovered from the acute symptoms of COVID-19 have persistent pulmonary dysfunction. New therapeutic options are needed to address the underlying inflammation and fibrotic mechanisms that lead to respiratory complications that persist following the resolution of COVID-19 infection.

The Role of Fibrosis and Inflammation in Respiratory Complications and Related Sequelae that Persist Following the Resolution of COVID-19 Infection

In COVID-19, as currently understood, the acute disease course can be modeled in three stages: first, an initial response mounted by the immune system to the virus; second, a secondary interferon-driven immune response

leading to lung tissue damage; and third, a final hyperinflammation in which an inflammatory macrophage response leads to aberrant lung tissue repair and ultimately fibrosis. As the disease progresses, patients with more severe disease have an imbalanced macrophage population in lung tissue tilted toward inflammation and fibrosis. The immune system transitions from repelling the initial insult to repair, but inflammation can lead instead to fibrosis (Figure X). Similar disease progression has been observed in patients with acute respiratory distress syndrome, or ARDS, undergoing mechanical ventilation.

COVID-19 post-acute injuries appear to mimic respiratory complications of other viral pneumonias like Severe Acute Respiratory Syndrome, or SARS, and Middle East Respiratory Syndrome, or MERS. Up to one third of SARS and MERS survivors had abnormal pulmonary testing and lung imaging that persists for years. Post-acute injuries are hypothesized to be due to a cascade of inflammation and fibrosis that begins during the acute phase of COVID-19 and continues after the infection resolves the post-acute sequelae of the disease. A high proportion of mild, moderate and severe COVID-19 patients (up to 53 percent) already show signs of lung fibrosis at three weeks post symptom onset. Clinicians are also reporting lung fibrosis that persists beyond the acute infection, and of COVID-19 patients with pneumonia, 44 percent had fibrosis on CT imaging at 9 days post-discharge.

Fibrosis in the lungs can impair lung capacity, pulmonary function, and gas exchange. In early studies of COVID-19 patients with lung fibrosis had higher rates of shortness of breath, or dyspnea, than those without fibrosis. Emerging data from pulmonary function testing also suggest quantitative changes in COVID-19 survivors who were hospitalized. After discharge, COVID-19 patients had reduced diffusing capacity of the lung for carbon monoxide percent predicted (DLCO percent), as well as other abnormal pulmonary function tests. The observed clinical time course of COVID-19 and its similarity to SARS may suggest a limited window of recovery for the lungs, with no additional healing of fibrotic lesions or diffusing capacity after a year. Similarly, patients who survive the acute phase of ARDS may either suffer from lingering long-term pulmonary complications or even develop progressive forms of pulmonary fibrosis. We believe resolving fibrosis is important for preventing post-acute complications, and there is likely a critical window of intervention in COVID-19 and other viral pneumonias. There are no approved therapies for post-acute respiratory complications of pneumonia driven by this process, and given the scale of the ongoing pandemic, novel therapies are urgently needed.

Unmet Need in Long COVID

COVID-19 is causing a global crisis driven by acute illness and mortality. After the acute infection resolves, the persistent suffering by COVID-19 “long-haulers,” referred to as Long COVID, could lead to an unprecedented public health burden. Therapeutic options are needed for COVID-19 and subsequent respiratory viral outbreaks to blunt the inflammatory and fibrotic damage and prevent disability related to lung injury. Hundreds of clinical trials of anti-viral, anti-inflammatory and immuno-modulatory and other drugs, such as hydroxychloroquine, anti-coagulants, vasodilators, anti-angiogenics and others, are under way in COVID-19 patients. Very few, if any, of these trials are designed to test interventions for longer-term respiratory complications and sequelae of COVID-19 using anti-inflammatory and antifibrotic agents. The inflammatory excess in COVID-19 patients has prompted investigations of anti-inflammatory drugs, but outside of dexamethasone in severe patients, there has been limited success. Remdesivir, an anti-viral agent previously used for Ebola and other viral infections, has been shown to be effective in reducing the time of hospitalization from COVID-19. Whether remdesivir can prevent post-acute complications is unclear.

Pharmacologic interventions are needed that targets both inflammation and fibrosis to disrupt the molecular cascade that leads to lung fibrosis and potentially permanent loss of lung function.

LYT-100 for Long Covid Respiratory Complications and Related Sequelae

LYT-100 is designed to employ a multimodal mechanism of action that could potentially treat or prevent the respiratory complications and related sequelae of Long COVID. Our preclinical data suggest that LYT-100 has anti-fibrotic and anti-inflammatory activity. LYT-100 has been observed in preclinical studies to reduce pro-inflammatory cytokines and suppresse TGF-ß, which is associated with downstream signaling related to fibrosis.

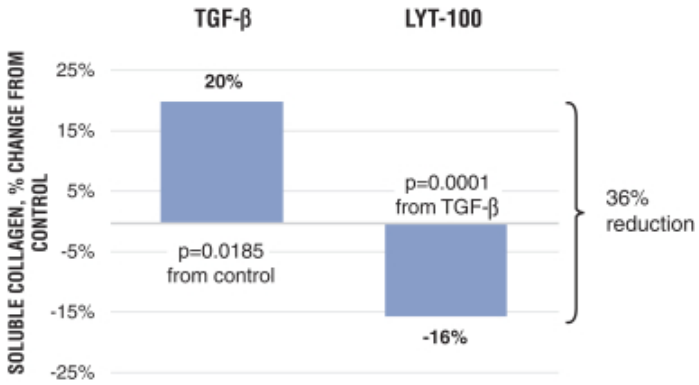
LYT-100 (deupirfenidone) is a selectively deuterated form of pirfenidone. Pirfenidone has anti-inflammatory and anti-fibrotic properties. In animal models, it treats acute and prevents long-term lung injury, and pirfenidone slows the progression of idiopathic pulmonary fibrosis (IPF) and has been approved for the treatment of IPF in the United States and other countries. LYT-100 may have differentiated pharmacokinetic properties and activity compared to pirfenidone. LYT-100 is expected to be metabolized slower and with less variability between patients compared with pirfenidone. These unique pharmacokinetic properties may improve the tolerability and activity of pirfenidone, while retaining the proven antifibrotic and anti-inflammatory properties that could have the potential to treat COVID-19.

Relevant Data

We believe LYT-100's potential clinical pharmacokinetics and mechanism of action make LYT-100 an attractive product candidate for addressing Long COVID respiratory complications and related sequelae. In preclinical studies, LYT-100 was observed to suppress IL-6 and TNF-α in rodent lipopolysaccharide (LPS) pretreatment models, which we believe are relevant to the acute inflammation and cytokine release triggered by COVID-19 infection.

LYT-100 anti-fibrotic activity was also observed in preclinical studies, which could be relevant to the lung fibrosis that can affect COVID-19 survivors. COVID-19 patients can progress to respiratory distress and lung damage driven by pro-inflammatory and pro-fibrotic cytokines like TGF-ß. TGF-ß is considered a master regulator of fibrosis (Meng et al., 2016). It is a pluripotent mediator of extracellular matrix production, which in excess can replace normal tissue with non-functioning scar tissue. The figure below illustrates results from an *in vitro* model of fibrosis with primary mouse lung fibroblasts measuring TGF-ß induced soluble collagen, on the primary components of fibrotic tissue. In this study, which predated the pandemic and did not relate to COVID-19, TGF-ß increased the level of soluble collagen by 20 percent (p=0.0185). LYT-100 inhibited this TGF-ß-dependent increase by 36 percent (p=0.0001).

***In Vitro* Reduction of TGF-ß1 Induced Soluble Collagen Production**



Our Planned Continued Development

In May 2020, we announced plans for a global, randomized, placebo-controlled Phase 2 trial to evaluate the efficacy, safety and tolerability of LYT-100 in non-critical COVID-19 patients with respiratory complications. The trial will initially be conducted outside of the United States, and will require appropriate notifications and authorizations in those jurisdictions. We will also submit an IND to FDA, which, if approved, would allow us to enroll subjects in the United States. As currently designed and subject to review by regulatory authorities, patients will receive treatment for up to three months. The trial is expected to enroll up to 168 patients, with a

primary endpoint measuring cardiopulmonary function. The trial is also currently planned to assess secondary endpoints of dyspnea and exploratory endpoints including pharmacokinetics, acute inflammatory biomarkers, imaging and patient-reported outcomes. Subject to regulatory approval, this trial is expected to begin in the second half of 2020, with topline results expected in second half of 2021.

LYT-100 for Lymphedema

Lymphatic Disorders

Dysfunctions of the lymphatic system have remained largely untreated or poorly addressed by current therapeutics. Diseases of the lymphatics include lymphedema, lymphatic and vascular malformations, GI lymphangiectasia and others. Impaired lymphatic drainage in the tumor microenvironment can promote immune escape and considerably contribute towards lymphatic metastatic spread of cancer. Additionally, we believe that neurodegenerative diseases, such as Alzheimer's disease, or AD, and Parkinson's disease, may be treated by correcting aging and inflammation related brain lymphatic dysfunction. There has been little progress toward the development of meaningful treatments for lymphatic diseases, and there are currently no approved drug therapies that can treat disorders such as lymphedema. We are developing LYT-100 to target the underlying fibrosis and inflammation affecting the lymphatic system to potentially improve lymphatic function and treat lymphedema.

Lymphedema is a chronic condition that afflicts millions of people globally and is characterized by severe swelling in parts of the body, typically the arms or legs, due to the build-up of lymph fluid and inflammation, fibrosis and adipose deposition. By conservative estimates, lymphedema afflicts approximately one million people in the United States. Lymph is a clear fluid collected from body tissues that transports fats and proteins from the small intestine, removes bacteria, viruses, toxins and certain proteins from tissues and supplies white blood cells, specifically lymphocytes, to the bloodstream to help fight infections and other diseases. Secondary lymphedema is the most prevalent form of lymphedema. Secondary lymphedema can develop after surgery, infection or trauma, and is frequently caused by cancer, cancer treatments such as radiation and chemotherapy, trauma or infections resulting in damage to or the removal of lymph nodes.

Lymphedema is a serious disease with significant health consequences, including disfigurement. Lymphedema typically progresses through multiple stages, with increased fibrosis, limb volume and tissue changes. Approximately one million people in the United States have lymphedema, including approximately 500,000 breast cancer survivors with secondary lymphedema. Each year, up to one in five of the more than 250,000 Americans estimated to be diagnosed with breast cancer and that undergo surgery will develop secondary lymphedema. Beyond breast cancer, lymphedema can occur in up to 15 percent of cancer survivors with malignancies ranging from melanoma and sarcoma. A subset of lymphedema patients will also experience cellulitis, a bacterial skin infection that can enter through wounds in lymphedematous skin. Cellulitis often requires hospitalization and intravenous antibiotics to treat, and approximately half of patients with cellulitis will have recurrent episodes. Rarely, patients with chronic lymphedema may develop lymphangiosarcoma, a rare malignant tumor.

The International Society of Lymphology classifies a lymphedematos limb based on staging that describes the condition of the limb, as illustrated in the table below. Within each clinical stage, clinicians use a measurement of limb swelling to capture disease severity described as mild, moderate or severe lymphedema.

CLINICAL STAGES OF LYMPHEDEMA

	STAGE I	STAGE II	STAGE III
Symptoms	Limb swelling, pitting edema, limb heaviness and discomfort	Limb swelling, skin thickening, dermal fibrosis, fat deposition, non-pitting edema	Disfiguring limb swelling, hyperkeratosis, loss of skin elasticity, skin lesions and overgrowths, massive fibrosis and fat deposition, elephantiasis
Additional clinical concerns	Lifelong need for compression therapy, chronic progression, repeated infections (cellulitis, lymphangitis), elephantine skin changes, development of lymphangiosarcoma		

As lymphedema progresses into later stages, the affected limb can acquire a “woody texture” due to fibrosis. In addition to clinical staging, clinicians use a measurement of limb swelling to capture disease severity. For upper limb lymphedema, a relative limb volume of five to 20 percent is considered mild, a relative limb volume of 20 to 40 percent is considered moderate and a relative limb volume greater than 40 percent is considered severe. Cancer treatments lead to new lymphedema patients each year, the majority of which will have mild lymphedema: over 70 percent of patients with breast cancer related upper limb lymphedema have mild to moderate lymphedema, while the remainder have moderate to severe lymphedema. We intend to initially evaluate LYT-100 in the more common mild to moderate lymphedema patient population.

The natural history of lymphedema is a chronic and progressive disorder, reflected in the increasing severity of limb swelling. The relative increase of limb volume in the affected limb compared to the unaffected limb worsens over time. It has been observed in patients with mild lymphedema that approximately 48 percent will progress to more severe stages during the first five years of follow-up. Because of the progressive nature of the disease, many patients will progress to the point where bandaging and compression are incapable of reducing limb volume. The potential loss of limb range of motion and function, the risk of secondary infections and complications and the disfigurement result in physical and emotional suffering in patients. Secondary lymphedema is a lifelong disease and the affected population is increasing each year due to improved survival of cancer patients, changes in patient and disease factors, including obesity, an aging population and increased use of radiation treatment.

Current Standard of Care

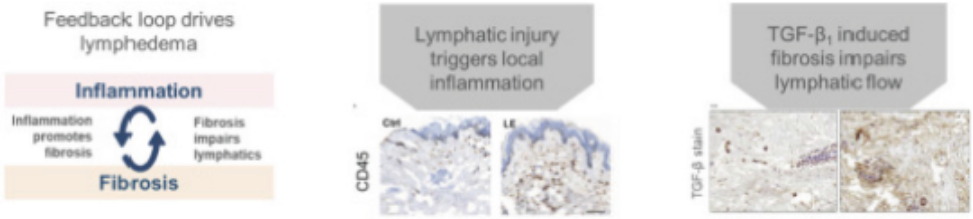
The current standard of care for lymphedema is management, primarily with compression and physical therapy to control swelling. These approaches are cumbersome, uncomfortable and non-curative, and they do not address the underlying disease, especially in patients with more severe lymphedema. Even with management, some patients will progress from mild-to-moderate lymphedema to more severe forms. Referral to current treatment regimens does not predict reversal or stabilization of lymphedema. In later stages, patients may also seek ablative surgeries, including liposuction or debulking. These surgeries reduce volume but do not restore lymphatic flow, and compression is still required to control swelling. There are currently no approved drug therapies that can treat the underlying causes of lymphedema. We believe the lack of treatments for lymphedema represents a major unmet medical need.

The Role of Fibrosis and Inflammation in Lymphedema

Inflammation and fibrosis play important roles in the pathophysiology of secondary lymphedema. Lymphatic injury activates chronic immune responses that promote fibrosis, reduce lymphatic flow and impair lymphatic formation. Targeting fibrosis in addition to inflammation may be a potentially effective way of ameliorating established lymphedema in patients.

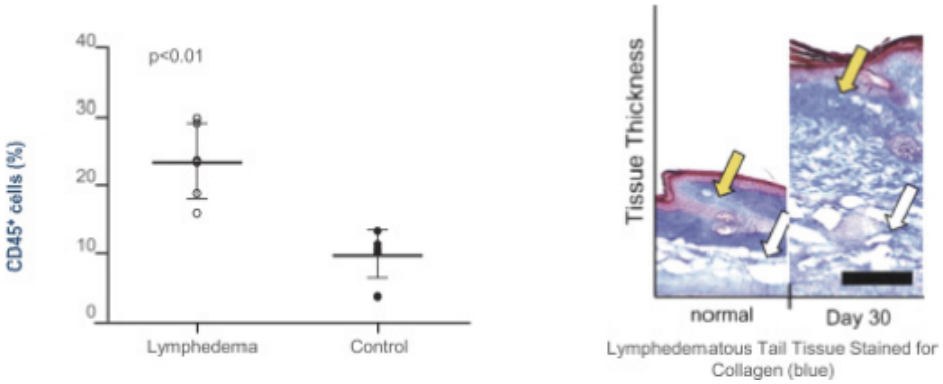
The figure below depicts the feedback loop between inflammation and fibrosis driven lymphedema. The accumulation of TGF-ß1 results in increased fibrosis in tissue from patients with lymphedema. TGF-ß1 is a secreted protein that performs many cellular functions, including the control of cell growth, cell proliferation, cell differentiation and apoptosis. TGF- ß1 is a critical regulator of fibrosis, and lymphedematous tissue has increased TGF-ß1 staining. Inflammation is also present in lymphedematous limbs. Tissue samples from patients with lymphedema have increased presence of inflammatory cells. These cells can produce pro-inflammatory and pro-fibrotic cytokines, including TGF-ß1, to further the progression of lymphedema. The middle panel below shows lymphedema skin biopsy samples from lymphedematous and normal limbs of patients. Lymphedema skin samples showed increased immune infiltrate as evidenced by elevated levels of CD45+ immune cells in immunohistochemical staining. As shown in the right panel below, lymphedema skin biopsy samples from lymphedematous and normal limbs of patients show increased intracellular TGF-ß1 staining in immunohistochemical staining.

Feedback Loop Driving Lymphedema



Accumulation of collagen and fibrosis is seen in swelling associated with lymphedema. The figure below depicts the accumulation of CD45+ cells in the mouse tail model of lymphedema on the left, and the increase in total tissue volume and accumulation of collagen on the right.

Accumulation of Collagen and Fibrosis in Mouse Lymphedema Model



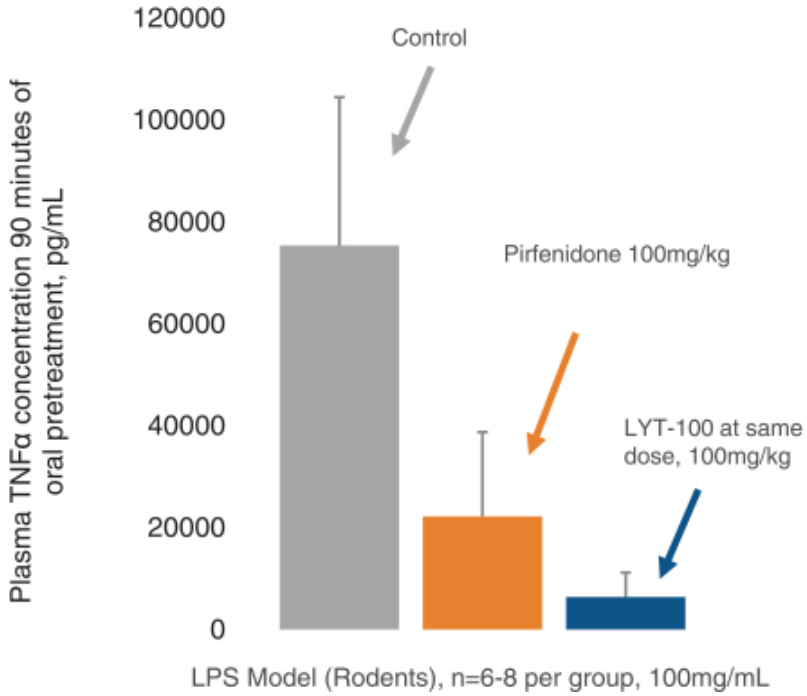
We believe targeting the chronic inflammation and fibrosis associated with lymphedema with an oral therapy could potentially treat secondary lymphedema.

Preclinical Results

In preclinical studies, LYT-100 showed greater anti-fibrotic and anti-inflammatory activity when compared to pirfenidone.

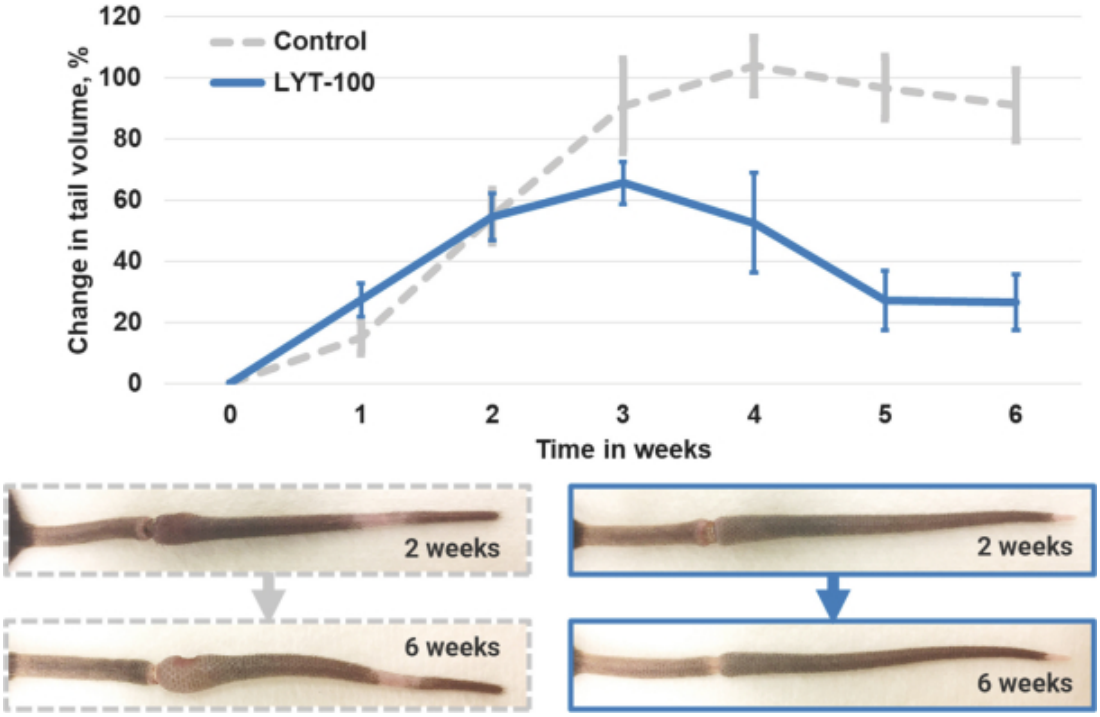
Inflammation was also monitored in an LPS induced preclinical rodent model. The figure below illustrates the plasma concentrations of TNF-α, a pro-inflammatory cytokine and biomarker of inflammation, 90 minutes post-LPS injection. When 100 mg/kg doses of LYT-100 were administered one hour prior to LPS, TNF-α levels were 70 percent lower than those obtained using equivalent oral volumes of the vehicle control in this study.

Preclinical Plasma Concentrations of TNF-α with LYT-100 versus Pirfenidone and Control



Additionally, LYT-100 was tested by one of our academic collaborators in a rodent tail model of lymphedema. In this model, the lymphatics draining the tail are surgically damaged, resulting in tail swelling, inflammation and fibrosis mimicking human limb lymphedema. In the figures shown below, a control vehicle substance of LYT-100 was administered daily at a dose of 400 mg/kg orally starting two weeks after surgery, when the tail has already begun the process of lymphedema (n=7 per group). LYT-100 treatment halted progression of lymphedema and reduced the overall volume of the lymphedematous tail. Control animals continued to have increases in tail volumes and have double the tail volume by Week 4. In contrast, the LYT-100 group had a 71 percent decrease in tail volume compared to control by Week 6, nearly returning the tail volume back to the presurgical baseline. Representative tail images from both groups at 2 weeks and 6 weeks are shown below.

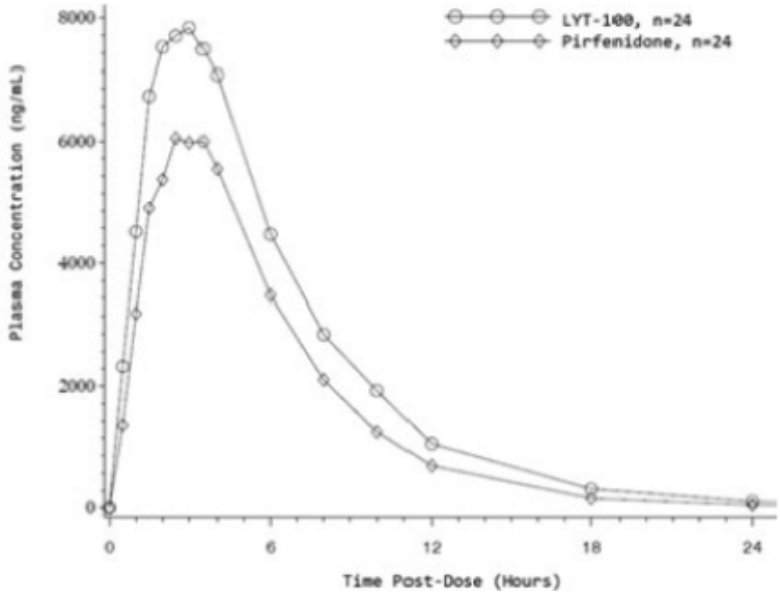
LYT-100 versus Control in Lymphedema Mouse Model



Clinical Results

LYT-100 was previously studied in a single dose crossover Phase 1 clinical trial of 24 healthy volunteers to assess safety and PK. The figure below illustrates single-dose PK at a 801 mg dose of LYT-100 and 801 mg dose of pirfenidone over 24 hours. LYT-100 has an approximately 35 percent increase in area under the curve systemic exposure and a 25 percent increase in C_{Max} relative to pirfenidone in this study. These results demonstrate that LYT-100 displays improved PK relative to pirfenidone and suggest the possibility of twice-daily dosing of LYT-100 in patients with lymphedema. In addition, LYT-100 was well-tolerated and there were no SAEs observed in the Phase 1 clinical trial of healthy volunteers.

24 Hour Single-Dose PK Profile of 801 mg of LYT-100 versus 801 mg of Pirfenidone



Our Planned Continued Development

In March 2020, we announced the initiation of a multiple ascending dose study of LYT-100 to evaluate the safety, tolerability and PK profile of LYT-100 in healthy volunteers. Results from this trial are anticipated the second half of 2020, and a subsequent POC trial in people with breast cancer-related, upper limb secondary lymphedema is expected to begin in the second half of 2020 with topline results expected in the second half of 2021. For this POC study, we plan to recruit patients with mild-to-moderate lymphedema of the arm. The primary endpoint of the patient study will be safety of LYT-100. As secondary endpoints, we will also study outcome measures of lymphedema, including relative limb volume, bioimpedance spectroscopy – a measure of extracellular fluid change, tonometry, a measure of fibrosis, and serum levels of inflammatory and fibrotic biomarkers. The study may also examine patient reported outcomes using validated self-report instruments specific to upper-arm lymphedema. The study will not evaluate statistical significance versus placebo, as we expect to use data from the study to inform future clinical protocols, including future efficacy endpoints.

We plan to pursue the foreign regulatory approvals needed to conduct the anticipated studies. We may seek FDA approval of LYT-100 using Section 505(b)(2) of the Federal Food, Drug, and Cosmetic Act, which allows the submission of an NDA that relies in part on the FDA's prior findings regarding the safety and effectiveness of approved drugs, which, if we are able to use this pathway, could expedite the development program for LYT-100 by potentially decreasing the overall scope of clinical data that we are required to present to support our application for the approval of LYT-100 in secondary lymphedema.

LYT-100 and the Treatment of Other Fibrosis and Inflammation-Related Diseases

Fibrosis and inflammation are a common mechanism across several lung diseases. There are acute diseases with high mortality or that lead to long-term fibrosis; chronic diseases linked to a specific cause, like a virus or autoimmune disease; and diseases like IPF, where the cause is less clear. In a large percentage of these various lung conditions, there are no approved treatments that address inflammation and fibrosis of the lungs. Many of these diseases can increase the risk for worsening of lung fibrosis, and there is a clear unmet need to stop inflammation and fibrosis and to preserve lung function. Even in IPF, for which pirfenidone is approved, high unmet need exists given pirfenidone's dosing schedule and unfavorable tolerability profile which often leads to dose reduction or treatment discontinuation. Despite these unmet needs, pirfenidone sales peaked above $1 billion in 2018 and 2019.

We plan to explore applications of LYT-100 where the anti-inflammatory and anti-fibrotic activity of pirfenidone has demonstrated clinical and preclinical activity, including IPF where pirfenidone is already approved for use, and other ILDs. There are serious limitations in the clinical use of pirfenidone in IPF and interstitial lung disease. Pirfenidone requires frequent dosing, which results in high peak to trough fluctuations in plasma concentrations, and side-effects leading to a >25 percent treatment discontinuation rate. In Phase 3 studies, 77 percent of patients taking pirfenidone had dose interruptions or reductions because of AEs. The real-world evidence of pirfenidone use also highlights tolerability issues: in a large, multinational post-marketing study, 73 percent of patients experienced an AE, including 38 percent with GI symptoms, leading to a high discontinuation rate. The most common AEs of pirfenidone included GI symptoms (nausea, diarrhea, dyspepsia, vomiting), fatigue, rash, and photosensitivity reactions. Additionally, reversible elevations in liver enzymes were seen in a small proportion of patients, as were dizziness and weight loss. Thus, despite an intriguing mechanism of action, pirfenidone has PK shortcomings that may limit its use in IPF and other ILDs. A therapeutic compound which improves upon metabolism and dose exposure of pirfenidone, while retaining or exceeding its efficacy, would be an attractive therapeutic option for interstitial lung diseases. LYT-100 has demonstrated anti-fibrotic and anti-inflammatory activity with superior PK that has the potential for improved dosing, safety, and efficacy compared to pirfenidone.

Because of our insight into how inflammation and fibrosis affect lymphatic flow, we also plan to explore the application of LYT-100 in other lymphatic flow conditions. Millions of patients have lymphedema beyond breast cancer-related arm lymphedema and we believe LYT-100 may have potential to target the underlying mechanisms of other forms of secondary or primary lymphedema. We may also explore the potential use of

LYT-100 in other inflammatory and fibrotic diseases including FSGS, a rare, progressive kidney disease that can lead to kidney failure and dialysis. An estimated more than 4,500 individuals in the United States develop FSGS every year, and there are no specific treatments designed to reduce fibrosis and inflammation in this disease. Treatment with immunosuppression is symptomatic and often does not prevent relapse and progression to end-stage renal disease. In a proof-of-concept study conducted by NIH that enrolled 21 adult patients with FSGS, pirfenidone prolonged renal survival by approximately 55 percent and a median improvement of 25 percent in the rate of decline of glomerular filtration rate. LYT-100's anti-fibrotic activity suggests the potential to target kidney fibrosis in FSGS and provide a novel treatment for this disorder.

LYT-100 and the Treatment of Brain and CNS Lymphatic-Related Disease

The lymphatic system is an important part of the immune system, GI system and CNS. Loss of lymphatic flow can play a critical role in diseases of these systems. We believe LYT-100, if successfully developed and approved, has the potential to address serious diseases of lymphatic flow.

One of our academic collaborators discovered a functional lymphatic system in the meninges of the brain that forms the basis of our meningeal lymphatics discovery research program. These meningeal lymphatics have been described as the "brain drain," a route through which macromolecules are flushed from the brain in cerebrospinal fluid. Among the macromolecules that are drained via the lymphatics are pathogenic macromolecules such as amyloid-beta and tau, which are both associated with AD pathology, as well as alpha-synuclein, which is associated with Parkinson's disease. Blocking the lymphatic flow increases levels of these molecules in the brain. In animal models of AD, AD-associated tauopathies and Parkinson's disease, blockade of meningeal lymphatic flow significantly exacerbated disease progression and severity and improving flow through aged meningeal lymphatics improved cognitive brain function in these animal models. With aging, the lymphatic vessels that drain the brain become dysfunctional and no longer drain as efficiently. The "lymphedematous characteristics" of meningeal lymphatic vessels in aged animals might be leading to inefficient clearance of pathologic macromolecules and potentially increase risk for neurodegenerative diseases. Restoration of lymphatic flow may then be a novel class of therapies for neurodegeneration, and we believe that augmenting meningeal lymphatic vasculature function may potentially improve outcomes for a range of neurodegenerative and neuroinflammatory conditions that are not currently effectively treated.

We are exploring multiple ways of altering lymphatic flow, both in the CNS and other parts of the body. Starting with LYT-100, we will continue to develop novel therapeutic candidates that target inflammation, fibrosis and other mechanisms that impair lymphatic flow. We also have ongoing discovery efforts to explore new mechanisms with the goal to advance, in-license and/or acquire assets that we can develop for diseases of lymphatic flow. We will use our network of collaborators and internal expertise in lymphatics to actively discover and develop novel solutions for diseases of the lymphatic system, including rare lymphatic diseases.

The FDA and corresponding regulatory authorities will ultimately review our clinical results and determine whether our Wholly Owned product candidates are safe and effective. No regulatory agency has made any such determination that LYT-100 is safe or effective for use by the general public for any indication.

LYT-200 & LYT-210: Targeting Immunosuppressive and Pathogenic Lymphocytes to Treat Intractable Cancers and Immunological Disorders

Hallmarks of cancer include dysregulated growth driven by both cellular oncogenes as well as the intratumoral microenvironment and local and systemic failures of the immune system to recognize cancer and mount an anti-tumor response. In cancer, a complex interaction of the tumor, tumor microenvironment and immune cells creates an immunosuppressive state, allowing cancer to evade the effects of many therapies as well as the attack of cytotoxic immune cells. Tumors can often express immunosuppressive factors, such as cell surface checkpoint molecules. For example, programmed death-ligand 1, or PD-L1, is a type of checkpoint overexpressed by cancer cells that suppress T cells, an important type of immune cell that normally responds to infections or cancer.

A class of therapies known as checkpoint inhibitors has been developed to counteract tumor defenses against the immune system and includes therapies that target programmed cell death protein 1, or PD-1, PD-L1 and

cytotoxic T-lymphocyte-associated antigen 4, or CTLA-4. These marketed drugs have demonstrated encouraging clinical responses and durable benefit across a number of cancers and according to EvaluatePharma had sales exceeding $16 billion in 2018. Unfortunately, a great proportion of patients still do not respond or respond suboptimally to approved checkpoint inhibitors. In immunologically silent tumors such as pancreatic cancer, CRC and CCA, little, if any, efficacy has been seen to date with any of these agents. In the United States, there are approximately 57,000 new pancreatic cancer patients, of which 50 percent present with metastatic disease, approximately 146,000 new CRC patients, of which 35 percent present with metastatic disease, and approximately 8,000 new CCA patients, of which 50 percent present with metastatic disease, per year, representing a significant patient population that has yet to receive benefit from any immuno-therapy agents.

In order to identify assets with the potential to provide significant therapeutic benefit to cancer patients, we undertook a global, proactive search to discover important new scientific insights and technologies that could address the challenge of multiple mechanisms of immunosuppression in current therapeutics. During this search, we employed the following criteria:

- Aim to avoid targets where others were developing drugs;
- Address multiple pathways of immunosuppression via key immunological nodes;
- Attempt to develop therapies for solid tumors where existing treatments are limited, including solid tumors where checkpoint inhibitors have failed;
- Identify targets where therapeutic intervention has the potential for both single-agent activity and the potential to be used in combination with other immuno-oncology, and more broadly, other anti-cancer agents;
- Represent targets whose underlying biology enables them to have a favorable therapeutic window and a favorable safety margin;
- Achieve significant preclinical validation;
- Focus on targets whose higher levels are associated with aggressive diseases and poorer outcomes in people; and
- Focus on targets where mAbs could be effective.

Based on these criteria, and through our extensive network of advisors and collaborators, we identified two foundational immunosuppressive mechanisms involving galectin-9 and immunosuppressive gd1 T cells, which are the basis of developing LYT-200 and LYT-210, respectively, and which fulfill the above criteria for a potentially clinically beneficial, novel immuno-oncology agent.

LYT-200: Our Immuno-Oncology Product Candidate Targeting Galectin-9, in Development for the Treatment of Solid Tumors

LYT-200 is a fully human IgG4 mAb that is designed to block galectin-9, which we are developing for the treatment of solid tumors, including pancreatic ductal adenocarcinoma, or PDAC, CRC and CCA, that do not respond to approved checkpoint inhibitors and have poor survival rates. We anticipate filing an IND for LYT-200 and initiating a Phase 1 study in solid tumors in 2020, with results anticipated in 2021.

We believe LYT-200 could meet the criteria that we set out in defining a potential immuno-oncology therapeutic because:

- Galectin-9 promotes and facilitates multiple immunosuppressive pathways by, for example, 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 tumors and in cancer patients' blood, and correlates with poor survival outcomes and aggressive disease in multiple solid tumor types;

- In order to assess the effects of LYT-200 in murine models of cancer, a mouse monoclonal antibody, which we refer to as mIgGI-200, that targets the same epitope on galectin-9 was developed. A mouse IgG1 isotype has blocking function similar to the human IgG4 isotype. Preclinical evidence we generated has confirmed that mIgG1-200 is efficacious in inhibiting tumor growth in pancreatic cancer (KPC) and melanoma (B16F10) mouse models of cancer. We have used mIgG1-200 as single agent in both the pancreatic cancer (KPC) and the melanoma (B16F10) mouse models of cancer. In both of these models, compared to control, we saw a significant tumor growth reduction. Equally, in the KPC model we observed that administration of LYT-200 both as a single agent, and in combination with chemotherapy (gemcitabine/nab-paclitaxel), significantly prolonged survival of pancreatic tumor bearing mice, compared to control, while chemotherapy alone did not give a significant prolongation of survival compared to control animals;
- LYT-200 also activated effector T cells in *ex vivo* models of patient derived tumor organoids (PDOTs) in multiple tumor types (pancreatic cancer, colon cancer, cholangiocarcinoma, etc.);
- While elevated in the context of cancer, galectin-9 has low expression under normal physiological conditions which indicates a potential safety window which has been further supported by the lack of tolerability concerns to date in our good laboratory practice, or GLP, studies with LYT-200 even at extremely high doses, such as 300 mg/kg in non-human primates (~100 mg/kg human equivalent dose);
- Other companies, to our knowledge, do not have clinical development programs around galectin-9 as a therapeutic target, and LYT-200 would represent a potentially innovative therapeutic. None of the other human galectins have been documented to play such a global role in immunosuppression in the context of cancer which galectin-9 plays; and
- We believe that LYT-200 may be used as a single agent and safely in combination with checkpoint inhibitors and other systemic cancer treatments.

Galectin-9 has a unique capacity to switch off a multitude of immune mechanisms that would otherwise engage in fighting cancer; therefore, targeting this molecule has the potential to restore the immune system’s ability to attack cancer.

Galectin-9 functions through multiple pathways by binding to carbohydrate motifs on cell surface molecules and receptors. It plays a critical regulatory role in immune cell response and homeostasis, and mediates immunoregulatory activities in several ways. Binding of galectin-9 to T cell immunoglobulin and mucin-domain containing-3, or TIM-3 for example, induces cell death of terminally differentiated TIM-3+ T helper cell, or Th1 and cluster of differentiation, or CD, 8+ T cells, as well as apoptosis of CD4+ Th1 cells. Galectin-9 binds to CD44 and cooperates with transforming growth factor beta, or TGF-ß, to promote T regulatory, or Treg, cell differentiation. Galectin-9 also favors expansion of immunosuppressive myeloid derived suppressor cells, or MDSCs, in the overall promotion of Th2/M2 differentiation, which ultimately favors tumor progression. Galectin-9 also functions to reduce the development of Th17 cells, and is immunomodulatory on tumor associated macrophages. Taking all this into consideration, galectin-9 is considered a potent mediator of cancer-associated immunosuppression.

Galectin-9 Proposed Mechanism of Action

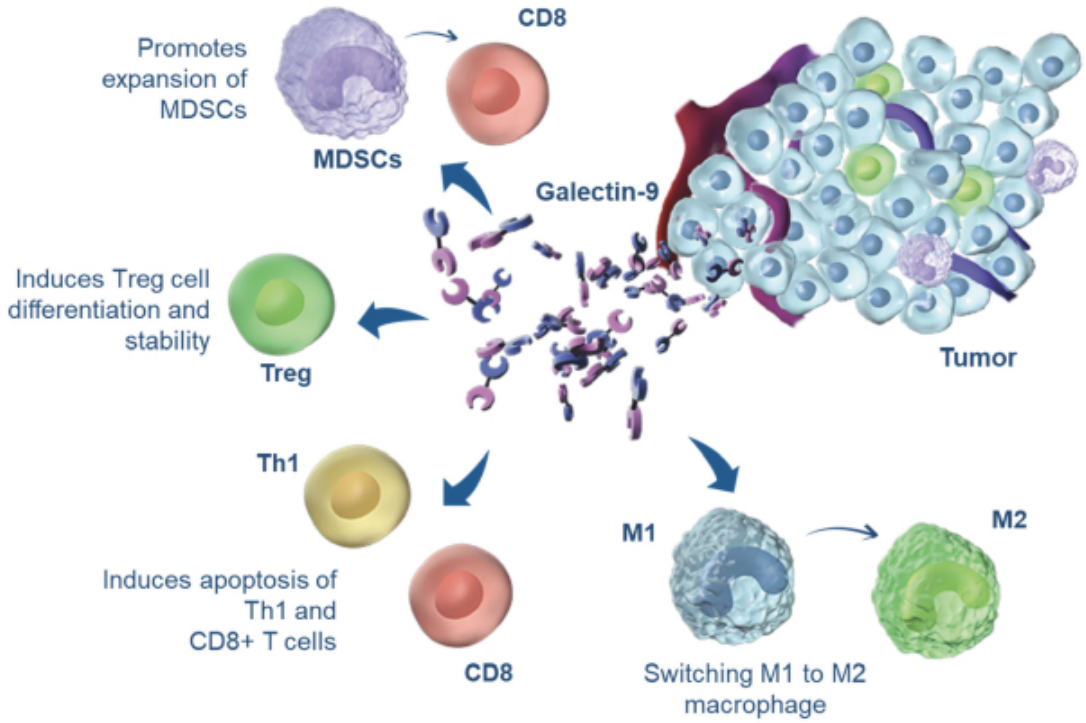


Image adapted from J Mol Biol; 428 (16): 3266-3281; 2016 Treg = T regulatory cell; MDSC = myeloid derived suppressor cell; M1/M2 = tumor associated macrophage (TAM)1 (immunoactive) and 2 (immunosuppressed) cell; Th1 = T helper1 cell

High levels of tissue and/or circulating galectin-9 correlate with aggressive tumor features and adverse survival outcome in many tumor types. For example, galectin-9 levels are significantly increased in metastatic melanoma patient plasma, correlating with Th2 systemic bias and less favorable two-year clinical survival outcome. Galectin-9 is also highly expressed in human PDAC compared with normal pancreas tissue and present on both tumor and intratumoral immune cells. Moreover, high serum concentration of galectin-9 may be able to discriminate PDAC from benign pancreatic disease and healthy individuals and is potentially prognostic for stage IV patients. Plasma levels of galectin-9 are associated with a worse overall and disease-free survival, as well as chemoresistance, in ovarian cancer patients. In gastric cancer, patients with galectin-9 positive tumors have significantly lower overall and gastric cancer-specific mortalities. In yet another gastrointestinal tumor type, CRC, galectin-9 markedly inhibits the cytotoxicity of the gamma delta T cells towards colon cancer cells, indicating its immune-suppressive mechanism of action. In muscle invasive bladder cancer, tumor-associated macrophages expressing galectin-9 are associated increasing numbers of Treg cells and decreasing numbers of CD8 T and dendritic cells, indicating an immunosuppressed microenvironment, that in turn translates to increased tumor grade/stage and galectin-9 positive tumors with poor prognosis.

In nasopharyngeal carcinoma, or NPC, significant increase in the expression of galectin-9 positive tumor cells, with concomitant increase in Treg cells and decrease in CD8 T cells, is observed in recurrent tumor tissues, indicating that galectin-9 confers immunologic escape in NPC.

High galectin-9 expression is highly correlated with expression of immune checkpoint molecules, M2 tumor-associated macrophages in the mesenchymal subtype of glioblastoma multiforme and in small cell lung cancer

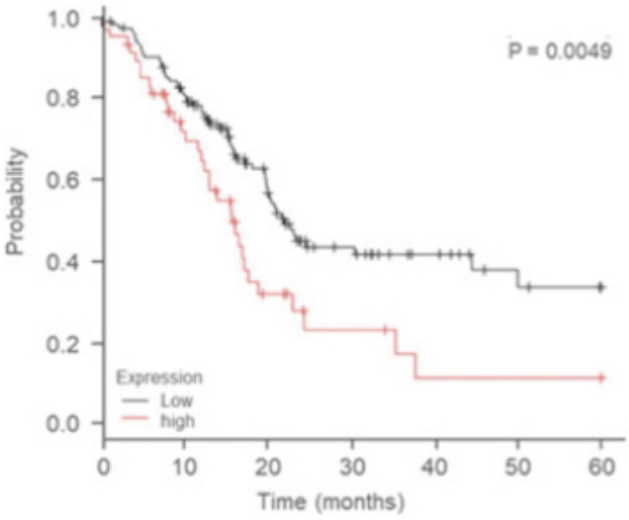
correlates with high levels of neuron specific enolase and shorter survival. In breast cancer, surface galectin-9 protects carcinoma cells against cytotoxic T cell-induced death, while in non-small cell lung cancer, or NSCLC, there is a co-expression between galectin-9 and PD-L1, with high galectin-9 expression on immune cells correlating with early disease relapse. Moreover, early accumulation of MDSCs expressing galectin-9 in NSCLC is associated with primary and secondary resistance to anti-PD-1 treatment.

Collectively, these data, across multiple solid tumor types, may support the use of LYT-200 in relapsed/refractory, metastatic solid tumors.

In basal physiological conditions, galectin-9 is weakly expressed in most tissues, with some abundance in the thymus and kidney.

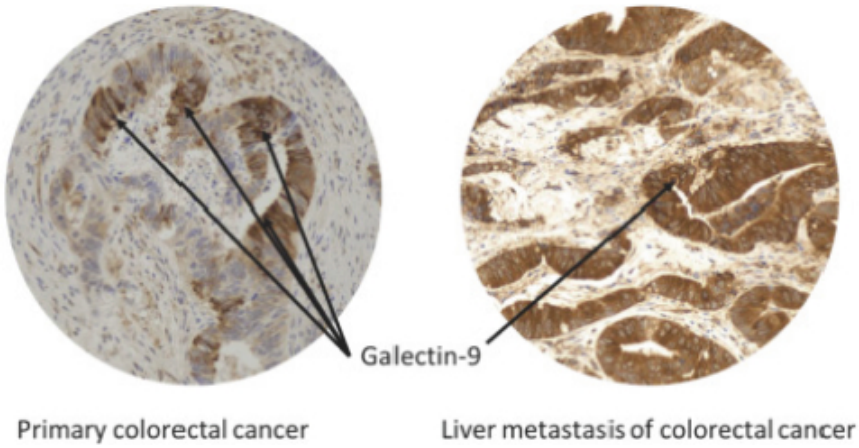
For example, the figure below illustrates the correlation between galectin-9 messenger ribonucleic acid, or mRNA, levels and decreased overall survival in pancreatic cancer. As shown below, high mRNA levels of galectin-9 in pancreatic cancer correlate to significantly shorter overall survival at five years, as represented by the red curve, compared to lower mRNA levels of galectin-9.

mRNA Levels of Galectin-9 in Pancreatic Cancer



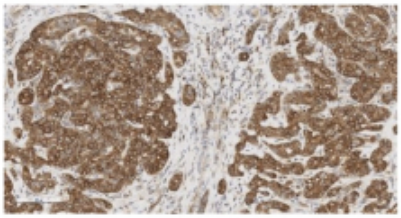
The figure below shows immunohistochemistry, or IHC, expression of galectin-9 in primary CRC and CRC liver metastasis. In staining of CRC samples with a reagent galectin-9 antibody, we observed high galectin-9 expression at the cell membrane and in the cytoplasm, both at the site of the primary tumor and the metastatic deposit.

Observed Galectin-9 Expression in CRC

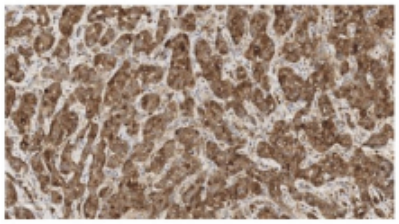


Additionally, data below represents staining patterns of galectin-9 in pancreatic cancer tissues, and we have observed the same IHC pattern in breast cancer and CCA as well. Namely, a variety of tumor types were assessed for the presence of galectin-9 using IHC of formalin-fixed, paraffin-embedded, or FFPE tissue samples. Over 1,000 samples of breast cancer, 141 samples of PDAC, and 99 samples of intrahepatic CCA, with available clinicopathologic information, were examined. Figures below show that strong and moderate tumor staining were associated with membranous expression of galectin-9 (p=0.004), and the tumors with strong expression correlated with worse outcomes. Strong galectin-9 expression conferred worse relapse free survival (p=0.052) and worse overall survival (p=0.044) in CCA.

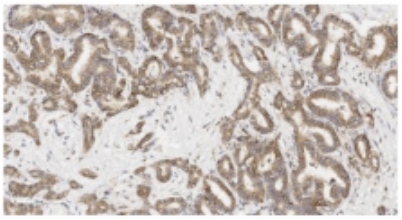
Representative IHC Staining of Galectin-9 in CCA



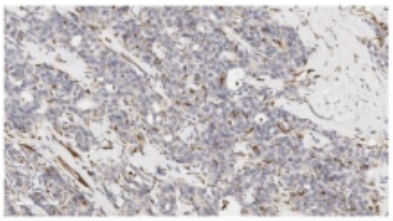
Strong cytoplasmic and membrane expression in tumor.



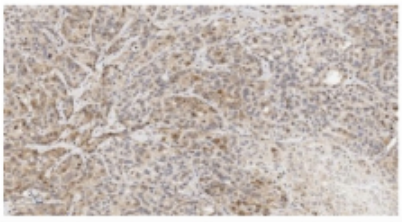
Strong cytoplasmic expression in tumor.



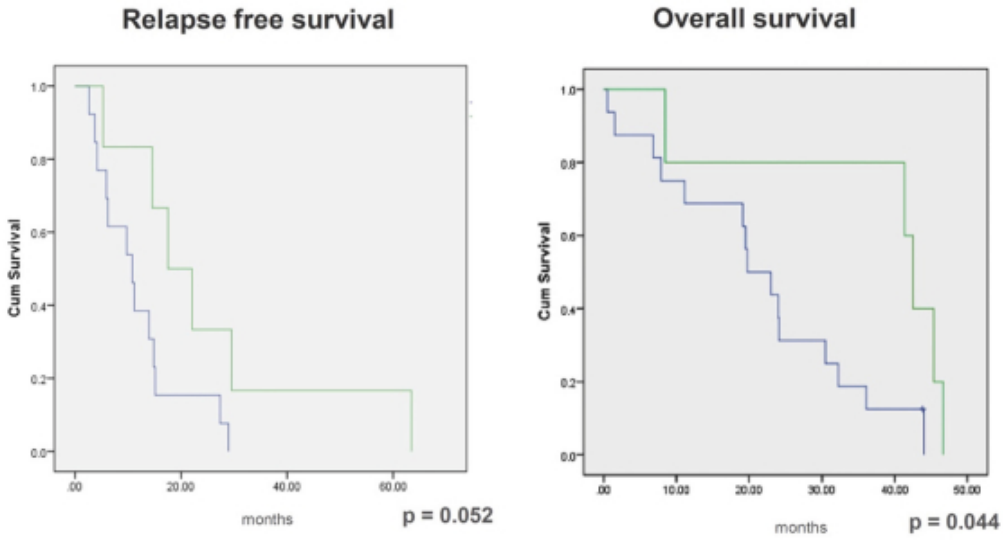
Moderate cytoplasmic expression in tumor.



Negative tumor cells. Moderate density immune cells (2+)



Weak cytoplasmic expression in tumor.

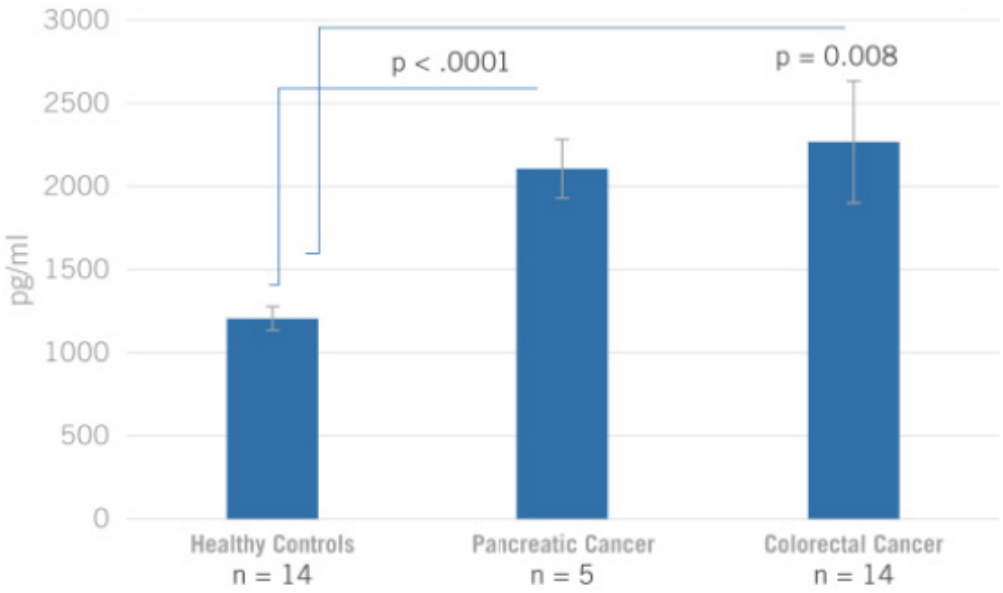


Galectin-9 Membrane Staining in CCA Correlates with Worse Outcome

----------Galectin-9 strong staining ----------Galectin-9 moderate staining

Additionally, we can detect galectin-9 levels in cancer patient blood which are much higher than in healthy individuals. The figure below depicts blood serum samples from 14 healthy subjects, 14 CRC and five pancreatic cancer patients that were evaluated for galectin-9 levels. Serum galectin-9 levels were measured using commercially available ELISA kits specifically for detection of human galectin-9. The data show increased galectin-9 levels in the serum of cancer patients compared to healthy subject controls. This assay indicates that galectin-9 overexpression occurs not only in cancer tissues but also in the blood of cancer patients.

Serum Galectin-9 Levels in Various Populations



Preclinical Results

Specifically, the binding affinity of LYT-200 to the C-terminal carbohydrate domain 2, or CRD2 and the non-binding CRD1 domains of mouse, rat, cynomolgus monkey and human galectin-9 was determined utilizing the Dynabead system (Invitrogen, ThermoFisher Scientific). Studies were conducted to assess cross species affinity to the CRD2 domain of galectin-9. CRD 1 and 2 domains of galectin-9 are domains used for interaction with binding partners and hence are relevant for therapeutic targeting.

LYT-200 has been observed to have high specificity for its primary target galectin-9, as established in the protein array that assessed binding of LYT-200 to more than 5,000 cell bound and secreted human proteins.

K_{Dapp} (nM) of LYT-200 to Galectin-9 Carbohydrate Domains

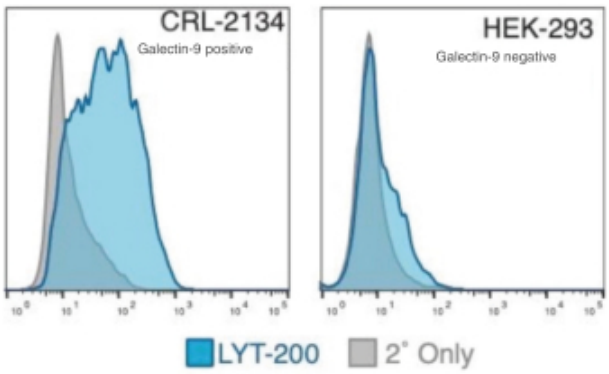
Species	Galectin-9 Carbohydrate Domain	LYT-200
Human	CRD1	No binding
Human	CRD2	0.33 ± 0.07
Mouse	CRD2	0.42 ± 0.04
Rat	CRD2	1.28 ± 0.06
Cynomolgus Monkey	CRD2	0.31 ± 0.03

The binding affinity of LYT-200 to CRD2 domain was similar and in the low nanomolar range between human, mouse and monkey models and three to four times weaker in the rat model although still within low nanomolar range. LYT-200 and mIgG1-200 share the same antibody variable region, and as a result have comparable binding affinities for the CRD2 domain of galectin-9 across the four species tested. Furthermore, both monoclonal antibodies are specific for the CRD2 domain, as no binding was detected to the CRD1 domain of human galectin-9.

Binding affinity of LYT-200 to cell surface galectin-9 was determined using human colon cancer cells (left panel; CRL-2134 cells) and a galectin-9 negative cell line (right panel; HEK-293 cells). Secondary antibody only

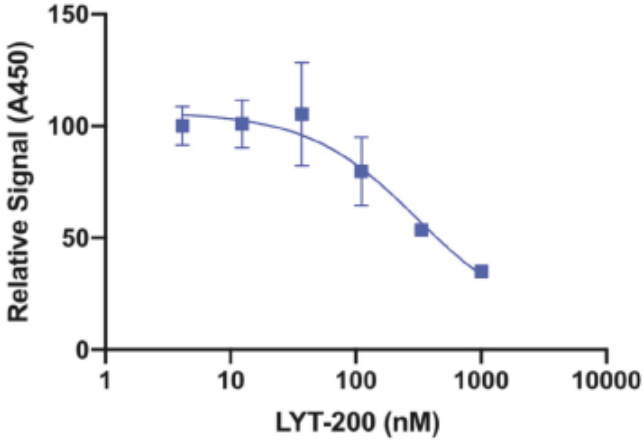
(2 only) condition was used as a control where no binding to galectin-9 is expected nor seen. Based on these saturation curves, a cell-based K_D for LYT-200 was determined to be 0.41 ± 0.07 nM.

Comparison of LYT-200 Binding to CRL-2134 and HEK-293 Cells



We next assessed the ability of LYT-200 to block interactions with galectin-9 specific binding protein, CD206. CD206 is a receptor found on the surface of macrophages, and is a known binding protein/receptor for galectin-9. An ELISA format was used to first demonstrate that CD206 and galectin-9 are a receptor-ligand pair and secondly to show that the addition of LYT-200 could inhibit this interaction.

LYT-200 Blocks CD206-Galectin-9 Interaction in a Dose Dependent Manner

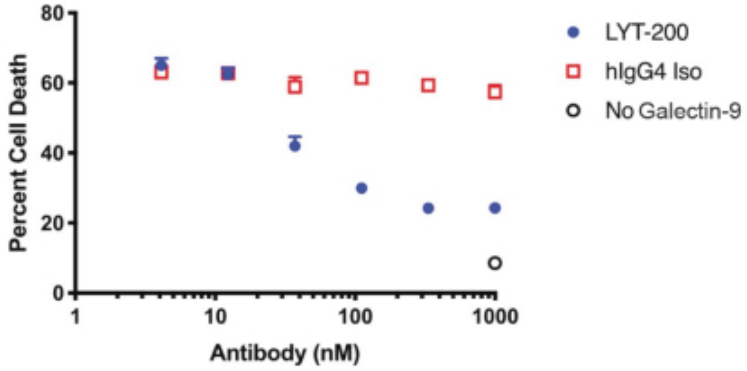


These data indicate that LYT-200 has the ability to block a functional activity of galectin-9, namely, interaction with a specific binding partner/receptor, CD206. This assay demonstrates the desired and expected blocking function of LYT-200 as the fully human IgG4 mAb.

We next observed that LYT-200 could protect T cells from galectin-9 induced apoptosis, as illustrated in the figure below. The presence of galectin-9 (red square) significantly increased cell death compared to culture in the absence of galectin-9 (black circle). The addition of LYT-200 to the culture of MOLM-13 cells in the presence of galectin-9 (blue circle) significantly reduced the observed percentage of cell death in a dose dependent manner.

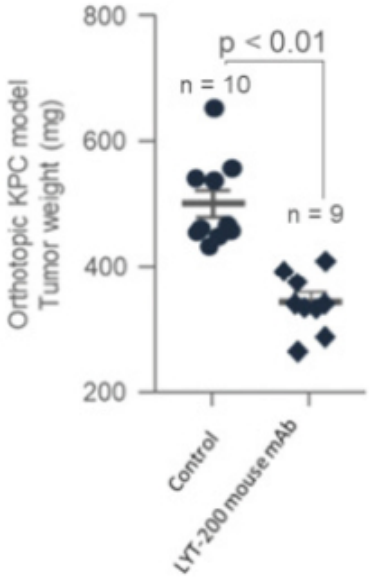
The IC_{50} for this assay is approximately 60 nM galectin-9. This assay supports the desired and expected functional activity of LYT-200 in blocking galectin-9 interactions on T cells which results in T cell apoptosis as well as a broad ability of LYT-200 to intercept galectin-9 - receptor interactions, since T cell death does not occur through interactions with CD206.

LYT-200 Protects MOLM-13 T Cells from Galectin-9-Mediate Apoptosis



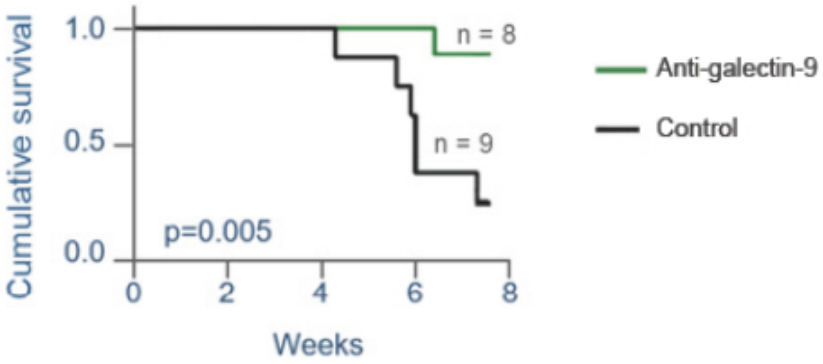
The ortothopic KPC mouse model is commonly used as a preclinical model for evaluating PDAC biology and therapeutic agent efficacy. Our academic collaborator previously showed that blocking galectin-9 with a murine galectin-9 antibody demonstrated significantly extended survival in a mouse KPC pancreatic cancer model. Anti-PD-1 checkpoint inhibitors have previously proven ineffective in this xenograft model. As noted previously, to further characterize the potential of LYT-200, we created a mouse LYT-200, or mIgG1-200, by cloning the antigen binding domain of LYT-200 into a murine antibody backbone. We confirmed this observation of single agent activity in the KPC mouse pancreatic cancer model illustrated in the figure below. We have also combined mIgG1-200 with the standard of care for pancreatic cancer, (e.g., chemotherapy, gemcitabine/nab-paclitaxel) in the KPC model and shown that both as a single agent and in combination, mIgG1-200 extends the life of mice bearing pancreatic cancer.

LYT-200 Mouse mAb Activity in Orthotopic Pancreatic Cancer KPC Model



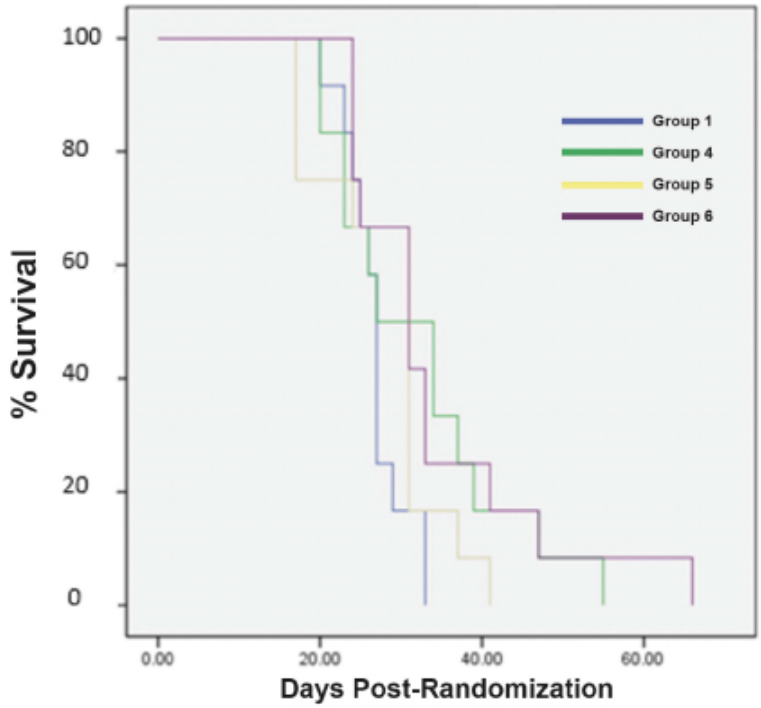
We also observed clear improvement in survival of these animals treated with LYT-200 mouse mAb, indicated as anti-galectin-9, versus controls (p=0.005), as illustrated in the figure below.

Targeting Galectin-9 and Survival in KPC Pancreatic Cancer Mouse Model



Effect of LYT-200 on Survival of Mice Implanted with Orthotopic Pancreatic Tumors

Kaplan Meier Survival Curve



Group 1: Untreated; Group 4: mIgG1-200 (200mg); Group 5: gemcitabine (50 mg/kg) plus Abraxane (15 mg/kg); Group 6: Combination of mIgG1-200 and gemicitabine+Abraxane at same doses. A significant survival benefit was delivered by treatment with mIgG1-200 alone, compared to the untreated controls (Group 4 versus Group 1: Hazard Ratio (HR)=0.348, 95%CI= (0.146, 0.83), p=0.017). The combination treatment provided an additional survival benefit over untreated animals (Group 6 vs Group 1: HR=0.336, 95% CI= (0.14, 0.806), p=0.015)

Cox Regression Analysis: Groups 4, 5 & 6 against Group 1

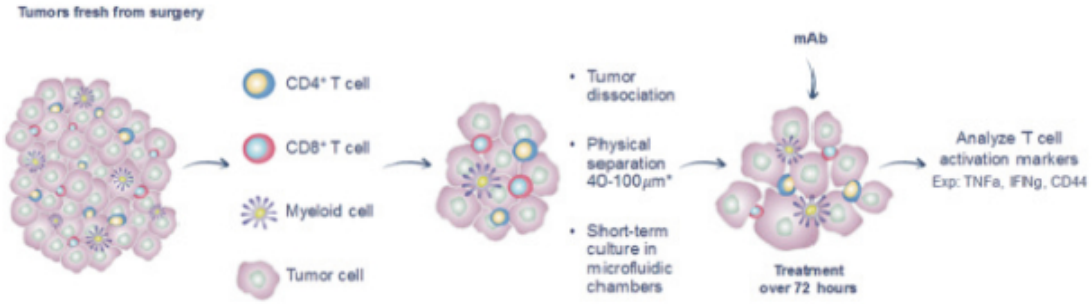
Group	P-value	HR	HR(95%CI)
4	0.017	0.348	(0.146, 0.83)
5	0.262	0.624	(0.274, 1.422)
6	0.015	0.336	(0.14, 0.806)

We also explored the activity of mIgG1-200 in a B16F10 melanoma mouse model, a model commonly used to assess the activity of checkpoint inhibitors. mIgG1-200 reduced mean tumor weights by ~50 percent while an anti-PD-1 antibody reduced mean tumor weights by ~22 percent. We also observed that when an anti-PD-1 antibody was used in conjunction with mIgG1-200, there was doubling of cytotoxic T cells in the tumor in the melanoma model.

One of the major challenges in oncology research is the translation from mouse models to humans, particularly in the case of immuno-oncology. To address this concern, we tested LYT-200 in PDOT cultures that mimic human tumor physiology and tumor microenvironment content. PDOTs are tumor excisions from primary and metastatic sites from PDAC, CRC, CCA, hepatocellular carcinoma and neuroendocrine tumors of the GI tract. Since the

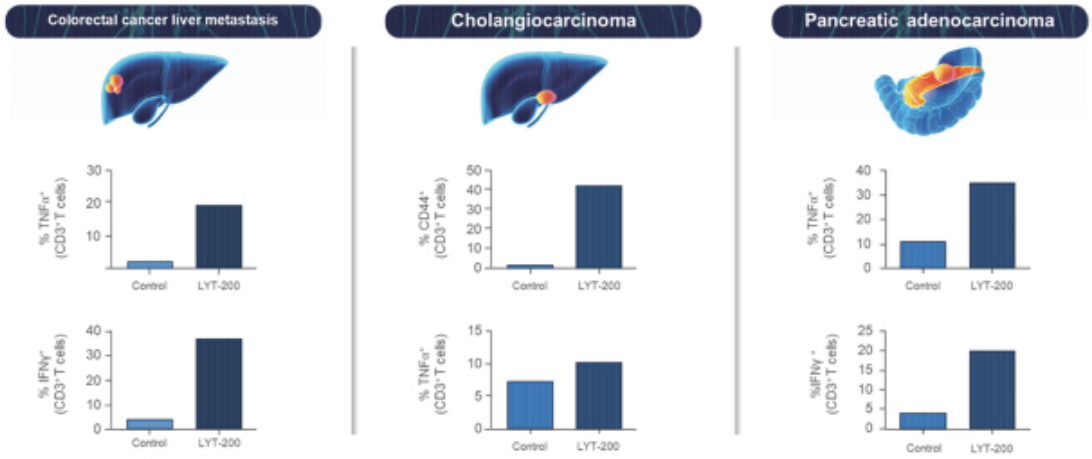
immune system within the tumor microenvironment is suppressed, the aim of treating PDOTs was to assess LYT-200's ability to induce T cell activation which would indicate that LYT-200 could show activity in humans. We observed that LYT-200 potently and reproducibly activated T cells in 56 percent of the samples tested (n=23), which we believe is indicative of a potential high response rate in cancer types which have currently been unresponsive to checkpoint blockade or where response rates do not surpass 20 percent. The figure below depicts a patient derived organoid system.

Illustration of PDOT System



We established PDOTs from tumor tissues surgically excised from cancer patients. Organoids containing the tumor microenvironment were processed by flow cytometry to establish the percentage of galectin-9 positive cells. We treated organoids containing the tumor microenvironment with LYT-200 and measured biomarkers of T cell activation such as TNF-α, interferon g, or IFNg and CD44. The figure below is an example of data from 23 human tumor organoid samples. Positive response in the organoid model was defined as an increase of more than 20 percent in at least two of three measured T cell activation markers, TNFα, IFNg and CD44.

Examples of *in vitro* T Cell Activation with LYT-200



GLP toxicology studies were carried out in Sprague Dawley rats and cynomolgus monkeys. No safety pharmacology findings attributed to LYT-200 at doses as high as 300 mg/kg/week were observed in either species.

Our Planned Clinical Development

Our first-in-human study of LYT-200 is intended to evaluate the safety, tolerability, PK and pharmacodynamics, or PD, and identify the recommended Phase 2 dose, or RP2D, for LYT-200 further evaluation as a single agent. This trial is being designed to permit inclusion of relevant drug combinations with LYT-200 in an expansion cohort setting for the treatment of certain solid tumors, including CCA, CRC and pancreatic cancer. We expect to file an IND and initiate this trial in the second half of 2020, with results anticipated in 2021.

LYT-200 Clinical Trial Design

Our planned clinical trial of LYT-200 is a Phase 1 open label non-randomized clinical trial of LYT-200 alone or in combination with chemotherapy or an approved anti-PD-1 agent in relapsed/refractory metastatic patients.

We plan to initiate a clinical trial under a dose escalation with dose expansion protocol as per recent FDA guidelines. The dose finding part of the study will be open to all comers, metastatic cancer patients with solid tumors who have failed previous lines of treatment. We intend to identify an RP2D of LYT-200 for further evaluation as a single agent and evaluate the safety of the RP2D in combination with chemotherapy and an approved checkpoint inhibitor. After the tolerability and RP2D have been determined, we plan to proceed with expansion cohorts in pancreatic cancer, CRC and CCA as pre-planned expansion cohort tumor types. We also plan to allow subjects with other tumor types to enroll in expansion cohorts as well based on the results from the dose finding part of the trial. In the expansion cohort, we plan to assess progression free survival benefit in pancreatic cancer and effect of potential tumor shrinkage in CRC and CCA. Throughout the study we plan to collect tumor tissue samples through biopsies as well as patient blood samples. These will be used to measure galectin-9 levels as well as many other immunological and tumor biomarkers that could help us further tailor the clinical trial and identify patients that we believe have highest likelihood to benefit.

The FDA and corresponding regulatory authorities will ultimately review our clinical results and determine whether our Wholly Owned product candidates are safe and effective. No regulatory agency has made any such determination that LYT-200 is safe or effective for use by the general public for any indication.

LYT-210: Our* gd*1 T Cell Focused Product Candidate Targeting Immunosuppressive and Pathogenic* gd*1 T Cells for Immuno-Oncology

LYT-210 is a fully human IgG1 mAb directed against the d1 chain of T cells bearing gdT cell receptors, or TCRs, we are designing for antibody-dependent cell-mediated cytotoxicity and antibody-dependent cellular phagocytosis, or ADCP. Similar to LYT-200, we believe that gd1 T cells represent an important new immuno-oncology target because they:

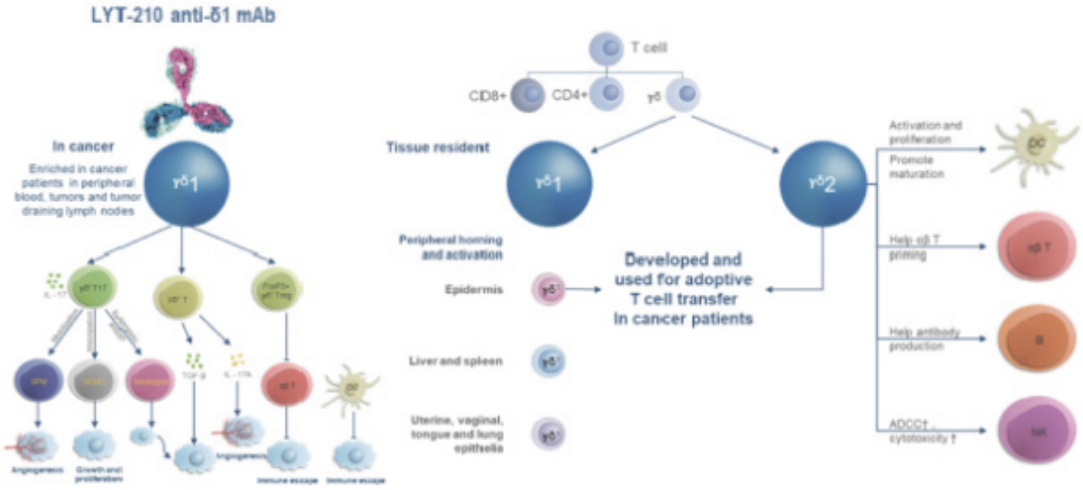
- Activate multiple immunosuppressive pathways;
- Have expression correlated with poor outcomes for multiple solid tumor types;
- Have preclinical evidence that showed improvement in survival in the KPC pancreatic cancer mouse model where approved checkpoint inhibitors are ineffective. We have since obtained data with anti-d1 antibodies in PDOT systems;
- While elevated in the context of cancer, have low expression under normal physiological conditions which indicates a potential safety window;
- Represent an attractive target; to our knowledge, there are no other companies developing a therapeutic candidate targeting immunosuppressive and pathogenic gd1 T cells; and
- We believe are an amenable target against which to generate a mAb.

Different T Cell Subtypes With the Focus on gd*T Cells*

Under normal physiological conditions, most T cells express the gd TCR, whereas gd T cells express the gd TCR. gd T cells are further classified based on d chain class, either gd1, gd2 or gd3 T cells. In healthy individuals, the

most abundant gd T cells are gd2, which are typically found in the blood and are cytotoxic by function. gd1 T cells can also be found in the blood but in much smaller numbers in healthy people. gd1 T cells are also present in mucosal membranes and skin in healthy people. In cancer patients, immunosuppressive gd1 T cells become more abundant in tumors and blood than gd2 T cells and create an immunosuppressive tumor microenvironment, as illustrated on the left side of the figure below. gd2 T cell cytotoxic functions are being evaluated by others as adoptive T cell therapeutics in early stage trials which is different from our approach of targeting immunosuppressive gd1 T cells.

We are targeting depletion of immunosuppressive, tumorigenic gd1 T cells rather than administration of cytotoxic gd2 T cells as a cell therapy. gd1 T cells execute potent immunosuppressive function via multiple mechanisms, as illustrated on the left side of the figure below, which facilitates cancer progression. We are designing LYT-210 to eliminate gd1 T cells, and thereby potentially relieve immunosuppression, which we believe could enable immune mediated cancer attack.



Elevated numbers of gd1 T cells have been observed in many cancer types, including but not limited to primary and metastatic breast, ovarian, colon and pancreatic cancers. This T cell population promotes tumor growth through active suppression of anti-tumor immune responses. gd1 T cells isolated from human tumors have been shown to suppress naive and memory T cell effector functions, quell cancer cell cytotoxic activity of gd2 T cells, recruit tumor infiltration of immune-suppressive macrophages, or tumor associated macrophages, or TAMS, and MDSCs, as well as inhibit antigen presentation activity of dendritic cells, or DCs. The figure below illustrates the impact of pro-tumorigenic gd1 T cells on tumor progression.

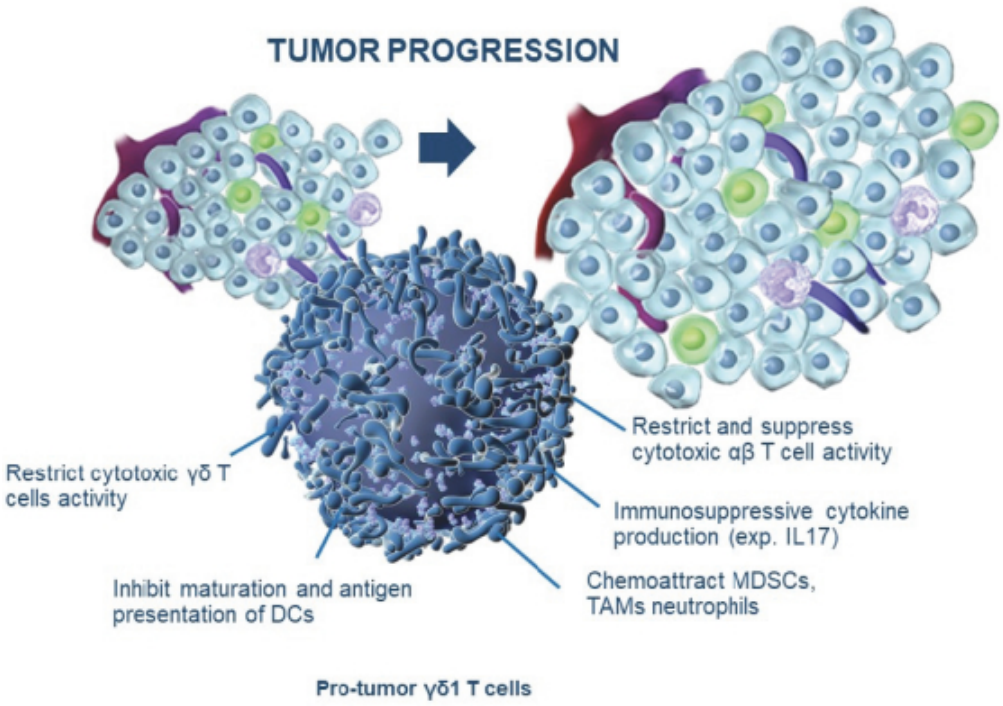
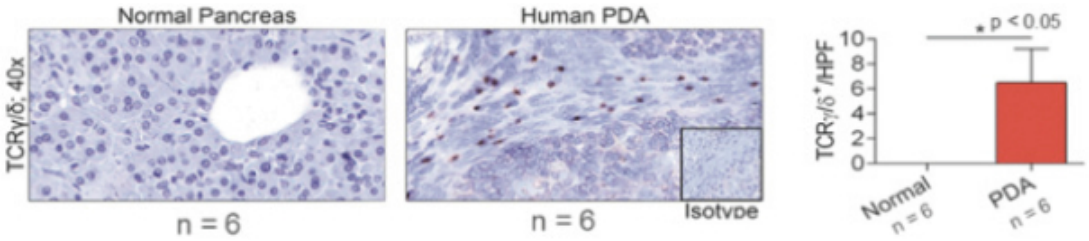


Image adapted from CellPress: REVIEW: gd T Cells: Unexpected Regulators of Cancer Development and Progression. DC = dendritic cell; TAM = tumor associated macrophage; MDSC = myeloid derived suppressor cell; IL17 = interleukin 17

The figure below demonstrates the presence of immunosuppressive gd1 T cells in patients with pancreatic adenocarcinoma. These cells are enriched in peripheral blood and expression of immunosuppression-related molecules on the gd1 T cell surface is significantly increased, while the expression of killing function-related molecules and the activation of killing function-related signaling pathway in the gd2 T cells are significantly decreased. In human cancers, gd1 T cells infiltrate the tumor microenvironment and can be detected using IHC or flow cytometry as shown in the figure below. Frozen sections of human PDA and normal pancreas were stained using a mAb specific for TCR gd or isotype control. Representative images and quantitative data are shown. The figure demonstrates that pancreatic cancers are enriched intratumorally for gd1 T cells compared to normal pancreatic tissue.

gd1 T Cell Infiltration of Tumor Microenvironment

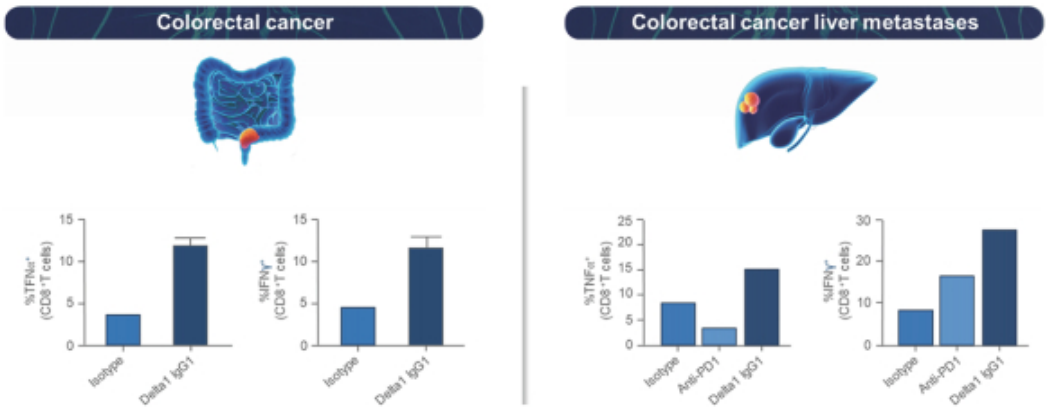


Preclinical Results for Immuno-Oncology Indications

Similar to LYT-200, to better assess the potential activity of the anti-d1 antibody, we employed PDOTs from primary and metastatic tumors spanning various checkpoint inhibitor insensitive solid tumor types such as pancreatic, colorectal, cholangiocarcinoma, hepatocellular cancer and neuroendocrine tumors of the GI tract in order to assess the prevalence of tumor-infiltrating gd1 T cells and the capacity of the antibodies to restore tumor-infiltrating immune cell effector activity. Positive response in the organoid model is measured by an increase of more than 20 percent in at least two out of three T cell activation markers. We observed positive response in approximately 60 percent of the PDOTs we analyzed, representing 19 patients, which we believe shows the potential of the approach to reactivate immunosuppressed T cells in the tumor microenvironment.

The figure below is illustrative of data collected from 19 human tumor organoid samples from CRC patients.

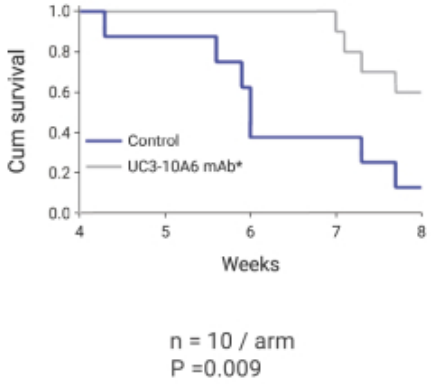
Examples of *in vitro* T Cell Activation with Antibodies Against gd1 T Cells



In order to assess the relevance of gd T cells in the development and progression of pancreatic cancer, we assessed the survival of immunocompetent mice which have gd T cells (wild type) or mice which are knock outs for gd T cells in a KPC mouse pancreatic model. In addition, there was an additional group of wild type mice treated with an antibody, UC3-10A6, which functionally blocks immunosuppressive mouse gd T cells.

As shown in the figure below, when pancreatic cancers grow in the absence of gd T cells, represented by the red curve, or when mice with pancreatic cancer were treated with an antibody against immunosuppressive gd T cells, represented by the grey curve, survival was greatly increased.

Pancreatic Cancer Mouse Survival with gd T Cell Depletion and Blockage



In order to validate and expand these findings, we compared the growth of syngeneic subcutaneous melanoma, or B16F10, and lung cancers in mouse strains with gd T cells (wild type) or without gd T cells (gd null) and evaluated the activity of anti-PD-1 and anti-CTLA4 mAbs within these groups. The results of these experiments showed increased anti-tumor activity of checkpoint blockade therapy in the absence of gd T cells.

We plan to advance additional preclinical and biomarker studies for LYT-210 in 2021.

LYT-210 for Autoimmune Disease: Mucosa-infiltrating Pathogenic gd*1 T cells*

Intraepithelial lymphocytes expressing gd1 TCRs are tissue-resident T cells that play a key role in homeostasis of the intestinal epithelium. It has been recently observed that chronic inflammation can permanently reconfigure the tissue-resident T cell compartment resulting in the repopulation of the GI mucosa with pathogenic and cytotoxic gd1 T cells. Establishment of pathogenic gd1 T cells along the GI tract tilts the gut environment towards a chronic inflammatory state, contributing to the pathophysiology of GI tract and inflammatory diseases, such as refractory celiac disease. We plan to conduct preclinical studies in animal models of inflammatory diseases.

The FDA and corresponding regulatory authorities will ultimately review our clinical results and determine whether our Wholly Owned product candidates are safe and effective. No regulatory agency has made any such determination that LYT-210 is safe or effective for use by the general public for any indication.

LYT-300: Oral Allopregnanolone in Development to Treat a Range of Neurological and Neuropsychological Conditions

The CNS comprises an extensive and immensely complex framework made up of a multitude of cells that support its essential function of signaling and transmitting information—predominantly carried out by neurons. With billions of neurons within the CNS, this communication across the complex network is achieved by means of neurotransmitters that enable signals to be transferred at junctions between neurons, or synapses. These signals transmitted between neurons might be inhibitory, excitatory or modulatory as it relates to the desired function to be achieved. Neurotransmitters communicate information between neurons via receptors that are exquisitely designed for transmission of information.

The major inhibitory neurotransmitter in the brain is gamma aminobutyric acid, or GABA, which decreases activity in the nervous system and essential for maintaining normal physiological function. One of its modes of action is via the $GABA_A$ receptor that is found on the membrane of neurons. These receptors have also been

found on the membranes of immune cells suggesting a role for this biology across the brain-immune interface. $GABA_A$ receptors play a critical role in biology and their modulation has been the subject of several therapeutic efforts with the goal of having an impact across a range of neurological disorders. However, concerns around safety, challenging dosing regimens, and PK limitations have hampered the development of meaningful drug candidates. Neurosteroids are a class of endogenous natural small molecules that play a crucial role in modulating neurotransmission. Importantly, as it relates to $GABA_A$ receptors, the neurosteroid allopregnanolone—a positive allosteric modulator, through its action via the synaptic and extra-synaptic receptors—is capable of having a profound impact on $GABA_A$ signaling. These compounds display significantly improved selectivity and capacity for modulation at these crucial sites, which might enable overcoming the challenges faced by approaches that have been developed to date.

Allopregnanolone, and neurosteroids in general as a class of potent endogenous natural small molecules, have been recognized over the past three decades for their therapeutic potential to treat a range of neurological and neuropsychological conditions such as epileptic disorders, fragile X syndrome, fragile X tremor-associated syndrome, anxiety, depression, essential tremor, and sleep disorders, among others. The major hurdles associated with the translation of these compounds have been:

- The inability to create an oral formulation due to first pass metabolism by the liver; and
- The inability to administer them chronically to patients – essential for treating CNS disorders.

The recent approval of Zulresso, a 60 hour IV infusion to treat post-partum depression, speaks to the challenges that limit the scope of translation of this class of compounds to treat neurological and neuropsychological disorders. An oral form of allopregnanolone and other neurosteroids would enable the development of these natural molecules for treating a range of neurological and neuropsychological conditions.

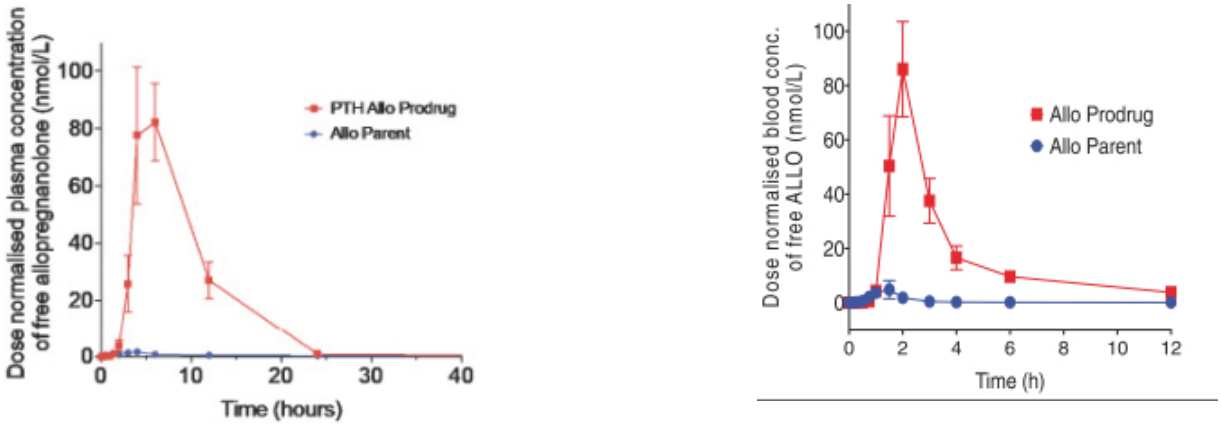
Inspired by the natural trafficking of fats via the lymphatics at the gut-immune interface, we have developed an oral lipid-prodrug version of allopregnanolone. By trafficking via the lymphatics, we are able to overcome the first pass metabolism by the liver and achieve significant oral bioavailability of endogenous allopregnanolone in preclinical models. By utilizing our versatile small molecule lymphatic trafficking chemistry platform, we designed a multitude of lipid-prodrug molecules to control lymphatic trafficking, systemic release, and hence oral bioavailability of the active endogenous compound. Importantly, by harnessing this approach we have developed a version of allopregnanolone that can be administered chronically to patients to treat a range of neurological and neuropsychological conditions and built a robust intellectual property portfolio that enables protection of our proprietary composition of matter.

Preclinical Results

We created a library of lipid prodrugs of allopregnanolone and showed that orally dosing these prodrugs achieved therapeutically relevant plasma levels in small and large animal models. These studies, coupled with our other preclinical studies, support the possible utility of this approach for converting natural allopregnanolone into an orally-dosed drug as well as for numerous other potential therapeutics with intrinsic hepatic metabolism liabilities and oral absorption limitations.

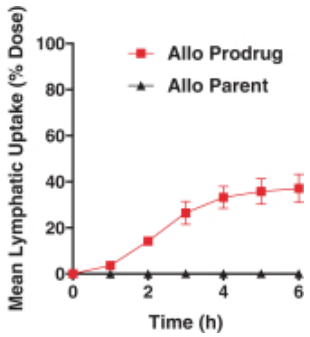
We measured plasma levels of allopregnanolone after oral administration of lymphatic targeting prodrug of allopregnanolone or unmodified allopregnanolone in preclinical models of dogs and non-human primates. Male cynomolgus monkeys (figure below on the left) or dogs (figure below on the right) were fed a standardized diet prior to drug administration. The figure below shows dose-normalized blood concentration of free allopregnanolone over time in monkeys (n = 6) and dogs (n = 4) after oral administration of lipid prodrug compound in comparison with orally-administered allopregnanolone (error bars represent standard error of measurement). Apparent bioavailability of free allopregnanolone versus intravenous, or IV, was calculated to be over 30 percent in both species.

Allopregnanolone Oral Exposure



This plasma exposure increase was confirmed to be due to lymphatic uptake. In the figure below, total allopregnanolone concentration (including free and prodrug-associated) was measured in the mesenteric lymph duct of anaesthetized rodents following intraduodenal infusion of prodrug (n = 3) or parent allopregnanolone (n = 2).

Allopregnanolone Lymphatic Uptake



No drug-related adverse effects have been noted in preclinical studies to date at therapeutically relevant doses. Formal safety studies are being pursued as a part of the first-in-human-enabling package of studies. To support these studies, dose escalation studies have been performed on rat and dog and dose proportionality has been observed in both species.

Our Planned Clinical Development

The initial objective of the LYT-300 clinical program is to characterize the safety, tolerability, and PK behavior of orally administered LYT-300 in a Phase 1 clinical trial in healthy volunteers. We expect to initiate a first-in-human clinical study by the end of 2021. These studies may include exploratory endpoints such as beta wave power electroencephalography, or ß-EEG, a marker of $GABA_A$ target engagement. Data from these initial studies will be used to define a range of future studies and planned indications, which could include those discussed in the above section on unmet needs.

Discovery Platforms: Our Platforms Leveraging the Absorption of Dietary Lipids to Traffic Therapeutics Via the Lymphatic System

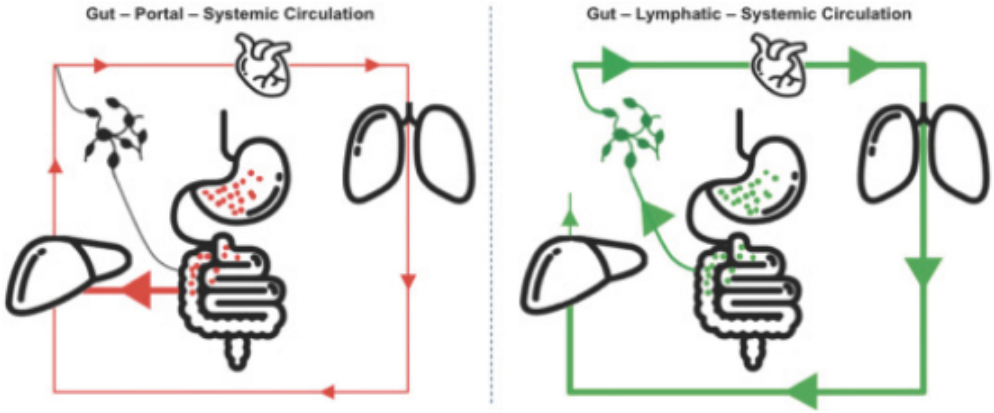
In addition to our internal product candidates described above, we have two platforms designed to harness the lymphatic system functions for immunology, oncology and CNS indications in discovery as discussed below.

Given our interest in the lymphatic system, we sought out different approaches that could be taken to selectively traffic therapeutic molecules through the lymphatic system to target immune cells in the lymph nodes.

Glyph™: Lymphatic Targeting Chemistry Platform

We are developing a synthetic lymphatic-targeting chemistry platform called Glyph, which employs the body's natural lipid absorption and transport process to orally administer drugs via the lymphatic system. Consumed nutrients and orally-administered pharmaceuticals are initially absorbed by the small intestine mucosa, distributed to the liver by the portal vein before entering systemic circulation. Importantly, many consumed dietary lipids, particularly triglycerides, enter systemic circulation by an alternate route. Triglycerides, which are composed of three fatty acid chains tethered to a 3-carbon glycerol molecule, are absorbed by small intestine mucosal enterocytes where they are incorporated into large lipid-protein complexes, or chylomicrons, and released into the submucosa. Chylomicrons are too large to enter blood vessels and are instead taken up by submucosal lymphatic vessels. Once in the lymphatic vessels, they are transported to mesenteric lymph nodes associated with the GI tract where they pass into larger lymphatic sinuses connected to the thoracic duct, then transition to systemic circulation as illustrated in the figure below. This is in contrast to conventional systemic circulation via the gut and liver as shown in the figure below on the left.

Conventional Drug Circulation versus Lymphatic Systemic Circulation



We believe this platform provides the following capabilities:

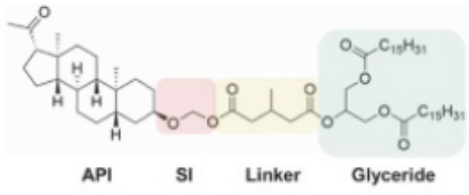
- *Targeting the mesenteric lymph nodes*. This lymphatic targeting technology has important features potentially offering meaningful advantages in the creation of orally-administered medicines, especially those that need to reach immune system drug targets present in the GI tract mucosa and submucosa, such as intestine-associated immune cells, or in the mesenteric lymphatic vasculature, such as circulating immune cells, and mesenteric lymph nodes, such as lymph node stromal cells, antigen-presenting DCs and lymph node-associated immune cells.
- *Enhancing oral bio-availability by bypassing first-pass metabolism*. We believe this technology could provide a broadly applicable modular means to significantly enhance the bioavailability of orally-administered drugs that suffer from substantial first-pass liver metabolism or those drugs, especially

those utilized in drug combination therapies, that act as modulators (inducers and/or inhibitors) of drug-metabolizing systems in the liver.

We have successfully extended our lymphatic targeting platform to encompass more than 20 molecules as well as a range of novel linker chemistries that have demonstrated promising lymphatic targeting in preclinical studies. We expect to select product candidates from this and ongoing discovery work. In April 2019, we announced an alliance with Boehringer Ingelheim, which is initially focused on evaluating the feasibility of applying our Glyph technology platform to one of its immuno-oncology product candidates. We retain all other applications of this technology.

Our proprietary Glyph technology platform takes advantage of the fact that one of the triglyceride-associated fatty acids remains bound to dietary lipids during intestinal absorption, chylomicron conversion, lymphatic vessel uptake and eventual transport into the circulatory system. Using a modular set of proprietary chemical entities, small molecule pharmaceutical compounds can be docked to triglycerides where, following oral administration, the small molecule is directed into the mesenteric lymphatic system and on to systemic circulation. The point of original small molecule release from the triglyceride is governed by self-cleaving chemical structures, with different release-timing features, that tether the small molecule to the module connected to the triglyceride. The figure below is a representation of the proprietary chemistry for the design of our lymphatic targeting technology. The active pharmaceutical ingredient, or API, is meant to indicate an example of a pharmaceutical small molecule that is attached to the triglyceride, or Glyceride in the figure below, group using proprietary linker chemistry, or Linker in the figure below, to create a prodrug of the API. The prodrug also includes a proprietary self-immolative or cleaving chemistry, or SI in the figure below, that can be tuned to release the API in its intact original form.

Schematic Representation of Our Lymphatic Targeting Prodrug Technology



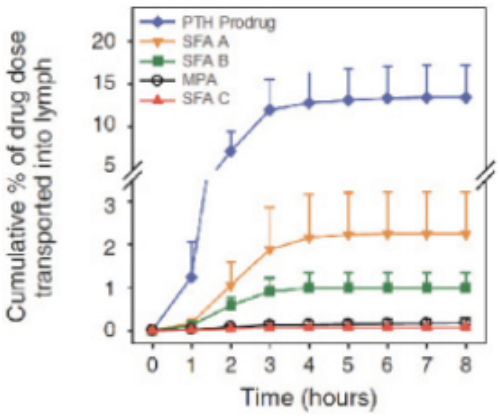
Self-Immolative (SI)
Allow controlled release of exact parent drug compound

Linker
Tunes stability to gut esterases and recognition for triglyceride resynthesis to maximize lymphatic transport levels

Glyceride
Integrates prodrug into chylomicrons for lymphatic transport

Earlier efforts by scientists to create lipid-like prodrugs used strategies that coupled the small molecule drug directly with a single fatty acid, which cannot be packaged by the GI into lymph-bound chylomicrons and therefore does not facilitate transport to the mesenteric lymph nodes. The figure below demonstrates our lymphatic targeting prodrugs, marked PTH Prodrug in the figure below, demonstrated five-fold improved lymph transport as compared to conventional single fatty acid prodrugs, marked prodrug A through C in the figure below, or unmodified mycophenolic acid, or MPA, an immune-suppressive agent widely used in solid organ transplant rejection therapy and the treatment of lupus autoimmunity.

Lymphatic Uptake of Our Prodrug

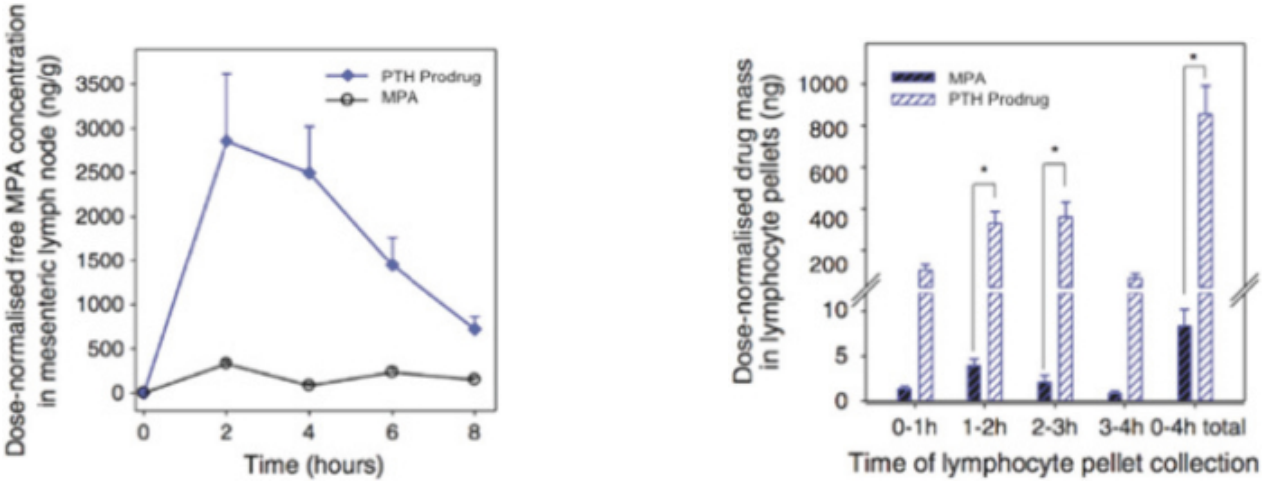


Targeting the Mesenteric Lymph Nodes

To demonstrate the mesenteric lymphatic targeting capability of the platform, prodrugs were created from MPA. Preclinical studies in rodent models conducted by our collaborator and co-inventor, which were independently repeated by us, demonstrated that lipid prodrugs of MPA were capable of achieving MPA concentrations in mesenteric lymph, mesenteric lymph nodes and in mesenteric lymph node immune cells that were ten to 100-fold higher than observed with unmodified MPA. The figures below show the level of released MPA measured in lymph nodes (left) or lymphocytes within mesenteric lymph fluid (right) at the time periods indicated following small intestine administration of MPA or MPA lipid prodrugs.

In the figure on the left below, dose-normalized MPA concentration in mesenteric lymph nodes following intraduodenal infusion (over two hours) of MPA or MPA prodrug to anaesthetized, mesenteric lymph-duct intact rats (n = 3 for each time point, each drug). Our modified prodrug had a ten-fold higher exposure as calculated by AUC over eight hours. The panel on the right depicts dose-normalized mass of MPA and MPA derivatives in lymphocyte pellets separated from hourly collected mesenteric lymph samples following intraduodenal infusion of formulations containing MPA or MPA prodrugs (PTH Prodrug). The measured prodrug was over 100-fold higher than free drug over the four-hour experiment.

Drug Concentration With and Without Our Prodrug
Measured in Lymph Nodes and in Lymph Fluids



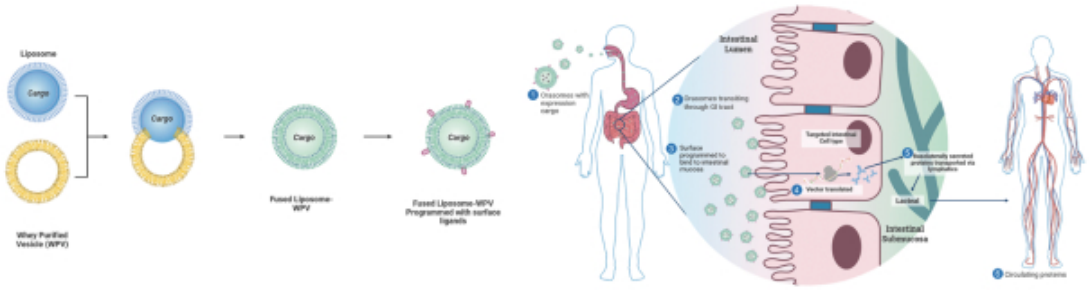
Enhancing Oral Bio-Availability

As noted above, we believe this platform provides a broadly-applicable modular approach to enhance the bioavailability of orally-administered drugs that suffer from substantial first-pass liver metabolism. To demonstrate the utility of our lipid prodrug platform in such cases, we chose allopregnanolone as the subject of our inquiry, which has resulted in the LYT-300 program. However, this benefit can potentially be widely applied to nearly any therapeutic compatible with the synthetic approach which suffers from hepatic first-pass metabolism as has been shown by us and our collaborators with compounds such as testosterone, buprenorphine and multiple cannabinoids.

Orasome™ Technology Platform: Designing a Programmable and Scalable Approach for Oral Administration of Nucleic Acids and Other Biologics

We are developing a versatile and programmable oral biotherapeutics platform, Orasome™, to enable administration of macromolecule therapeutic payloads, including antisense oligonucleotides, short interfering RNA, mRNA, modular expression vector systems, peptides and nanoparticles that are otherwise administered exclusively by injection.

The figure below depicts the administration of oral biotherapeutics:



Our Orasome technology platform was inspired by the *in vivo* trafficking of ubiquitous, naturally occurring vesicles, which are often referred to as exosomes, and we have engineered them for transport through the gastro-intestinal tract. Exosomes are a type of extracellular vesicle approximately ranging from 50nm to 150nm in diameter that are produced in the endosomal compartment and secreted from most types of eukaryotic cells. We believe human cell-derived exosomes have attractive promise as vehicles for systemic drug delivery due to their likely observed tolerability over synthetic polymer-based delivery technologies. However, the fragile nature of exosomes derived from human cells limits their usage for oral administration and the type of post-isolation manipulations that can be applied in order to optimize such vesicles for exogenous drug cargo loading and storage.

Our Orasome technology platform utilizes multiple vesicle components, including those isolated from milk. We have engineered these vesicles, building on the naturally evolved architecture in mammals, to remain stable following oral consumption and transit through the upper GI tract. Orasome vesicles are readily amenable to manufacturing at scale and relatively low cost based on the easily accessible and engineerable components.

Our proprietary Orasome technology platform has the potential to transform the treatment paradigm for diseases, such as rheumatoid arthritis, other autoimmune diseases, diabetes and cancer for which the standard of care often requires intravenous infusion or subcutaneous injection of monoclonal antibodies (e.g., anti-programmed death-1, anti-tumor necrosis factor) or therapeutic proteins/peptides *(e.g.*, glucagon-like peptide-1, insulin, granulocyte colony-stimulating factor GCSF, Factor VIII and IX, cytokines and erythropoietin, among others.

Our Orasome vesicles are currently constructed to transport macromolecular medicines to selected mucosal cell types of the intestinal tract where the therapeutics act either directly in the GI tract, transit through the mucosa to the underlying lymphatic vascular network or, in the case of cargos that yield mRNAs, enable the body to produce its own therapeutic proteins and peptides, such as antibodies within mucosal cells that are secreted into the mucosal lymphatic vascular network for subsequent systemic distribution. Using our Orasome technology platform, we believe it may be possible for a patient to take an oral drug product that will permit their own GI tract cells to make virtually any type of therapeutic protein. We believe this approach also has the potential to provide a more convenient and significantly less expensive means to deliver biological medicines.

Within the context of the current COVID-19 pandemic, we believe our Orasome technology platform has the potential to support oral administration of anti-SARS-CoV-2 monoclonal antibodies or antibody combinations and vaccines to supply passive immune therapies for infected individuals and passive immune protection for health care and first responder professionals. Thus, whether combating emerging epidemic/pandemic pathogens or other diseases where monoclonal antibody therapeutics or vaccines offer significant clinical benefit, we believe our Orasome technology platform has the potential to transform the treatment of a range of clinical indications, while also lowering costs and simplifying administration of such biotherapeutics.

We expect preclinical proof-of-concept data in 2021 and anticipate additional preclinical results from a non-human primate proof-of-concept study in 2021. The proof-of-concept studies are designed to document the presence of therapeutic serum levels of biotherapeutics (peptides and proteins, such as antibodies) produced by the body following the oral administration designer payloads.

This work could lay the foundation for IND-enabling clinical studies for one or more additional product candidates to be included in our Wholly Owned Pipeline. We intend to leverage our proprietary technology platforms, as well as our extensive network with major pharmaceutical companies and world-leading scientists in immunology and lymphatics, to generate additional novel product candidates.

Our Founded Entities' Product Candidates

The table below summarizes the programs of our Founded Entities. We established the underlying programs and platforms that have resulted in the product candidates being developed by our Founded Entities and advanced them through key validation points. Each of their product candidates targets indications related to one or more of

the BIG systems, and any value we realize from these product candidates will be through the potential growth and realization of equity and royalty stakes highlighted in the table below.

We hold majority voting control of our Controlled Founded Entities and continue to play a role in the development of their product candidates, through representation on their board of directors, with respect to Follica, Vedanta, Alivio and Sonde. Our board designees represent a majority of the members of the board of directors of Follica, Vedanta and Alivio and a minority of the members of the board of directors of Sonde. With respect to our Non-Controlled Founded Entities, we do not hold majority equity ownership and are not responsible for development or commercialization of their product candidates and FDA-cleared products. Our Non-Controlled Founded Entities have independent management teams, and we do not control the day-to-day development of their respective product candidates.

Founded Entities

Founded Entity	PureTech Ownership*	Description
Non-Controlled Founded Entities with Royalty Interests		
GELESIS	21.0%[R]	Gelesis is developing a novel hydrogel platform technology designed to treat obesity and other chronic diseases related to the GI pathway. Gelesis' proprietary approach is designed to act mechanically in the GI pathway to potentially alter the course of chronic diseases. Gelesis received clearance from the FDA and a European CE Mark for its first product, Plenity, and has additional programs in development for indications including NASH/NAFLD and functional constipation.
KARUNA	12.8%[R]	Karuna is developing novel therapies with the potential to transform the lives of people with disabling and potentially fatal neuropsychiatric disorders, including schizophrenia and dementia-related psychosis. Following the completion of a successful End-of-Phase 2 meeting with the FDA, Karuna expects to initiate Phase 3 trials for its lead program.
Controlled Founded Entities		
follica	78.3%[R]	Follica is developing a regenerative biology platform designed to treat androgenetic alopecia, epithelial aging and other medical indications. Follica's approach is based on generating an "embryonic window" in adults via a targeted, proprietary method of scalp disruption, stimulating stem cells causing new hair follicles to grow. It has two clinical-stage programs focused on androgenetic alopecia and skin rejuvenation.
VEDANTA	50.4%	Vedanta is developing a new category of therapies for immune-mediated diseases based on a rationally-defined consortia of human microbiome-derived bacteria. It has four clinical-stage programs in development for high-risk CDI, food allergy, IBD and solid tumors.
SONDE	45.8%	Sonde is developing a voice-based technology platform designed to detect health conditions and symptoms from changes in voice. Using machine learning, Sonde's proprietary technology senses and analyzes subtle vocal changes due to changes in a person's physiology to provide early health detection and monitoring.
ALIVIO	78.6%	Alivio is advancing its targeted disease immunomodulation platform for the potential treatment of chronic and acute inflammatory disorders. Its three preclinical-stage programs are in development for pouchitis, IBD and IC/BPS.
entrega	72.9%	Entrega is advancing its technology platform for the oral delivery of biologics, vaccines and other drugs that are otherwise not efficiently absorbed when taken orally. Entrega's approach uses a proprietary, customizable hydrogel dosage form to control local fluid microenvironments in the GI tract to both enhance absorption and reduce the variability of drug exposure.
Founded Entities Limited to Equity Interest		
AKILI	34.0%	Akili is a leading digital therapeutics company, combining scientific and clinical rigor with the ingenuity of the tech industry with a goal of changing how medicine is developed, delivered and experienced. Akili is pioneering the development of treatments designed to have direct therapeutic activity, delivered not through a traditional pill but via a high-quality video game experience. Akili is evaluating a number of technologies and potential new digital medicines designed to target neural systems to improve associated cognitive functions. Akili received clearance from the FDA for EndeavorRx™ (AKL-T01) as a prescription treatment to improve ADHD and a European CE Mark as a prescription-only digital therapeutic intended for the treatment of attention and inhibitory control deficits in pediatric patients with ADHD.
VOR	11.8%	Vor is a cell therapy company that combines a novel patient engineering approach with targeted therapies to provide a single company solution for patients suffering from hematological malignancies. Vor's proprietary platform leverages its expertise in hematopoietic stem cell, or HSC, biology and genome engineering to remove surface targets expressed by cancer cells by genetically modifying HSCs. Its lead product candidate, VOR33, is in development for acute myeloid leukemia.

* Relevant ownership interests for Founded Entities were calculated on a diluted basis (as opposed to a voting basis) as of June 30, 2020, including outstanding shares, options and warrants, but excluding unallocated shares authorized to be issued pursuant to equity incentive plans. Ownership of Vor is based on the

assumption that all future tranches of the most recent financing round are funded. Karuna ownership is calculated on an outstanding voting share basis as of August 26, 2020.

R PureTech Health has a right to royalty payments as a percentage of net sales. For a description of these agreements, see "Business—Overview."

All of these underlying programs and platforms across our Founded Entities were initially identified or discovered and then advanced by our team through key validation points before being further developed by each respective Founded Entity.

Our Founded Entities are described below.

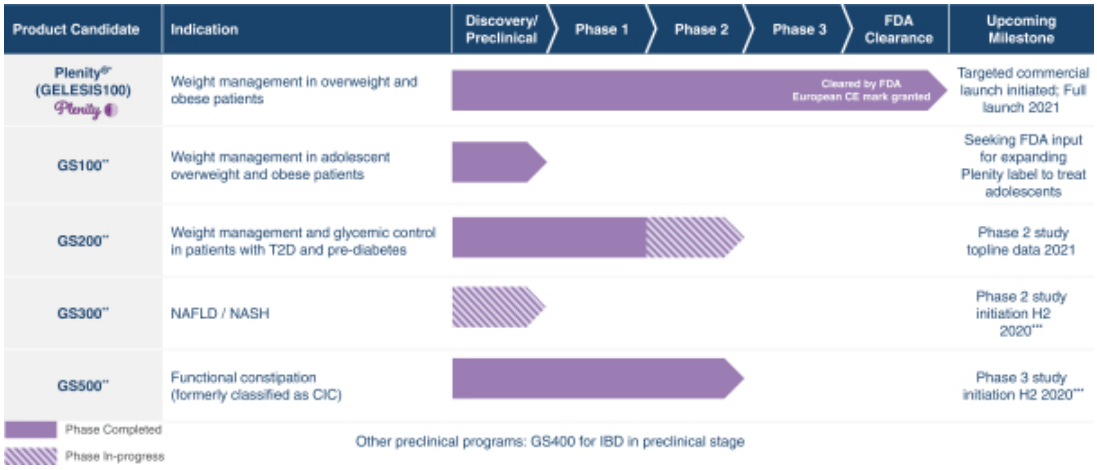
Founded Entities in which PureTech has a Controlling Interest or the Right to Receive Royalties, in Order of Development Stage

Gelesis

Gelesis is developing oral therapeutics based on a novel, superabsorbent hydrogel technology platform to treat obesity and other chronic diseases related to the GI pathway. Gelesis' proprietary approach is designed to act mechanically in the GI pathway to potentially alter the course of chronic diseases. In April 2019, Gelesis received clearance from the FDA for its first product, Plenity® (Gelesis100), an aid for weight management in adults with a body mass index, or BMI, of 25-40 kg/m2, when used in conjunction with diet and exercise. In June 2020, Gelesis received a CE Mark for Plenity as a class III medical device indicated for weight loss in overweight and obese adults with a Body Mass Index, or BMI, of 25-40 kg/m2, when used in conjunction with diet and exercise, which allows Gelesis to market Plenity throughout the European Economic Area and in other countries that recognize the CE Mark.

Given challenges associated with pharmacological and invasive surgical treatments for obesity, Gelesis designed an approach with an oral, non-invasive, non-systemic mechanism of action and a highly favorable safety and efficacy profile. Gelesis' product candidates work in the GI tract and pass through the body without being absorbed. They are synthesized from two naturally derived building blocks (citric acid and cellulose) that form a novel, patent-protected three-dimensional structural composition and occupies volume in the stomach and small intestine to promote satiety and fullness. Because Gelesis' technology acts mechanically and is not systemically absorbed, the product candidates are treated as devices for regulatory approval purposes.

Gelesis was incorporated in February 2006. The following chart summarizes Gelesis' product and product candidates:



* Important Safety Information: Plenity is contraindicated in patients who are pregnant or are allergic to cellulose, citric acid, sodium stearyl fumarate, gelatin, or titanium dioxide. Plenity may alter the absorption

of medications. Read Sections 6 and 8.3 of the Instructions for Use carefully. Avoid use in patients with the following conditions: esophageal anatomic anomalies, including webs, diverticuli, and rings; suspected strictures (such as patients with Crohn's disease); or complications from prior gastrointestinal (GI) surgery that could affect GI transit and motility. Use with caution in patients with active GI conditions such as gastro-esophageal reflux disease (GERD), ulcers or heartburn. The overall incidence of adverse events (AEs) in the Plenity group was no different than the placebo group. The most common side effects were diarrhea, distended abdomen, infrequent bowel movements, and flatulence. For the safe and proper use of Plenity, refer to U.S. Instructions for Use or the EU Instructions for Use

** Products are investigational and have not been cleared by the FDA for use in the United States.

*** Contingent of FDA review of the research plan.

Program Discovery Process by the PureTech Team

We were interested in creating an effective and safe therapy for obesity given the tremendous need, significant health implications and failure of prior approaches to effectively engage and serve the breadth of the population affected. We consulted with leading obesity experts to brainstorm on the characteristics of an ideal approach, which we decided was an orally-administered mechanically acting device, and we then conducted a worldwide search for compelling technologies meeting these criteria. We identified and in-licensed the core intellectual property from one of our academic collaborators in October 2008, and we subsequently co-invented additional intellectual property around a novel class of biocompatible, superabsorbent hydrogels. One of the core PureTech team members involved in the initial identification and development process subsequently assumed the role of chief executive officer of Gelesis, and successfully attracted financing and built a strong development and commercial leadership team.

The Gelesis advisory team is comprised of leading experts in obesity and its related comorbidities, clinical research and development and advanced biomaterials, including Caroline Apovian, M.D., professor of Medicine and Pediatrics at Boston University School of Medicine; Louis J. Aronne, M.D., FACP, director of the Comprehensive Weight Control Program at Weill Cornell Medicine; Arne Astrup, M.D., head of department of Nutrition, Exercise and Sports at University of Copenhagen; Ken Fujioka, M.D., director of the Nutrition and Metabolic Research Center and the Center for Weight Management at the Scripps Clinic; James Hill, Ph.D., chairman, Department of Nutrition Sciences, director, Nutrition Obesity Research Center, University of Alabama; professor of Medicine and Pediatrics, University of Colorado; Lee M. Kaplan, M.D., Ph.D., Director of the Obesity, Metabolism and Nutrition Institute at Massachusetts General Hospital; Bennett Shapiro, M.D., co-founder and non-executive director at PureTech and former Executive Vice President of Research for Merck; and Angelo Tremblay, Ph.D., professor at Laval University.

Patient Need and Market Potential

Excess weight is growing rapidly in prevalence worldwide, with approximately 70 percent of American adults struggling with overweight and obesity. Globally there are more than 1.9 billion adults 18 years of age or older who are overweight and 600 million who have obesity. Additionally, approximately 13.7 million American children and adolescents are estimated to have obesity. Obesity-related conditions, such as heart disease, stroke, type 2 diabetes, NASH/NAFLD and certain types of cancer, are some of the leading causes of preventable death. Functional constipation and NASH/NAFLD affect approximately 35 million and 80 to 100 million individuals, respectively, in the United States. Type 2 diabetes and prediabetes affect approximately 30 million and 84 million individuals, respectively, in the United States.

Current treatments for patients with overweight and obesity begin with lifestyle modification, such as diet and exercise. When healthy eating and physical activity fail to produce the desired results, physicians may consider pharmaceutical therapies, device implantation or surgical treatments, such as gastric bypass and gastric banding (for patients with more severe obesity). These approaches are associated with safety concerns, lifestyle impact, complexity of use, high cost and compliance issues that have limited their adoption. While indicated for adults

with a BMI of 25-40 kg/m2 when used in conjunction with diet and exercise, an important market segment for Plenity® is adults with BMI <35 kg/m2 (approximately 130 million adults in the US). The consumer expectations of weight loss within this group and the desire for a strong safety profile provide a particularly differentiated opportunity for Plenity®.

Development Status

Gelesis received clearance from the FDA to market and sell its lead product Plenity as an aid for weight management in adults with a BMI of 25-40 kg/m^2, when used in conjunction with diet and exercise. Plenity is FDA-cleared for the largest number of adults struggling with overweight and obesity of any prescription weight-management aid and the only prescription weight management product to be cleared for use by overweight adults with a BMI as low as 25 kg/m^2, with or without comorbidities. Nearly 150 million adults with excess weight in the United States fall within the BMI range included in the Plenity label.

Gelesis also received a CE Mark for Plenity as a class III medical device indicated for weight loss in overweight and obese adults with a BMI of 25-40 kg/m^2, when used in conjunction with diet and exercise. Gelesis will now be able to market Plenity throughout the European Economic Area and in other countries that recognize the CE Mark. Gelesis plans to bring Plenity to the U.S. first, where it has been available to a limited extent since the second half of 2019 through an early experience program and since 2020 via a limited launch while the company ramps up its commercial operations and inventory for a full launch in 2021. Gelesis also plans to seek FDA input on the requirements for expanding the Plenity label for treating adolescents.

Gelesis has a partnership with Ro, a leading U.S. telehealth provider, to support the U.S. commercialization of Plenity. Gelesis also has a partnership with China Medical Systems Holdings Ltd., or CMS, for the commercialization of Plenty in China. Through the terms of the deal, CMS will provide $35 million upfront in a combination of licensing fees and equity investment, with the potential for an additional $388 million in future milestone payments as well as royalties.

Plenity was evaluated in a multicenter, double-blind, placebo-controlled pivotal study designed to assess change in body weight in 436 adults with overweight or obesity (BMI ³ 27 and ³ 40 kg/m^2) after six months of treatment. The study had two predefined co-primary endpoints: at least 35 percent of patients taking Plenity achieving more than five percent weight loss (categorical endpoint) and placebo-adjusted weight loss with a super-superiority margin of three percent. In addition, a prespecified analysis of simple superiority was also performed. The study met and exceeded the predefined categorical endpoint, with 59 percent of adults in the treatment group achieving weight loss of five percent or greater and losing on average 10 percent of their weight (22 pounds) and 3.5 inches from their waists within six months. The study did not meet the three percent super-superiority endpoint but demonstrated superiority of the Plenity treatment over the placebo group (–6.4 percent vs. –4.4 percent, P=0.0007). Plenity-treated individuals had twice the odds of achieving at least five percent weight loss as compared to placebo (adjusted odds ratio: 2.0, P=0.0008).

In addition, 26 percent of the adults who completed the treatment with Plenity were “super-responders,” defined as achieving at least ten percent weight loss. These super-responders achieved an average of about 14 percent weight loss or approximately 30 pounds.

The overall incidence of AEs in the Plenity treatment group was no different than placebo. The most common treatment related adverse events, or TRAEs, were GI disorders (158 TRAEs in 84 (38 percent) subjects in the Plenity arm, compared to 105 events in 58 (28 percent) subjects receiving placebo), infections and infestations (two events in two (one percent) subjects with Plenity and one events in one (one percent) subjects with placebo), and musculoskeletal and connective tissue disorders (three events in two (one percent) subjects with Plenity and 0 in 0 (0 percent) subjects with placebo). There were no SAEs in the Plenity treatment group, whereas there was one SAE in the placebo treatment group. For the safe and proper use of Plenity, refer to the Instructions for Use.

In the second half of 2020, Gelesis expects to initiate a Phase 2 study of GS300 in NASH/NAFLD and a Phase 3 study of GS500 in functional constipation. A pilot study of 40 individuals showed that a prototype of GS500 demonstrated a significant reduction in colonic transit time, or CTT, in patients with functional constipation by approximately 16 hours (approximately 31 percent) compared to baseline (P=0.02 compared to placebo).

In 2021, Gelesis expects topline results from a Phase 2 study of GS200 in weight management and glycemic control in adults with type 2 diabetes and prediabetes. Data from a pilot study of GS200 demonstrated that administration of GS200 ten minutes prior to a meal increased fullness throughout the entire day (P=0.012).

Gelesis' completed and ongoing studies have been approved by the applicable reviewing IRBs as nonsignificant risk device studies. Gelesis also has ongoing discovery efforts to expand its pipeline.

Our board designees represent a minority of the members of the board of directors of Gelesis, and we do not control the clinical or regulatory development or commercialization of Gelesis' products and product candidates. We have an interest in Gelesis' product candidates through our equity investment as well as our right to royalty payments as a percentage of net sales pursuant to a license agreement between us and Gelesis.

Karuna

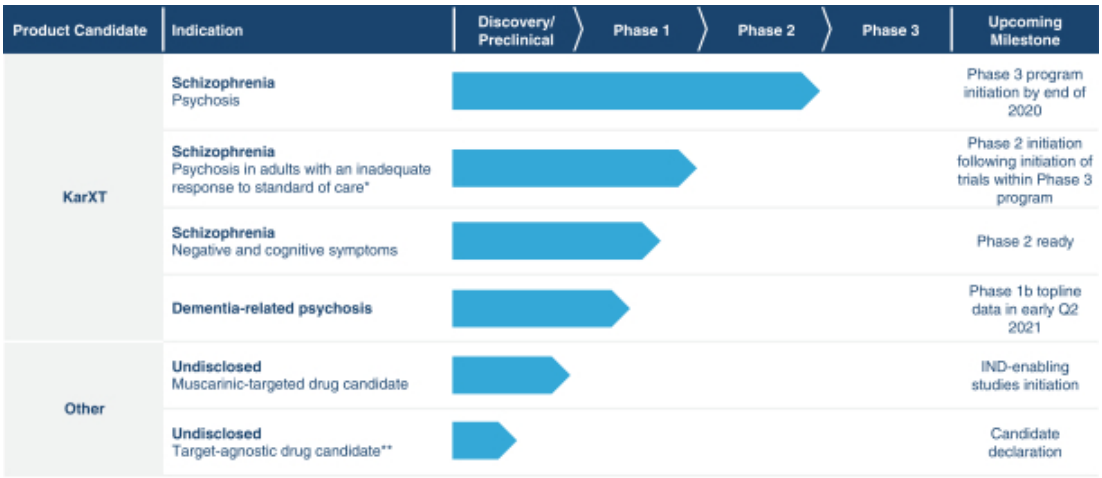
Karuna is developing novel therapies with the potential to transform the lives of people with disabling and potentially fatal neuropsychiatric disorders, including schizophrenia and dementia-related psychosis.

KarXT combines xanomeline, a muscarinic receptor agonist that has demonstrated decreases in multiple psychotic symptoms and improvements in cognitive symptoms in placebo-controlled human trials in schizophrenia and AD, and trospium chloride as further described below, an FDA approved and well-established muscarinic receptor antagonist that has been shown not to measurably cross the blood-brain barrier. KarXT is designed to preferentially stimulate M1/M4 muscarinic receptors in the brain without stimulating muscarinic receptors in peripheral tissues in order to achieve meaningful therapeutic benefit in patients with psychotic and cognitive disorders.

Xanomeline was previously studied by Eli Lilly and Company, or Eli Lilly, in randomized, double-blind, placebo-controlled trials in schizophrenia with acute psychosis and AD, demonstrating dose-dependent decreases in multiple psychotic symptoms and related behaviors, including hallucinations, delusions and agitation, as compared to patients on placebo in the treatment of psychosis and improvements in symptoms as measured by both the Alzheimer's Disease Assessment Scale-Cognitive Subscale and the Clinician Interview-Based Impression of Change plus caregiver interview standards. To our knowledge, xanomeline is the only muscarinic agonist that has demonstrated potential therapeutic benefit in humans in either schizophrenia or AD. Like all muscarinic receptor agonists studied to date, however, xanomeline's tolerability has been limited by side effects arising from muscarinic receptor stimulation in peripheral tissues, leading to nausea, vomiting, diarrhea and increased salivation and sweating, collectively referred to as cholinergic AEs, or ChAEs, which led Eli Lilly to discontinue development of xanomeline. By pairing xanomeline with trospium chloride, Karuna believes KarXT could potentially maintain efficacy of xanomeline while ameliorating its ChAEs. In November 2019, Karuna announced topline results from EMERGENT-1, its Phase 2 clinical trial of KarXT for the treatment of acute psychosis in patients with schizophrenia, in which KarXT met the trial's primary endpoint with a statistically significant ($p<0.0001$) and clinically meaningful 11.6 point mean reduction in total PANSS scores over placebo at week five (-17.4 KarXT vs. -5.9 placebo), with similar discontinuation rates between KarXT (20 percent) and placebo (21 percent). The study enrolled 182 schizophrenia patients with acute psychosis, 90 of whom received KarXT. The number of discontinuations due to treatment emergent AEs were equal in the KarXT and placebo arms (n=2 in each group). One SAE was observed in the KarXT treatment group, in which the patient discontinued treatment and subsequently sought hospital care for worsening psychosis, meeting the regulatory definition of an SAE. In Karuna's Phase 1 tolerability POC study, KarXT was better tolerated than xanomeline plus placebo and no SAEs were reported. In June 2020, Karuna announced next steps in the EMERGENT program, the clinical program evaluating KarXT for the treatment of adults with schizophrenia, following the

completion of a successful End-of-Phase 2 meeting with the FDA. The outcome of the meeting supports the progression of KarXT into Phase 3 development.

Karuna was incorporated in July 2009. The following chart summarizes Karuna's product candidates:



* Trial to evaluate KarXT when added to standard of care
** In collaboration with PsychoGenics
Note – pipeline supplied by Karuna Therapeutics. Shading of bars does not conform to key used for other Founded Entity pipelines within this document.

Program Discovery Process by the PureTech Team

We were interested in developing a new approach to treat schizophrenia that was effective but did not have the debilitating side effects of the current class of antipsychotics, realizing that any potential new approaches could have wider applicability. We engaged with a group of leading schizophrenia experts who were most excited about muscarinic agonists, pointing to the data generated by Eli Lilly with xanomeline, which was not advanced at that time due to tolerability issues. We invented and broadly filed patents to cover the concept of combining a muscarinic receptor agonist with a peripherally acting antagonist, and we in-licensed xanomeline from Eli Lilly in May 2012. The core team member who was running this program at PureTech became Karuna's chief operating officer and we built a team of leading drug developers and neuroscientists around him, including Steven Paul, M.D., an expert in CNS drug discovery and development. Karuna completed an IPO on the Nasdaq Global Market in July 2019.

Dr. Paul was formerly executive vice president for science and technology and president of the Lilly Research Laboratories at Eli Lilly and was involved in the original xanomeline work at Eli Lilly. Dr. Paul was also a co-founder of Sage Therapeutics and Voyager Therapeutics, where he also served as chief executive officer, and the former scientific director of the National Institute of Mental Health.

Patient Need and Market Potential

Psychosis is a prominent and debilitating symptom that occurs in many neuropsychiatric disorders, including schizophrenia, dementia, bipolar disorder, major depressive disorder and inflammatory neurological diseases, such as multiple sclerosis, but there are no existing medicines that sufficiently and safely treat psychosis and cognition impairments. There are approximately 2.7 million adults living with schizophrenia and about 8.4 million people living with dementia in the United States, of which approximately 40 percent are diagnosed with the disease, with around 1.2 million experiencing symptoms of psychosis. Antipsychotics are the mainstay therapy; however, drugs currently in use all rely on the same fundamental mechanism of action and, despite

widespread use, the prognosis for patients remains poor. People with schizophrenia have a ten to fifteen year reduction in life expectancy compared to the general population, struggle to maintain employment or live independently and are often unable to maintain meaningful interpersonal relationships.

Current antipsychotics only address psychosis, also known as positive symptoms, such as hallucinations and delusions, but despite treatment patients often experience residual positive symptoms throughout their lives. There are no approved treatments for the negative symptoms, such as apathy, reduced social drive and loss of motivation, or cognitive symptoms, such as changes in working memory and attention, all of which currently lack any approved treatments. Current antipsychotics have modest efficacy in many patients and significant side effects. At least half of patients fail to adequately respond to current antipsychotic drugs. Additionally, current treatments are often associated with severe side effects, including sedation, extrapyramidal side effects such as motor rigidity, tremors and slurred speech and significant weight gain resulting in the complications of diabetes, hyperlipidemia, hypertension and cardiovascular disease. The clinical benefit of current antipsychotics is further limited by poor adherence.

There is an unmet need for new treatments in schizophrenia that could address the positive, negative and cognitive symptoms and are free of the problematic safety issues with existing medicines. There are currently no approved treatments for dementia-related psychosis.

Development Status

In June 2020, Karuna announced next steps in the EMERGENT program, the clinical program evaluating KarXT for the treatment of adults with schizophrenia, following the completion of a successful End-of-Phase 2 meeting with the FDA. The outcome of the meeting supports the progression of KarXT into Phase 3 development. Karuna plans to initiate two five-week inpatient trials evaluating the efficacy and safety of KarXT for the treatment of acute psychosis in adults with schizophrenia. The first Phase 3 trial, EMERGENT-2, is expected to commence by the end of 2020. This five-week, 1:1 randomized, flexible-dose, double-blind, placebo-controlled, inpatient trial will enroll approximately 250 adults in the U.S. and evaluate the change in Positive and Negative Syndrome Scale total score at Week 5 of KarXT versus placebo as the primary outcome measure. Details of the second efficacy trial, EMERGENT-3, will be finalized by the end of 2020, with initiation expected in the first half of 2021. The EMERGENT program also includes EMERGENT-4, a 52-week, outpatient, open-label long-term safety and tolerability extension trial of EMERGENT-2 and EMERGENT-3. EMERGENT-5, a 52-week, outpatient, open-label long-term trial evaluating the safety of KarXT in adults with schizophrenia who have not been enrolled in the EMERGENT-2 or EMERGENT-3 trials, is expected to commence the first half of 2021.

In November 2019, Karuna announced topline results from a Phase 2 clinical trial of KarXT for the treatment of acute psychosis in patients with schizophrenia, in which KarXT met the trial's primary endpoint with a statistically significant ($p<0.0001$) and clinically meaningful 11.6 point mean reduction in total PANSS scores over placebo at week five (-17.4 KarXT vs. -5.9 placebo). Karuna also observed a statistically significant 3.2 point mean reduction from baseline in the PANSS-positive subscale (-5.6 KarXT vs. -2.4 placebo) and a statistically significant 2.3 point mean reduction from baseline in the PANSS-negative subscale (-3.2 KarXT v. -0.9 placebo) at week five ($p<0.0001$ and $p<0.001$, respectively). The total PANSS, PANSS-positive subscale, and the PANSS-negative subscale had statistically significant separation at every assessment throughout the trial.

The safety and tolerability of KarXT and dose selection for the Phase 2 clinical trial was supported by results from Karuna's two Phase 1 healthy volunteer studies in over 140 patients with KarXT. As disclosed in its public filings, Karuna observed in its first Phase 1 randomized, double-blind placebo-controlled study that the addition of trospium to xanomeline was associated with clinically meaningful reductions in the rate of the most common treatment-emergent ChAEs than reported with xanomeline plus placebo, including nausea, vomiting, diarrhea and excess sweating and salivation. The overall ChAE rate was 64 percent on xanomeline plus placebo compared to 34 percent on KarXT ($p=0.016$). The rate of ChAEs for volunteers receiving KarXT (34 percent) was similar to the rate observed in volunteers receiving placebo during the lead-in period (32 percent), suggesting that the

tolerability of KarXT was more similar to the placebo lead-in period than to treatment with xanomeline plus placebo.

Karuna's second Phase 1 study was a randomized, double-blind, placebo-controlled multiple ascending dose trial of KarXT. This trial evaluated twice-a-day dosing of the proprietary KarXT co-formulation containing fixed ratios of xanomeline and trospium, rather than the three-times-a-day dosing previously used with xanomeline. The study demonstrated tolerability at xanomeline dose levels exceeding those shown in previous studies of xanomeline alone. The co-formulation also achieved exposure levels equivalent to or higher than the separate dosage forms used previously.

Karuna plans to initiate a Phase 2 trial evaluating KarXT for the treatment of psychosis in patients with schizophrenia who have an inadequate response to current standard of care therapies. The trial will evaluate the efficacy and safety of KarXT when dosed in conjunction with background antipsychotic treatment and its potential to improve symptoms in patients who had not achieved an adequate response on their current antipsychotic treatment given the unique mechanism of action of KarXT in comparison to existing standard of care therapies. Karuna plans to start this trial following the initiation of the Phase 3 trials within the EMERGENT program.

Karuna anticipates topline results from a Phase 1b clinical trial in healthy elderly volunteers to assess the safety and tolerability of KarXT early in the second quarter of 2021. This Phase 1b trial is designed to demonstrate safety and tolerability of KarXT in healthy elderly volunteers in order to select the most appropriate dose to carry forward into future studies in patients with dementia-related psychosis.

Karuna has an exclusive license for xanomeline from Eli Lilly and has a patent portfolio more broadly covering selective muscarinic targeting enabled by the KarXT approach.

Karuna has an active IND on file with the FDA for KarXT. Karuna also has ongoing discovery efforts to expand its pipeline. We do not control the clinical or regulatory development of Karuna's product candidates.

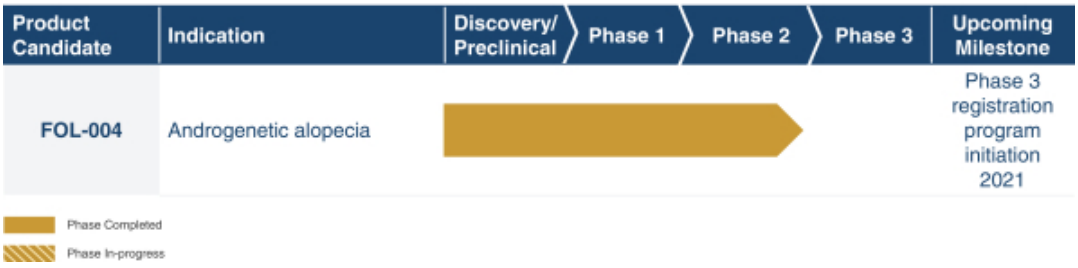
The disclosure above is qualified in its entirety by reference to Karuna's public filings with the SEC.

We do not have any board designees on Karuna's board of directors and we are not responsible for the development or commercialization of its product candidate. We have an interest in Karuna's product candidates through our equity interest as well as our right to royalty payments as a percentage of net sales of any commercialized product covered by the granted license pursuant to a license agreement between us and Karuna.

Follica

Follica is developing a regenerative biology platform designed to treat androgenetic alopecia, epithelial aging and other medical indications. Follica's approach is based on generating an "embryonic window" in adults via a series of skin disruptions, stimulating stem cells causing new hair follicles to grow. We believe that Follica's technology is the first observed to create new follicles and hair, followed by the application of specific compounds to enhance the effect.

Follica was incorporated in July 2005. The following chart summarizes the progress of Follica's platform:



Program Discovery Process by the PureTech Team

We were interested in conditions of aging and focused on hair follicles given their importance in regulating human hair and skin rejuvenation across many medical conditions. We engaged leading dermatologists and hair follicle experts and identified and in-licensed intellectual property, or IP, from George Cotsarelis, M.D., the chair of the Department of Dermatology at the University of Pennsylvania, on hair follicle neogenesis, or HFN, prior to its publication in the journal *Nature*. We translated the academic work into an in-office procedure after testing a number of modalities for initiating HFN, identified and co-invented IP around modalities and drug compounds to enhance the newly formed hair follicles and helped conduct multiple POC studies to prioritize HFN inducing modalities and prioritize potential drug compounds.

Follica's core technology and patent suite has been developed in collaboration with leading researchers, building on the work of Dr. Cotsarelis. Follica's other key scientific advisors include Richard Rox Anderson, M.D., Chairman of the Wellman Center for Photomedicine at the Massachusetts General Hospital, Ken Washenik, M.D., Ph.D., Medical Director of Bosley and the Executive Vice President of Scientific and Medical Development of the Aderans Research Institute.

Patient Need and Market Potential

Androgenetic alopecia represents the most common form of hair loss in men and women, with an estimated 90 million people who are eligible for treatment in the United States alone. Additionally, the market is estimated to be $1 billion in the United States and $3.5 billion globally. Only two drugs, both of which have demonstrated a 12 percent increase of non-vellus hair count over baseline for their primary endpoints, are currently approved for the treatment of androgenetic alopecia. The most effective current approach for the treatment of hair loss is hair transplant surgery, comprising a range of invasive, expensive procedures for a subset of patients who have enough donor hair to be eligible. As a result, Follica believes that there is significant unmet need for safe, effective, non-surgical treatments which grow new hair. Follica's regenerative biology platform has potential applications beyond hair growth to other aging-related conditions and wound healing, such as facial skin rejuvenation.

Development Status

In December 2019, Follica announced topline results from the safety and efficacy optimization study of its lead candidate to treat hair loss in male androgenetic alopecia. The study was designed to select the optimal treatment regimen using Follica's proprietary device in combination with a topical drug and successfully met its primary endpoint. The selected treatment regimen demonstrated a statistically significant 44 percent improvement of non-vellus (visible) hair count after three months of treatment compared to baseline ($p < 0.001$, $n = 19$). Across all three treatment arms, the overall improvement of non-vellus hair count after three months of treatment was 29 percent compared to baseline ($p < 0.001$, $n = 48$), reflecting a clinical benefit across the entire study population and a substantially improved outcome seen with the optimal treatment regimen. Additionally, a prespecified analysis comparing the 44 percent change in non-vellus hair count to a 12 percent historical benchmark set by approved pharmaceutical products established statistical significance ($p = 0.005$).

The study was an endpoint-blinded, randomized, controlled study designed to establish therapeutic parameters for Follica's proprietary Follica Hair Follicle Neogenesis, or HFN, device in combination with a topical on-market drug. The study involved a less than five-minute in-office experimental scalp procedure using the HFN and evaluated the optimal frequency and number of treatments across three arms. The study consisted of 48 men aged 18 to 40 who had moderate grades of androgenetic alopecia as determined by the Hamilton Norwood III-IV scale. The regimen was well tolerated across all treatment arms with no reported SAEs. No AEs were related to device treatment. A single non-severe event (headache) was determined to be related to use of the drug and is in line with minor side effects seen from treatment with the approved drug alone.

In June 2020, Follica announced the completion of a successful End-of-Phase 2 meeting with the FDA for its lead program to treat male androgenetic alopecia, which supports the progression into Phase 3 development. The initiation of a Phase 3 registration program in male androgenetic alopecia is expected in 2021. Follica has an active IND on file with the FDA for FOL-004.

In the three previously conducted clinical studies of patients with androgenetic alopecia, Follica demonstrated hair follicle neogenesis via biopsy following skin disruption, and hair growth through target area hair count. One of these studies demonstrated that skin disruption alone generates not only new hair follicles but also terminal (visible, thick) hairs. Follica has been optimizing its device and conducting tests in androgenetic alopecia and other medical indications and is further developing and testing compounds that enhance the newly formed follicles and hairs.

Follica has studied the potential for its proprietary device approach to address other regenerative conditions, including female pattern hair loss and facial skin rejuvenation. Follica also has proprietary amplification compounds in development and ongoing discovery efforts to expand its pipeline.

Our board designees represent a majority of the members of the board of directors of Follica, but Follica has its own independent management team. Our role in the development of Follica's product candidates is through our representation on its board of directors and our role as a majority shareholder.

Vedanta Biosciences

Vedanta is developing a new category of therapies for immune-mediated diseases based on a rationally-defined consortia of human microbiome-derived bacteria. The human microbiome is increasingly implicated in various immune-mediated diseases. Vedanta is a leader in the field with capabilities and deep expertise to discover, develop and manufacture live bacteria drugs. These include what is believed to be a leading IP position with the largest collection of human microbiome-associated bacterial strains, a suite of proprietary assays to select pharmacologically potent strains, vast proprietary datasets from human interventional studies and facilities for current good manufacturing practice, or cGMP, compliant manufacturing of rationally-defined bacterial consortia in powder form. All of this work has helped move the microbiome field beyond correlation to causation, and beyond fecal transplants or fractions to defined, characterized biologic drugs.

Vedanta was incorporated in December 2010. The following chart summarizes Vedanta's product candidates:

Note: In 2017, Vedanta was awarded a grant of up to $5.4 million from CARB-X for the development of VE303. In 2020, Vedanta was awarded funding of $7.4 million, with the potential for up to an additional $69.5 million, from the Biomedical Advanced Research and Development Authority (BARDA) to advance clinical development of VE303. In 2018, Vedanta and Bristol-Myers Squibb announced a partnership to evaluate VE800 with Bristol-Myers Squibb's checkpoint inhibitor Opdivo® (nivolumab) in patients with selected types of advanced or metastatic cancer. As part of the agreement, BMS will supply nivolumab, and Vedanta will conduct the clinical trial.

Program Discovery Process by PureTech Team

We were interested in translating the crosstalk between the immune system and commensal microbes that live in our bodies into therapeutics to modulate a range of immunological processes. We engaged with leading world-renowned experts in immunology, including Dr. Ruslan Medzhitov, professor of Immunobiology at Yale; Dr. Alexander Rudensky, a tri-institutional professor at the Memorial Sloan-Kettering Institute, the Rockefeller University, and Cornell University; Dr. Dan Littman, professor of Molecular Immunology at NYU; Dr. Brett Finlay, professor at the University of British Columbia; and Dr. Kenya Honda, professor at the School of Medicine, Keio University. Drs. Honda and Rudensky demonstrated the role of the microbiota in inducing regulatory T cells and uncovered some of the molecular mediators, known as short chain fatty acids.

We identified and in-licensed intellectual property from Dr. Honda when he was at Tokyo University in November 2011 before his seminal work was published in the journals *Science* and *Nature*. Based on Dr. Honda's work, we pioneered the concept of defined consortia of microbes to modulate the immune system or treat bacterial infections. We played a critical role in the initial product development, initial experiments and planning of key clinical studies, business development and fundraising, and a core PureTech team member who helped lead the identification and platform development is now the chief executive officer of Vedanta.

Patient Need and Market Potential

Clostridioides Difficile Infection: The Center for Disease Control and Prevention considers CDI one of the most urgent bacterial threats. *C. difficile* infections account for approximately 12,800 deaths each year in the United States alone and there are approximately 500,000 cases annually, of which 100,000 to 120,000 patients experience recurrence. Existing interventions include antibiotics such as vancomycin or metronidazole, which have the undesirable side effect of damaging the gut microbiome and leaving patients vulnerable to re-infection. An alternative intervention, fecal transplantation, is an experimental procedure which is exceedingly difficult to standardize and scale and is fraught with potential safety issues.

Inflammatory Bowel Disease: IBD is estimated to affect approximately three million people in the United States, and other autoimmune diseases affect over 20 million people in the United States. Many of the existing interventions are limited by toxicities and systemic immune suppression.

Allergies: Food allergies are a growing U.S. public health concern and have an estimated annual economic cost near $25 billion. Peanut allergies specifically affect an estimated 2.5 million people in the United States. Current treatment options primarily center around allergen avoidance. Desensitization regimens in development have limited efficacy, are risky, require treatment for life and may not be cost-effective. Vedanta's product candidate, VE416, is being developed to safely induce permanent tolerance to food allergens including peanut allergy.

Immuno-Oncology: Despite profound survival improvements in some patients, checkpoint inhibitors such as PD-1, PDL-1 and CTLA-4 are only effective in 20 to 30 percent of patients. Common tumor types where checkpoint inhibitors are utilized include lung, bladder, skin, and renal cancers. Vedanta's immuno-oncology product candidate, VE800, is designed to act in combination with approved checkpoint inhibitors and potentially other immunotherapies to safely improve their efficacy. Initial proposed indications include advanced and metastatic MSS colorectal cancers, affecting more than 46,000 U.S. patients per year, gastric cancers, affecting more than 11,000 U.S. patients per year and melanoma, affecting more than 9,000 U.S. patients per year.

The Microbiome Field: Moving Beyond Fecal Transplants and Fractions

Unlike fecal transplants, which require use of donors and are untargeted, inherently variable procedures, Vedanta's approach is based on bacterial consortia therapeutics, which are defined drug compositions produced from clonally isolated bacteria that can trigger targeted immune responses. Unlike single strain probiotics, defined consortia can robustly shift the composition of the gut microbiota and provide colonization resistance against a range of intestinal infectious pathogens.

Vedanta's novel product candidates are administered as a lyophilized powder in a capsule dosage form, designed to have specific effects on the immune system, including restoring the balance of the microbiome in the gut to treat immune and infectious diseases and immunopotentiating responses to treat cancer.

Development Status

VE303, Vedanta's product candidate for the treatment of high-risk CDI, is being studied in a Phase 2 clinical trial in patients at high risk of rCDI. The trial was initiated in December 2018, and dose selection was based on the results from the Phase 1a/1b clinical trial in healthy volunteers, which showed that VE303 treatment resulted in rapid, durable, dose-dependent colonization and accelerated gut microbiota restoration after antibiotics. Clinical results for the Phase 2 clinical trial of VE303 are anticipated in 2021.

VE202, Vedanta's product candidate for IBD, was evaluated in two Phase 1 clinical trials in healthy volunteers. Vedanta announced positive topline data from these studies which showed that VE202 was generally well-tolerated at all doses and demonstrated durable and dose-dependent colonization. The trial was conducted by Janssen Research & Development, LLC, and a more complete study dataset and analyses will be submitted to a peer-reviewed journal. Vedanta has regained full rights to the program and will owe Janssen single-digit royalty payments on net sales of a commercialized product. Vedanta plans to take the program forward into a Phase 2 study in 2021.

VE416, Vedanta's product candidate for food allergy, is being evaluated in a Phase 1/2 investigator sponsors trial at Mass General Hospital for Children for patients 12 years of age or older with a history of peanut allergy. The first patient was enrolled in July 2019 and will explore VE416 both as a monotherapy and in combination with an oral peanut immunotherapy over the course of several months. Topline data from the Phase 1/2 clinical trial of VE416 in food allergy are expected in 2021.

VE800, Vedanta's immuno-oncology product candidate, is being evaluated in a first-in-patient clinical trial with Bristol-Myers Squibb's, or BMS, checkpoint inhibitor Opdivo® (nivolumab) in patients with selected types of advanced or metastatic cancer. The trial was initiated in December 2019, and topline results are anticipated in 2021. As part of the agreement with BMS, Vedanta will conduct the clinical trial and BMS will supply nivolumab. Active INDs or the foreign regulatory equivalent are on file for VE202, VE303, VE416 and VE800.

Vedanta also has ongoing discovery efforts to expands its pipeline, including VE707. VE707 is Vedanta's preclinical discovery program for the prevention of infection and reoccurrence of several multi-drug resistant organisms, or MDROs, including carbapenem-resistant Enterobacteriaceae, or CRE, extended-spectrum beta lactamase producers, or ESBL, and vancomycin-resistant Enterococci, or VRE, which are some of the most common hospital-acquired infections.

Our board designees represent a majority of the members of the board of directors of Vedanta, but Vedanta has its own independent management team. Our role in the development of Vedanta's product candidates is through our representation on its board of directors and our role as a majority shareholder.

Sonde

Sonde Health, Inc., or Sonde, is developing a voice-based technology platform to measure health when a person speaks. Sonde's proprietary technology is designed to sense and analyze subtle changes in the voice to create a range of persistent brain, muscle and respiratory health measurements that provide a more complete picture of health in just seconds.

We believe Sonde's Vocal Biomarker program has demonstrated the potential to screen and monitor for disease using information obtained from an individual's voice on commonly-owned devices, such as smartphones and smart speakers, and it has the potential to fundamentally change the way mental and physical health is screened and monitored.

Sonde was incorporated in February 2015. The following chart summarizes the progress of Sonde's platform:

Program Discovery Process by the PureTech Team

We were interested in new ways to detect and quantify disease in a low- to no-burden manner that could allow for more proactive and potentially effective interventions. We selected vocal features as leading source of health data for this purpose, particularly given the evolving technology landscape where voice interactions with devices are rapidly increasing, and we identified and in-licensed proprietary technology from Thomas Quatieri, Ph.D., at MIT's Lincoln Laboratory in May 2016. Pursuant to an exclusive license agreement with Dr. Quatieri, we paid an upfront fee and are obligated to pay annual license maintenance fees, both of which we deem immaterial. Pursuant to the agreement, we are also obligated to pay MIT a low single-digit running royalty of net sales of any commercialized product covered by the agreement and a mid double-digit running royalty of net sales of any commercialized product of a party that we sublicense. MIT also is also eligible to receive milestone payments upon the achievement of specified development, regulatory and commercial milestones up to $250,000. We developed additional, novel IP around this concept and helped advance the technology from an academic concept to a commercially-focused technology. A core PureTech team member who played a critical role in founding Sonde is currently the chief operating officer.

Patient Need and Market Potential

The lag between onset of disease and accurate diagnosis and beginning of treatment can be measured in years for many high-burden health conditions, including depression, AD, multiple sclerosis, Parkinson's disease and cardiovascular and respiratory diseases, to name just a few. Depression alone affects approximately 17 million adults in the United States. Near-continuous health information, powered by Sonde's technology, has the potential to improve screening, monitoring, and timeliness of treatment of high-cost conditions, broadly improving outcomes and care efficiency.

Development of effective therapies for CNS diseases and disorders is hampered by the high cost and inherent variability of these diseases and the reference diagnostic measures used to characterize them. Objective digital tools that can augment, and perhaps one day replace, the current clinical endpoints with novel measures that can be quantified with more meaningful accuracy and less burden can improve patient enrollment and drug development for a range of important conditions.

Development Status

As of the date of this registration statement, Sonde has collected voice data from over 50,000 subjects as a part of the ongoing validation of its platform, and it has also initiated research and development to expand its proprietary technology into AD, respiratory and cardiovascular disease, as well as other health and wellness conditions. Sonde is collaborating with the University of New South Wales and Black Dog Institute in Australia to create the first mobile device-based automatic assessment of depression from acoustic speech and has entered into collaborative partnerships with leading institutions, including UMass Memorial Medical Center, Yale University, Partners Massachusetts General Hospital and multiple other ex-U.S. hospitals, clinics and academic medicine centers.

In July 2020, Sonde launched Sonde One for Respiratory, a new voice-enabled health detection and monitoring app, to potentially help employers improve employee safety, meet government mandates and satisfy their own administrative needs as they reopen office doors in a COVID-19 environment. Leveraging the company's advanced vocal biomarker platform and machine learning technology, Sonde One combines 6-second voice analysis, CDC-informed COVID-19 questionnaire and body temperature reporting in one app and is designed to give employees clear instructions about where they can work within one minute. Sonde partnered with corporate wellness solutions provider Wellworks for You to bring the health screening tool to market. SHI International, a 5,000-person global provider of technology products and services, is the first enterprise to enrol. The company will begin implementing the Sonde One for Respiratory app in August, as it gradually begins bringing employees back to the workplace.

In August 2020, Sonde acquired NeuroLex Labs, a leading voice-enabled survey and data acquisition platform. As part of the agreement, Jim Schwoebel, the chief executive officer of NeuroLex, has joined Sonde's leadership team as vice president, data and research. The transaction did not involve any financial participation from the PureTech parent level.

Sonde is also creating the first mobile device-based automatic assessment of depression, Sonde One for Depression, a new voice-enabled health detection and monitoring app, to potentially help employers and payors improve engagement in services to address employee and patient behavioral health needs. Leveraging the company's advanced vocal biomarker platform and machine learning technology, Sonde One for Depression will also combine 6-second voice analysis with validated self-report questions in one app and is designed to give employees a timely indication of how important measures of mental health and symptoms may be changing.

Sonde has ongoing discovery efforts to expand its pipeline. Sonde has obtained Institutional Review Board, or IRB, approval independently or in collaboration with partner institutions that covers all past and ongoing human data collection for research in the United States and abroad.

We have two board designee on the board of directors of Sonde, but Sonde has its own independent management team. Our role in the development of Sonde's product candidates is through our representation on its board of directors and our role as a majority shareholder.

Alivio

Alivio is pioneering inflammation-targeted disease immunomodulation, which involves selectively restoring immune homeostasis at inflamed sites in the body, while having minimal impact on the rest of the body's immune system, as a novel strategy to treat a range of chronic and acute inflammatory disorders. This long sought-after approach has the potential to broadly enable new medicines to treat a range of chronic and acute inflammatory disorders, including enabling the use of drugs which were previously limited by issues of systemic toxicity or PK.

To achieve the vision of selective immunomodulation, Alivio is developing a proprietary platform centered on a class of self-assembling therapies that selectively bind to inflamed tissue. Alivio's platform has been validated in multiple labs using a range of animal models and indications. The platform is able to entrap a wide array of APIs, including small molecules, biologics and nucleic acids. By selectively targeting API pharmacology to inflamed tissue, Alivio is developing product candidates that are designed to selectively treat autoimmune disease without having related systemic toxicities. Alivio's pipeline includes candidates for IBD, pouchitis and interstitial cystitis or bladder pain syndrome, or IC/BPS.

Alivio was incorporated in December 2015. The following chart summarizes the progress of Alivio's platform:

* ALV-107 preclinical development through its IND-enabling safety study was supported, in part, by a $3.3 million grant from the U.S. Department of Defense and in collaboration with Purdue Pharma LP (Imbrium Therapeutics). See "Alivio—Development Status" for more information about Alivio's agreement with Purdue.

**ALV-preclinical research and development activities will be supported, in part, by a $3.3 million grant from the U.S. Department of Defense.
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Program Discovery Process by the PureTech Team

A key challenge in new drug development for autoimmune and inflammatory disease is that attractive drug targets are frequently expressed in both diseased and normal tissue. Consequently, we were interested in identifying ways to address autoimmune disease in a targeted manner. We were inspired by a key observation, which is that pathologic inflammation frequently manifests at specific sites in tissues and organs and is driven by dysfunctional immune signaling. However, traditional approaches act to broadly suppress the immune system throughout the body. This mismatch substantially limits the potential targets that can be pursued and frequently results in narrow therapeutic windows. We worked with leading immunology experts and identified and in-licensed a technology created by Alivio's co-founder Jeffrey Karp, Ph.D., professor of medicine at Harvard Medical School and Brigham and Women's Hospital, and Robert Langer, Sc.D., David H Koch Institute Professor at MIT, that was centered around this unique inflammation-targeting and inflammation-responsive platform in May 2016. In addition to repeating key academic work and developing product candidates, Alivio continues to move those product candidates into the clinic while we oversee business development.

Patient Need and Market Potential

Results in preclinical models suggest the Alivio technology could be applied to diseases such as IBD, pouchitis, inflammatory arthritis, organ transplantation, and IC/BPS. These diseases collectively impact tens of millions of patients in the United States alone and have limited treatment options.

IC/BPS is a chronic bladder condition that consists of discomfort or pain in the bladder or surrounding pelvic region and is often associated with frequent urination. It is estimated to affect four million to 12 million people in the United States. Current treatments fail to control pain in many patients. Pouchitis is estimated to affect between 70,000 and 135,000 people in the U.S. IBD is estimated to affect approximately three million people in the United States.

Development Status

Alivio plans to file an IND for ALV-107 for IC/BPS in 2021 and an IND for ALV-304 for IBD in 2022. In December 2018, Alivio entered into a research collaboration, option and license agreement with Imbrium Therapeutics L.P., an entity affiliated with Purdue Pharma LP, or Purdue, to advance Alivio's product candidate, ALV-107, through clinical development and commercialization. Under the terms of the agreement, Alivio is eligible to receive up to $14.8 million in upfront and near-term license option exercise payments and is eligible to receive low single digit to low teens royalties in tiers on product sales and over $260.0 million in research and development milestones. Purdue does not currently have any ownership interest in ALV-107, but does have an option to exercise for rights to develop ALV-107 under the agreement. Purdue also has an option to collaborate on a limited number of additional compounds utilizing Alivio's inflammation-targeting technology, as well as an option to invest in Alivio's next equity financing. Alivio is also evaluating the potential application of its proprietary platform to enable the oral administration of biologics in additional indications. Alivio also has ongoing discovery efforts to expand its pipeline. We are evaluating the impact, if any, of the announced Chapter 11 bankruptcy by Purdue on this collaboration agreement.

A majority of the board of directors of Alivio are PureTech employees. These PureTech employees actively manage the day-to-day business activities of Alivio and together with Alivio's Chief Executive Officer and the board of directors of Alivio, which is controlled by PureTech, direct the strategy and decision making in connection with the clinical and regulatory development of Alivio's product candidates. As a result, we exert substantial control over the clinical and regulatory development of Alivio's product candidates. Additionally, Alivio's lab and office space is shared with our lab and office space.

Entrega

Entrega is focused on the oral delivery of biologics, vaccines and other drugs that are otherwise not efficiently absorbed when taken orally. The vast majority of biologic drugs, including peptides, proteins and other macromolecules, are currently administered by injection, which can present challenges for healthcare delivery and compliance with treatment regimes. Entrega believes oral administration thus represents an ideal administration approach for this increasingly large class of therapies reshaping many areas of medicine, including the treatment of diabetes.

Entrega's technology platform is an innovative approach to oral delivery which uses a proprietary, customizable hydrogel dosage form to control local fluid microenvironments in the GI tract in an effort to both enhance absorption and reduce the variability of drug exposure.

Entrega was incorporated in December 2010.

Program Discovery Process by the PureTech Team

We were interested in enabling the oral administration of biologics, which has been a long-standing problem in drug development. We engaged with leading experts in drug delivery, including Robert Langer, Sc.D., and screened over 100 technologies and the initial platform was licensed from Samir Mitragotri, Ph.D., professor of chemical engineering at UC Santa Barbara. We later enhanced this platform with IP developed by our team.

Other scientific and business advisors include Colin Gardner, Ph.D., former chief scientific officer of Transform Pharmaceuticals, former SVP of research and site head at Johnson & Johnson and formerly VP of pharmaceutical R&D at Merck & Co., Inc., or Merck; Rodney Pearlman, Ph.D., formerly CEO of Nuon Therapeutics, President & CEO of Saegis Pharmaceuticals; and director of pharmaceutical R&D at Genentech; Robert Armstrong, Ph.D., cofounder and chief executive officer of Boston Pharmaceuticals; and Mr. Howie Rosen, former president of ALZA.

Development Status

To validate its technology, Entrega generated POC preclinical data demonstrating delivery of therapeutic peptides into the bloodstream of large animals. Entrega received $5 million in equity and research funding from Eli Lilly to investigate the application of its peptide delivery technology to certain Lilly therapeutic candidates. Entrega also has ongoing discovery efforts to expand its pipeline.

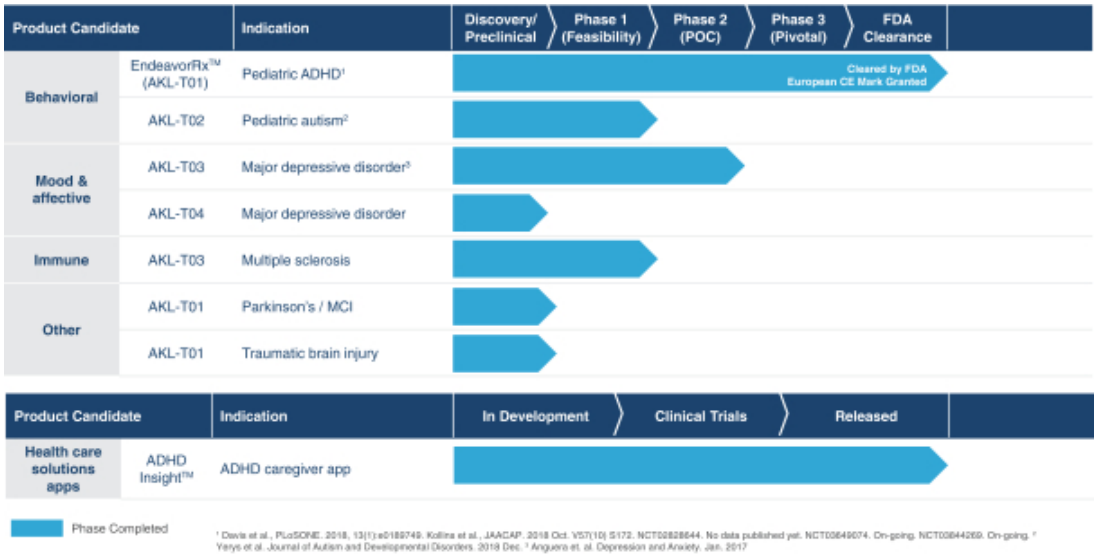
The management team of Entrega consists of PureTech employees, and a majority of the board of directors are PureTech designees. These PureTech employees actively manage the day-to-day business activities of Entrega and together with the board of directors of Entrega, which is controlled by PureTech, direct the strategy and decision making in connection with the clinical and regulatory development of Entrega's product candidates. As a result, we exert substantial control over the clinical and regulatory development of Entrega's product candidates. Additionally, Entrega's lab and office space is shared with our lab and office space.

Founded Entities in which PureTech has an Equity Interest, in Order of Development Stage

Akili

Akili is a leading digital therapeutics company, combining scientific and clinical rigor with the ingenuity of the tech industry with a goal of changing how medicine is developed, delivered and experienced. Akili is pioneering the development of treatments designed to have direct therapeutic activity, delivered not through a traditional pill but via a high-quality video game experience. Akili is evaluating a number of technologies and potential new digital medicines designed to target neural systems to improve associated cognitive functions. In June 2020, Akili received clearance from the FDA for EndeavorRx™ (AKL-T01) as a prescription treatment to improve attention function in children with attention-deficit/hyperactivity disorder, or ADHD. Also in June 2020, Akili received a Conformité Européenne, or CE Mark, certification for EndeavorRx as a prescription-only digital therapeutic intended for the treatment of attention and inhibitory control deficits in pediatric patients with ADHD. Additionally, through a collaboration and development agreement with Shionogi, Akili is pursuing regulatory approval in Japan for EndeavorRx. Akili has evaluated its platform technology in studies of various sizes across a variety of patient populations suffering from cognitive dysfunction, including adult ADHD, ASD, multiple sclerosis, or MS, major depression disorder, or MDD, Parkinson's-related mild cognitive impairment, or MCI, and traumatic brain injury, or TBI. Currently focused on the clinical study of the company's patented Selective Stimulus Management Engine, or SSME™, core technology, Akili has conducted more than 30 clinical trials of SSME across a number of different diseases and disorders. Akili is also developing complementary and integrated monitoring and measurement-based care applications, including Akili Care™—comprising a mobile tracking app (ADHD Insight™) and personalized dashboard showing the child's EndeavorRx treatment and symptom/behavior tracking data and support and resources to help guide caregivers through their child's treatment experience. Akili was incorporated in February 2012.

The following chart summarizes the current stage of product candidates that have been evaluated by Akili. Following the FDA clearance of EndeavorRx and the evolving healthcare and mental health landscape, Akili is undergoing a pipeline prioritization strategic review which may result in a change in or the addition of product candidates and/or indications in the near term.



Program Discovery Process by the PureTech Team

We were interested in identifying novel approaches to measure and improve cognition in a safe and non-invasive manner. 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 identified and in-licensed from the University of California, San Francisco, or UCSF, the intellectual property invented by Dr. Adam Gazzaley, M.D., Ph.D., professor of neurology, psychiatry and physiology at UCSF and the inventor of this platform technology, in October 2013 before his work was published as a cover story in the journal *Nature*. We then collaborated with Dr. Gazzaley to translate the underlying academic device into a medical intervention, including overseeing the initial product development and design and the implementation of the initial POC studies. We helped to build development and commercial teams and raise funds, including from the investment arms of Amgen and Merck KGaA, Darmstadt, Germany as a part of Akili's Series B financing round. One of the core PureTech team members who helped lead the identification and platform development is now the CEO of Akili.

Akili's FDA-cleared product, EndeavorRx, is based on a platform technology exclusively licensed from UCSF. The proprietary platform targets cognitive interference processing while also adapting difficulty automatically in real-time, allowing individuals of wide-ranging ability levels to interact with the product in their homes without the need for physician calibration or additional hardware. Dr. Gazzaley currently serves as the chief scientific advisor and a board member of Akili. Daphne Bavelier, Ph.D., associate professor in the Department of Brain and Cognitive Sciences at the University of Rochester and at the University of Geneva, is a co-founding scientific advisor.

Patient Need and Market Potential

Cognitive dysfunction is a key feature of many neuropsychiatric disorders, including ADHD, ASD, MS, MDD, MCI, TBI and AD. The treatment of the cognitive dysfunction associated with these conditions is only partially served, or not served at all, by currently available medications or by in-person behavioral therapy.

There are approximately 6.4 million pediatric ADHD patients in the United States and this market—and other markets where Akili's cognitive dysfunction targeting products may address the cognitive dysfunction associated with neuropsychiatric disorders—represent significant potential opportunities for the company.

Akili's Innovative Approach

Akili's treatment is based on a patented technology that is designed to deploy sensory and motor stimuli that target and activate the neurological systems known to play a key role in certain cognitive functions, including attentional control. Akili's approach aims to improve cognitive impairment and related symptoms through improving neural processing at the functional neurological level. The treatment is delivered through an immersive video game, resulting in non-invasive, patient-friendly medicine that can be used at home.

By combining high quality neurological and clinical science, and consumer-grade entertainment, Akili is seeking to produce a new type of medical product that can potentially offer safe, effective, scalable and personalized treatments for patients across a range of neuropsychiatric conditions, and allow patients to experience medicine in a new way.

Development Status

Akili has evaluated its SSME technology across a variety of patient populations, including pediatric and adult ADHD, ASD, MS, MDD, MCI and TBI.

In June 2020, Akili announced that the FDA has granted clearance for EndeavorRx as a prescription treatment for improving attention function in children with ADHD. Delivered through a captivating video game experience, EndeavorRx is indicated to improve attention function as measured by computer-based testing in children ages 8-12 years old with primarily inattentive or combined-type ADHD, who have a demonstrated attention issue. Akili expects that the EndeavorRx treatment will be available with a prescription to families soon. The FDA clearance followed the April announcement that ENDEAVOR™ would be available for use for a limited time by children with ADHD and their families in response to new guidance from the FDA recognizing the need for access to certain low-risk clinically-validated digital health devices for psychiatric conditions, including ADHD, during the COVID-19 pandemic. Also in June 2020, Akili announced that it had received approval to market EndeavorRx in Europe. Akili received a CE Mark certification for EndeavorRx as a prescription-only digital therapeutic intended for the treatment of attention and inhibitory control deficits in pediatric patients with ADHD. The CE Mark approval enables the future marketing of EndeavorRx in European Economic Area member countries. With a near-term focus on launching the EndeavorRx prescription treatment in the U.S. first, Akili is exploring expansion opportunities in Europe as part of its global strategy.

Akili's EndeavorRx was evaluated in a multi-center, randomized, blinded, controlled pivotal study in 348 pediatric ADHD patients. In this study, AKL-T01 achieved its primary endpoint, showing a statistically significant change in the Attention Performance Index, a composite score of attention from the Test of Variables of Attention, or T.O.V.A.®, compared to an expectancy matched digital control ($p=0.006$). There were no SAEs or discontinuations. Of participants using EndeavorRx, 9.2 percent experienced TRAEs which were mild and included frustration (2.8 percent) and headache (1.7 percent). Mean patient compliance with AKL-T01 was 83 percent of instructed use. Subjective secondary outcome measures, including the ADHD Rating Scale and the Impairment Rating Scale, showed statistically significant improvements in both the treatment and control groups and there was no statistically significant separation on those measures between groups.

In January 2020, Akili announced that a study achieved its primary endpoint evaluating the effects of EndeavorRx in children with ADHD when used with and without stimulant medication. The study achieved its predefined primary efficacy outcome, demonstrating a statistically significant improvement in the ADHD Impairment Rating Scale, or IRS, from baseline after one month of treatment ($p<0.001$) in both children taking stimulant medications and in those not taking stimulants.

In March 2019, Akili entered into a strategic partnership with Shionogi for the development and commercialization of AKL-T01 and AKL-T02 (in development for children with ASD) in Japan and Taiwan. Under the terms of the agreement, Akili will build and own the platform technology and received upfront payments totaling $20 million with potential milestone payments for Japan and Taiwan commercialization of up to an additional $105 million in addition to royalties. Akili and Shionogi have initiated a clinical study in preparation for a regulatory submission in Japan.

In December 2019, Akili presented results from a trial of AKL-T03 as a potential treatment for cognitive impairments adjunct to anti-depressant medication in adults with MDD. In the trial, AKL-T03 demonstrated a statistically significant improvement in sustained attention compared to control. AKL-T03 is designed to improve specific cognitive functions and may play a complementary role to antidepressants in the holistic treatment of MDD.

Akili is planning to build its own commercial distribution platform for its digital therapeutic products to enable launch in a variety of commercial models. The company is building Akili Care, an integrated system for patient service, data processing, and distribution functions for its initial product launch, to allow flexibility, learning, and iteration as it continues to invest in the delivery of digital therapeutic solutions to the market. Akili's Shionogi partnership is structured to enable the implementation of this localized platform in Japan. Multiple IRBs have determined AKL-T01 to be a non-significant risk device. Akili has obtained IRB approval independently or in collaboration with independent clinical research institutions for all past and ongoing human data collection for clinical research in the United States. We do not control the clinical or regulatory development of Akili's product candidates.

We do not have a direct interest in Akili's product or product candidates. Our interest in Akili's product and product candidates is limited to our equity interest in Akili and any potential appreciation in the value of such equity interest, and we do not control the clinical or regulatory development of Akili's product candidates.

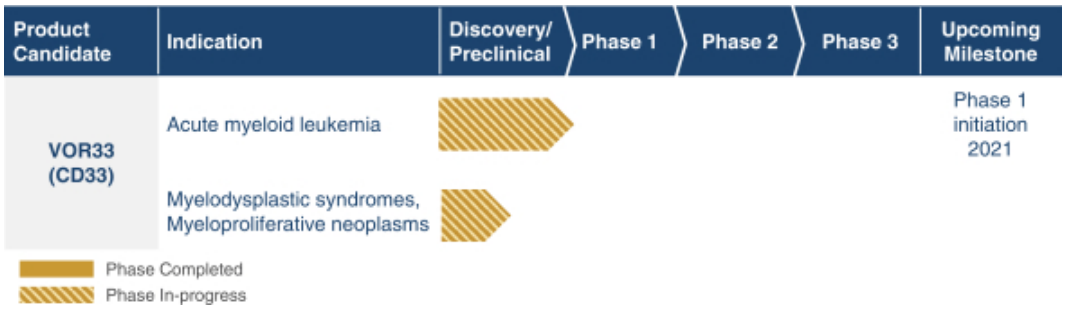
Vor Biopharma

Vor Biopharma, Inc., or Vor, is a cell therapy company that combines a novel patient engineering approach with targeted therapies to provide a single company solution for patients suffering from hematological malignancies. The only way for many of these patients to achieve durable remission or a cure is through hematopoietic stem cell transplant, or HSCT. Despite this, approximately 40 percent of acute myeloid leukemia, or AML, patients relapse following such transplant and face a prognosis with a two-year survival of less than 20 percent. Targeted therapies are an effective treatment for many patients in transplant settings who relapse, though they are limited by toxicities resulting from the expression of the surface targets on healthy cells, including these new transplanted cells, which is referred to as on-target toxicity.

Vor's proprietary platform leverages its expertise in hematopoietic stem cell, or HSC, biology and genome engineering to remove surface targets expressed by cancer cells by genetically modifying HSCs. By removing these targets, Vor makes these HSCs and their progeny unrecognizable by targeted therapies and enables these treatments to selectively destroy cancerous cells while sparing healthy cells. As a result, Vor's engineered HSCs, or eHSCs, are designed to limit the on-target toxicities associated with these targeted therapies, or companion therapeutics, thereby enhancing their utility and broadening their applicability.

Vor's platform and expertise allow it to advance its goal of replacing the patient's HSCs with next-generation, treatment-resistant eHSCs that unlock the potential of highly-potent target therapies.

Vor was incorporated in December 2015. Vor's initial pipeline of eHSC programs is shown below:



Program Discovery Process

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 engaged leading hematological cancer specialists and we became aware of work from the laboratory of Vor Scientific Board chair Siddhartha Mukherjee, M.D., Ph.D., assistant professor of Medicine at Columbia University and Pulitzer Prize-winning author of *The Emperor of All Maladies*: *A Biography of Cancer.* Dr. Mukherjee pioneered the idea of genetically engineering stem cells to eliminate a particular target such that healthy stem cells and progeny cells would be spared from targeted cancer therapy. We worked with Dr. Mukherjee on this IP, which Vor exclusively in-licensed from Columbia in April 2016, and on advancing this concept through critical POC experiments. With our support, Vor secured additional intellectual property rights (both in-licensed from Columbia and owned by Vor), assembled an excellent research team and completed a round of fundraising.

In July 2019, Bill Lundberg, M.D., was appointed to Vor's board of directors. In August 2019, Robert Ang, MBBS, MBA, was appointed president and chief executive officer of Vor. In May 2020, Vor announced the appointment of Nathan Jorgensen, Ph.D., as chief financial officer, in July 2020, Vor announced the closing of a $110M Series B financing and the appointments of Daniella Beckman and David Lubner to its board of directors and Christopher Slapak, M.D., as chief medical officer, in August 2020, Vor announced the appointment of John King as chief commercial officer, and in October 2020 Vor announced the appointment of Matthew Patterson to its board of directors.

Patient Need and Market Potential

The prognosis for relapsed and refractory blood-borne malignancies is very poor and can be measured in a few months, depending on patient-specific risk factors. For example, for acute myeloid leukemia, or AML, which affects approximately 60,000 patients at any one time in the United States, only about 30 percent of patients with active disease following a bone marrow transplant survive past 12 months.

Targeted therapies, such as CAR-T cells and bispecific antibodies, antibody-drug conjugates, and conventional mAbs, have shown excellent clinical activity, particularly in patients with certain hematologic malignancies expressing B cell markers. However, these targeted therapies frequently target both cancer and normal cells, causing substantial toxicities and limiting their potential. There is a need for new strategies that can enable selectively targeting cancer cells with limited impact on a patient's normal cells.

Development Status

VOR33 is Vor's eHSC product candidate designed to transform the standard of care in AML and potentially other myeloid malignancies. To create VOR33, Vor genetically modifies donor HSCs in order to remove the CD33 surface target that is highly expressed in most AML cells. In preclinical studies, Vor observed that the removal of CD33 had no deleterious effects on the differentiation or function of hematopoietic cells, but it did render these healthy cells unrecognizable by CD33-directed therapies, thereby providing robust protection from these therapies' cytotoxic effects. Vor intends to develop VOR33 as an HSC transplant product candidate to

replace the standard of care in transplant settings. Once the VOR33 cells have engrafted, patients can potentially be treated with anti-CD33 therapies, such as Mylotarg or a CAR-T therapy product candidate, with limited on-target toxicity. The combination of VOR33 and CD33-directed therapies has the potential to lead to durable antitumor activity. Leveraging its proprietary platform, Vor has identified additional surface targets as well as multiple genome engineering approaches. Additionally, Vor is conducting ongoing discovery efforts on undisclosed targets for non-myeloid malignancies. We do not control the clinical or regulatory development of Vor's product candidates.

We do not have a direct interest in Vor's product candidate. Our interest in Vor's product candidate is limited to our equity interest in Vor and any potential appreciation in the value of such equity interest and we do not control the clinical or regulatory development of Vor's product candidate.

Manufacturing

We currently source most of our nonclinical and clinical compound supply through third-party contract manufacturing organizations, or CMOs.

For clinical supply, we use CMOs who act in accordance with the FDA's GLP and current good manufacturing practices, cGMP, for the manufacture of drug substance and product. Manufacturing of any product candidate is subject to extensive regulations that impose various procedural and documentation requirements, which govern recordkeeping, manufacturing processes and controls, personnel, quality control and quality assurance, among others. We expect that all of our contract manufacturing organizations will manufacture our Wholly Owned product candidates under current Good Manufacturing Practice, or cGMP, conditions. cGMP is a regulatory standard for the production of pharmaceuticals to be used in humans.

We believe there are multiple sources for all of the non-proprietary materials required for the manufacture of our internal product candidates. Our manufacturing strategy enables us to more efficiently direct financial resources to the research, development, and potential commercialization of product candidates rather than diverting resources to internally develop manufacturing facilities. As our Wholly Owned product candidates advance through development, we expect to enter into longer-term commercial supply agreements with key suppliers and manufacturers to fulfill and secure the ongoing and planned preclinical, clinical, and, if our Wholly Owned product candidates are approved for marketing, our commercial supply needs for ourselves and our collaborators.

Our Founded Entities independently manufacture or contract to manufacture their products and product candidates.

Sales and Marketing

We do not have our own marketing, sales or distribution capabilities. In order to commercialize our Wholly Owned product candidates if approved for commercial sale, we must either develop a sales and marketing infrastructure or collaborate with third parties that have sales and marketing experience. We plan to directly commercialize our Wholly Owned product candidates in the United States and for some indications, we may also directly commercialize our Wholly Owned product candidates in the European Union. In other markets or for certain indications outside the United States for which commercialization may be less capital efficient for us, we may selectively pursue strategic collaborations with third parties in order to maximize the commercial potential of our Wholly Owned product candidates.

As our Founded Entities begin to commercialize product candidates approved for commercial sale, they will independently develop a sales and marketing infrastructure or enter into collaborations with third parties to do so.

We will not have control over or direct the sales and marketing efforts of our Founded Entities. As of the date of this registration statement, only one of our Founded Entities, Gelesis, has a product cleared by the FDA and all sales and marketing efforts related to Gelesis' planned U.S. launch of Plenity will be undertaken by Gelesis.

Intellectual Property

We strive to protect the proprietary technologies that we believe are important to our business, including pursuing and maintaining patent protection intended to cover novel platform technologies relating to our Wholly Owned Programs, our corresponding product candidates and their methods of use, as well as other technologies that are important to our business. In addition to patent protection, we also rely on trade secrets to protect aspects of our business for which we do not consider patent protection appropriate. The intellectual property covering the technologies, products and product candidates for the programs involving our Founded Entities are handled directly by our respective Founded Entities and we are not actively involved in the management of Founded Entity intellectual property.

LYT-100

We acquired LYT-100 and all of the associated IP rights thereof, from Auspex. We are also obligated to make payments to Auspex in connection with certain development, regulatory and sales milestones and pay royalties on sales of the product upon commercialization. We plan to advance LYT-100 for the treatment of various lymphatic disorders, including lymphedema.

As of June 30, 2020, the LYT-100 patent portfolio includes 31 active patents acquired, and one patent application licensed from Auspex. These patents and application provide broad coverage of compositions of matter, formulations and methods of use for deuterated pirfenidone, including the LYT-100 deupirfenidone compound, comprising six issued U.S. patents, which are expected to expire in 2028, one U.S. patent application which if issued, is expected to expire in 2035, and 25 patents issued in 23 foreign jurisdictions, without taking into account any possible patent term extension or regulatory exclusivities. In addition, we have filed additional patent applications on deupirfenidone, including 14 pending U.S. patent applications and one international PCT application directed to the use of deuterated pirfenidone, including LYT-100 deupirfenidone, for the treatment of a range of conditions involving inflammation and fibrosis and disorders of lymphatic flow of lymphedema and other relevant disorders. Any issued patents claiming priority to these applications are expected to expire in 2039 through 2041, exclusive of possible patent term adjustments or extensions or other exclusivities.

LYT-200 and LYT-210

LYT-200 is an investigational fully human mAb targeting galectin-9, a global immunosuppressor that facilitates a tumor-permissive microenvironment, for use in the treatment of solid tumors and other cancers. LYT-210 is an investigational fully human mAb targeting gd T cells.

We have broad intellectual property coverage for these antibody-based immunotherapy technologies, including exclusive rights to nine families of patent filings that are exclusively licensed from or co-owned with New York University which cover antibodies that target immunosuppressive agents and mechanisms and methods of use for the treatment of solid tumors, such as pancreatic cancer, CRC, melanoma, gastric cancer, breast cancer and various other cancers, and one family of patent filings that cover antibodies directed to pro-inflammatory gdT cells for use in the treatment of inflammatory conditions, such as autoimmune disorders, for example, IBD, ulcerative colitis, Crohn's disease and celiac disease, among others.

We exclusively licensed and co-own a patent portfolio of ten patent families from New York University. As of June 30, 2020, there are five families of intellectual property within this patent portfolio covering compositions of matter and methods of use for antibodies targeting galectin-9, including LYT-200, which in total comprise two issued U.S. patents which are expected to expire in 2038, seven pending U.S. patent applications, which if issued,

are expected to expire 2037-2040, three international PCT applications, and 12 pending applications in foreign jurisdictions. There are two families covering compositions of matter and methods of use for antibodies targeting gdT cells, including LYT-210, which are directed to the use of these antibodies for the treatment of cancer and pro-inflammatory and autoimmune disorders, which in total comprise one granted U.S. patent, one pending U.S. patent application and two international PCT applications. In addition, there are two additional families of intellectual property covering compositions of matter and methods of use for related IO technologies, which in total comprise six patent applications in U.S. and foreign jurisdictions. Our issued patents and any patents issuing from pending applications with respect to LYT-200 are expected to expire in between 2038 and 2040, any patents issuing from pending applications with respect to LYT-210 are expected to expire in between 2039 and 2040, and our additional families of pending applications are expected to expire in 2037, all of which expiration dates are exclusive of possible patent term adjustments or extensions or other periods of exclusivity.

Oral Biotherapeutics Program

We have broad intellectual property coverage for our Orasome technology platform. Our Orasome technology platform IP portfolio covers compositions of matter, methods of use and methods of treatment spanning various platform-based technologies, as well as various broad classes of Orasome-formulated therapeutics, which include nucleic acid-based therapeutics (such as messenger RNA, short interfering RNA and antisense oligonucleotide-based approaches), small molecules, biologics (such as peptides, proteins and antibodies), expression systems for biologics and other therapeutics for use in the treatment of a wide range of diseases and disorders, including various immunological disorders, such as cancers and inflammatory diseases. In addition, we licensed patents and patent application on certain milk exosome technology of oral administration of biotherapeutics.

As of June 30, 2020, our Orasome technology platform patent portfolio consists of ten U.S. and five foreign patent applications and one pending international PCT application in seven patent families. Any patents to issue from the patent applications are expected to expire in 2037 through 2041, exclusive of possible patent term adjustments or extensions or other forms of exclusivity. We exclusively licensed a patent portfolio consisting of two patent families from 3P Biotechnologies, Inc., based on certain milk exosome technology originating from the University of Louisville. In addition, we exclusively licensed a patent portfolio consisting of two patent families from NuTech Ventures, based on certain milk exosome technology originating from the University of Nebraska.

Glyph Technology Platform

We have broad intellectual property coverage for our proprietary Glyph technology platform, which includes exclusively licensed and co-owned patent applications, as well as company-owned patent applications. These patent applications cover compositions of matter, methods of use and methods of treatment encompassing specific chemical modifications, including a wide range of novel linker chemistries, as well as various classes of lymphatic targeting therapeutics, which include prodrugs for a large number of APIs, for use in the treatment of a wide range of diseases and disorders. The most advanced of these is LYT-300, which is an oral form of FDA-approved allopregnanolone, a natural neurosteroid, that may be applicable to a range of neurological conditions.

As of June 30, 2020, our Glyph technology platform IP portfolio consists of 19 patent families comprising 19 U.S. patent applications, four international PCT applications and 14 foreign patent applications. Of these, company-owned IP consists of 12 U.S. patent applications in nine patent families. We exclusively licensed and co-own a patent portfolio of 10 patent families comprising 20 U.S. and foreign patent applications and four international PCT applications from Monash University. Of these patent applications, LYT-300 is covered by two patent families comprising one international PCT application and two U.S. patent applications, all of which are co-owned with Monash University. Any patents to issue from the in-licensed patent applications are expected to expire in 2035-2036 and any issued patents from the co-owned and company-owned patent applications are expected to expire in 2038-2041, exclusive of possible patent term adjustments or extensions or other forms of exclusivity.

Meningeal Lymphatics Discovery Research Program

We have broad intellectual property coverage around our meningeal lymphatics discovery research program, which includes exclusively licensed patent applications covering compositions of matter, methods of use and methods of treatment encompassing its platform-based brain lymphatic technologies, including the identification of macromolecular targets, as well as various classes of brain lymphatic targeting therapeutics for use in the treatment of a wide range of neurodegenerative and neuroinflammatory conditions, as well as various neuropathies and cancers.

As of June 30, 2020, our meningeal lymphatics discovery research program patent portfolio consists of eight patent families comprising eight U.S. patent applications, two international PCT applications and five foreign patent applications exclusively licensed from the University of Virginia Licensing & Ventures Group, and one family of one U.S. application exclusively owned by PureTech. Any patents to issue from the in-licensed patent applications are expected to expire in 2037 through 2041, exclusive of possible patent term adjustments or extensions or other forms of exclusivity.

Our commercial success depends in part upon our ability to obtain and maintain patent and other proprietary protection for commercially important technologies, inventions and know-how related to our business, defend and enforce our intellectual property rights, particularly our patent rights, preserve the confidentiality of our trade secrets and operate without infringing valid and enforceable intellectual property rights of others.

The patent positions for biotechnology companies like us are generally uncertain and can involve complex legal, scientific and factual issues. In addition, the coverage claimed in a patent application can be significantly reduced before a patent is issued, and its scope can be reinterpreted and even challenged after issuance. As a result, we cannot guarantee that any of our technologies and product candidates will be protectable or remain protected by valid and enforceable patents. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. Any patents that we hold may be challenged, circumvented or invalidated by third parties.

Founded Entities' Intellectual Property Overview

Our Founded Entities, other than Alivio and Entrega, maintain their own intellectual property portfolios and manage their intellectual property strategy. The ownership percentages for each of our Founded Entities noted below, other than Karuna, are calculated on a diluted (as opposed to voting) basis, including outstanding shares, options and warrants, but excluding unallocated shares authorized to be issued pursuant to equity incentive plans. Karuna ownership is shown on an outstanding share basis.

Gelesis

As of June 30, 2020, Gelesis' platform has broad intellectual property coverage worldwide, including over 120 patents and patent applications in 11 families, several of which are issued in the United States and numerous foreign jurisdictions, including the EU, Canada, Japan, Russia and South Korea. The filings cover pharmaceutical composition of matter, methods of use, and methods of making polymer hydrogels for use in weight management and glycemic control, as well as predicting weight loss and treating obesity, chronic constipation, NASH, NAFLD, and IBD. Gelesis' issued patent and any patents issuing from pending applications are expected to expire in 2027 through 2038, exclusive of possible patent term adjustments or extensions or other forms of exclusivity.

We own 21.0 percent of Gelesis as of June 30, 2020. Our board designees represent a minority of the members of the board of directors of Gelesis and we are not responsible for the development or commercialization of its product candidates. We have an interest in Gelesis' product candidates through our equity investment as well as our right to royalty payments as a percentage of net sales pursuant to a license agreement between us and Gelesis. Gelesis maintains its own intellectual property portfolio and manages its intellectual property strategy.

Karuna

Karuna has broad intellectual property coverage worldwide, including, according to Karuna's annual report on Form 10-K filed on March 24, 2020, two issued U.S. patents directed to an oral medicament comprising certain doses of xanomeline and/or the salt thereof in combination with certain doses of trospium chloride and two issued U.S. patents directed to methods for treating central nervous system disorders using combinations of certain oral doses of xanomeline and/or the salt thereof and certain oral doses of trospium chloride. They also have one issued patent in Canada and one in Europe, with other patent applications pending in the U.S., Europe, Hong Kong and Japan.

We own 12.8 percent of Karuna as of August 26, 2020 on an outstanding voting share basis. We do not have any board designees on Karuna's board of directors and we are not responsible for the development or commercialization of its product candidate. We have an interest in Karuna's product candidates through our equity investment as well as our right to royalty payments as a percentage of net sales pursuant to a license agreement between us and Karuna. Karuna maintains its own intellectual property portfolio and manages its intellectual property strategy.

Follica

As of June 30, 2020, Follica's regenerative biology program has broad worldwide intellectual property coverage, including over 16 pending patent applications, and over 49 issued patents (of which 32 are design patents), in 10 families of patent filings, which are company-owned or exclusively licensed. The intellectual property covers composition of matter and methods of treatment including combination therapies employing disruption approaches and active agents, as well as devices to promote hair follicle regeneration.

We own 78.3 percent of Follica as of June 30, 2020 and continue to play a role in the development of its product candidates through our majority representation on its board of directors. We also have an interest in Follica's product candidates through our right to royalty payments as a percentage of net sales pursuant to a royalty agreement between us and Follica. Follica maintains its own intellectual property portfolio and manages its intellectual property strategy.

Vedanta

As of June 30, 2020, Vedanta has broad intellectual property coverage worldwide, currently owning or having rights to more than 140 patent applications and issued patents in over 22 families of patent filings. Vedanta's IP estate positions the company as a leader in the microbiome field. Vedanta's IP portfolio includes patents covering compositions and therapeutic uses of products containing microbiome bacteria belonging to Clostridium clusters IV and XIVa, which are among the most abundant colonizers of the human intestine and play an important role in human health, including regulating inflammatory responses and other immune responses. The IP estate includes issued patents in the major pharmaceutical markets, including the United States, Europe and Japan. These patents provide coverage through at least 2031, with priority filing dates as early as 2010.

We own 50.4 percent of Vedanta as of June 30, 2020 and continue to play a role in the development of its product candidates through our majority representation on its board of directors. Vedanta maintains its own intellectual property portfolio and manages its intellectual property strategy.

Sonde

As of June 30, 2020, Sonde has broad intellectual property coverage worldwide, currently owning or having exclusive rights to eight patent applications and 10 issued patents in five families of patent filings. Sonde has filed several patent applications covering a number of facets of its technology in addition to the IP that was licensed from MIT. Sonde's issued patent and any patents issuing from pending applications are expected to expire in 2031 through 2037, exclusive of possible patent term adjustments or extensions or other forms of exclusivity.

We own 45.8 percent of Sonde as of June 30, 2020 and continue to play a role in the development of its product candidates through our representation on its board of directors. Sonde maintains its own intellectual property portfolio and manages its intellectual property strategy.

Alivio

As of June 30, 2020, Alivio has broad intellectual property coverage in multiple countries, currently owning or having exclusive rights to 24 patent applications and six issued patents in nine families of patent filings. Alivio's IP estate covers composition of matter, novel formulations, and methods of using nanostructured gels for the delivery of therapeutic agents. Alivio's issued patent and any patents issuing from pending applications are expected to expire in 2036 through 2039, exclusive of possible patent term adjustments or extensions or other forms of exclusivity.

We own 78.6 percent of Alivio as of June 30, 2020 and continue to play a role in the development of its product candidates. The management team of Alivio consists of PureTech employees, and a majority of the board of directors are PureTech designees. These PureTech employees actively manage the day-to-day business activities of Alivio and, together with the board of directors of Alivio, which is controlled by PureTech, direct the strategy and decision making in connection with the clinical and regulatory development of Alivio's product candidates. We maintain Alivio's intellectual property portfolio and manage its intellectual property strategy.

Entrega

As of June 30, 2020, Entrega has broad intellectual property coverage worldwide, including 10 patent applications in six families of patent filings. Entrega's patent portfolio covers oral drug devices, drug formulations, compositions of matter, methods of use and methods of making hydrogel dosage forms for delivery of active agents. Any patents issuing from pending applications are expected to expire in 2033 through 2039, exclusive of possible patent term adjustments or extensions or other forms of exclusivity.

We own 72.9 percent of Entrega as of June 30, 2020 and continue to play a role in the development of its product candidates. The management team of Entrega consists of PureTech employees, and a majority of the board of directors are PureTech designees. These PureTech employees actively manage the day-to-day business activities of Entrega and, together with the board of directors of Entrega, which is controlled by PureTech, direct the strategy and decision making in connection with the clinical and regulatory development of Entrega's product candidates. We maintain Entrega's intellectual property portfolio and manage its intellectual property strategy.

Akili

As of June 30, 2020, Akili's IP portfolio covers digital intervention that targets interference processing through a proprietary mechanism with adaptive algorithms to improve cognitive function and related symptoms associated with neurological and psychiatric conditions. The IP estate also covers novel adaptive algorithms and reward structures invented by Akili to apply to various neural targeting algorithms. Akili owns or has exclusive rights to nine issued or granted patents and is actively pursuing additional patent applications worldwide.

We own 34.0 percent of Akili as of June 30, 2020. We do not have a direct interest in Akili's product candidates. Our interest in Akili's product candidates is limited to our equity investment in Akili and we do not control the clinical or regulatory development of Akili's product candidates. Akili maintains its own intellectual property portfolio and manages its intellectual property strategy.

Vor

As of June 30, 2020, Vor is pursuing broad intellectual property coverage worldwide to protect Vor's proprietary platform technology and product candidates, such as VOR33, with pending and granted claims to compositions

of matter, methods of use, related technologies, diagnostics and other complimentary inventions. Vor's worldwide IP portfolio includes over 40 patent applications in eight families, including three issued U.S. patents. Vor's portfolio includes patents licensed exclusively from Columbia University as well as patents owned by Vor.

We own 11.8 percent of Vor as of June 30, 2020, assuming all future tranches of the most recent financing round are funded. We do not have a direct interest in Vor's product candidate. Our interest in Vor's product candidate is limited to our equity investment in Vor, and we do not control the clinical or regulatory development of Vor's product candidate. Vor maintains its own intellectual property portfolio and manages its intellectual property strategy.

License Agreements

Wholly Owned Programs

We have a disciplined strategy to advance our Wholly Owned Programs and technologies through a combination of internal funding and non-dilutive funding from external collaborations, such as with other biopharmaceutical companies and grant funding organizations. Given the breadth of applications envisioned from our internal platform technologies, we have a strategy to maximize the value of our Wholly Owned Programs through partnerships with other biopharmaceutical companies, that also serves to not only advance these technologies but also provide important external validation for our technologies. In April 2019, we entered into a collaboration and license agreement with Boehringer Ingelheim, or BI, to evaluate the feasibility of applying our Glyph technology platform to advance certain of BI's immuno-oncology product candidates. Our proposed approach harnesses the gut's lipid transport mechanisms to enable oral administration and transport of drug candidates directly through the gut-draining lymphatic vasculature, also bypassing first pass metabolism in the liver. We plan to continue to partner with other biopharmaceutical companies to develop product candidates that we believe have promising utility in disease areas or patient populations that are better served by resources of larger biopharmaceutical companies.

Another example of this strategy is the Research and License Agreement that we entered into 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 LYT-200 and LYT-210. 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.

We have also entered into exclusive license agreements with each of Monash University, University of Louisville, Memorial Sloan Kettering Cancer Center and University of Virginia, pursuant to which we have in-licensed certain early stage technology for our Wholly Owned Programs Pursuant to these agreements, the universities are entitled to non-material payments upon the achievement of certain specified development and sales based milestones. Additionally, the universities are entitled to low single digit royalty payments on net sales of any products covered by their intellectual property.

Founded Entities

Gelesis

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 intellectual property 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.

Karuna

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.

Follica

We entered into a Royalty Agreement with Follica, 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.

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. We believe that expertise and capabilities across the BIG therapeutic areas, technology, drug discovery and development 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 companies that are working on potential medicines targeting the Brain-Immune-Gut and 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

We are aware of one current drug product candidate in development for secondary lymphedema. Herantis Pharma is developing Lymfactin, an adenoviral VEGF-C gene therapy used alongside lymph node transfer surgery to treat lymphedema.

The other current treatments for lymphedema include durable medical goods, such as compression sleeves and garments, and surgical options, including liposuction and debulking. A novel investigational surgery, lymph node transfer, is also being tested.

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. Other potential competitive product candidates in various stages of development include, but are not limited to, Galapagos NV's GLPS1690 in Phase 3 clinical trials, Fibrogen's pamrevlumab in Phase 3 clinical trials, Roche/Promedior, Inc.'s PRM-151 which is expected to enter a Phase 3 trial in the second half of 2020, Liminal BioSciences' PBI-4050 is in Phase 2 clinical development, Pliant Therapeutics' PLN-74809 in Phase 2 clinical development, Kadmon Holding, Inc.'s KD025 in Phase 2 clinical development, BMS' BMS-986278 in Phase 2 clinical development, BMS/Celgene's CC-90001 in Phase 2 clinical development, Galecto's GB0139 in Phase 2 clinical development, Blade Therapeutics's BLD-2660 in Phase 1 clinical development and Avalyn's AP01 in Phase 1 clinical development.

In the field of COVID-19, there are numerous clinical trials for prevention of COVID-19 using vaccines, or for acute treatment of COVID-19 using anti-viral and anti-inflammatory agents. However, we are only aware of investigator sponsored trials that have been undertaken with pirfenidone and nintedanib for respiratory complications following COVID-19 infection.

LYT-200

Although we are not aware of any direct competitors targeting galectin-9, if we are successful in developing LYT-200 as an immuno-oncology 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.

LYT-210

To the best of our knowledge, there are no competitors in the space of immunosuppressive gd T cells. However, Gamma Delta Therapeutics, Gadeta, TC Biopharm, Adicet Bio are developing gd T cell based therapies at various stages of development. Lava Therapeutics is developing gd T cells engaging antibodies and ImCheck is developing antibodies to target affecting gd T cell expansion in tissues.

LYT-300

In the field of $GABA_A$ positive allosteric modulators, there is one approved drug, allopregnanolone (Zulresso), marketed by Sage Therapeutics. This drug is administered via a 60 hour IV infusion, leading to sustained unmet need for novel therapies. Other potential competitive product candidates in various stages of development include, but are not limited to, Sage Therapeutics's SAGE-2017 (Zuranolone) in Phase 3 clinical development,

Marinus Pharmaceuticals's Ganaxolone in Phase 3 clinical development and Praxis's PRAX-114 in Phase 2 clinical development.

Other Programs

We are not aware of any direct competitors to our Glyph, Orasome and meningeal lymphatics platforms, but they may compete with new therapies that become available in the future to target the indications we are focused on. There are several exosome programs being developed but to the best of our knowledge none of them are targeting oral delivery or using milk, thus differentiating our approach. Competitors developing exosomes or engineered exosomes to deliver payloads include Inc AstraZeneca plc, Capricor Therapeutics, Evox Therapeutics Ltd, ArunA Biomedical Inc, ExoCoBio Inc, Codiak Biosciences, Inc. and Exopharm Ltd.

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, 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. Government Regulation of Drug and Biological Products

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and its implementing regulations and biologics under the FDCA and the Public Health Service Act, or PHSA, and their implementing regulations. Both drugs and biologics also are subject to other federal, state and local statutes and regulations, such as those related to competition. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, and local statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or following approval may subject an applicant to administrative actions or judicial sanctions. These actions and sanctions could include, among other actions, the FDA's refusal to approve pending applications, withdrawal of an approval, license revocation, a clinical hold, untitled or warning letters, voluntary or mandatory product recalls or market withdrawals, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement and civil or criminal fines or penalties. Any agency or judicial enforcement action could have a material adverse effect on our business, the market acceptance of our products and our reputation.

Product candidates must be approved by the FDA through either a new drug application, or NDA, or a biologics license application, or BLA, process before they may be legally marketed in the United States. The process generally involves the following:

- completion of nonclinical, or preclinical, laboratory tests, animal studies and formulation studies in compliance with the FDA's GLP regulations;
- submission to the FDA of an investigational new drug application, or IND, which must take effect before human clinical trials may begin;
- approval by an independent IRB representing each clinical site before each clinical trial may be initiated at that site;
- performance of adequate and well-controlled human clinical trials in accordance with good clinical practices, or GCPs, to establish the safety and efficacy of the proposed drug product for each indication;

- preparation and submission to the FDA of an NDA or BLA, and payment of user fees;
- a determination by the FDA within 60 days of its receipt of an NDA or BLA to accept the application for substantive review;
- review of the product by an FDA advisory committee, where appropriate or if applicable;
- satisfactory completion of one or more FDA pre-approval inspections of the manufacturing facility or facilities where the drug or biologic will be produced to assess compliance with Current Good Manufacturing Practices, or cGMP, requirements to assure that the facilities, methods and controls are adequate to preserve the drug or biologic's identity, strength, quality and purity;
- satisfactory completion of potential FDA audits of clinical trial sites to assure compliance with GCPs and the integrity of the clinical data; and
- FDA review and approval of the NDA, including consideration of the views of any FDA advisory committee, prior to any commercial marketing or sale of the drug or biologic in the United States.

Preclinical Studies

Before testing any drug or biological product candidate in humans, the product candidate must undergo rigorous preclinical testing. Preclinical studies include laboratory evaluation of product chemistry and formulation, as well as in vitro and animal studies to assess safety and in some cases to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal and state regulations and requirements, including GLP regulations.

The IND and IRB Processes

An IND is an exemption from the FDCA that allows an unapproved drug or biological product to be shipped in interstate commerce for use in an investigational clinical trial and a request for FDA authorization to administer such investigational drug or biological product to humans. Such authorization must be secured prior to interstate shipment and administration of the investigational drug or biological product. In an IND, applicants must submit a protocol for each clinical trial and any subsequent protocol amendments. In addition, the results of the preclinical tests, manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, are submitted to the FDA as part of an IND. Some long-term preclinical testing, such as animal tests of reproductive AEs and carcinogenicity, may continue after the IND is submitted.

The FDA requires a 30-day waiting period after the filing of each IND before clinical trials may begin. At any time during this 30-day period, the FDA may raise concerns or questions about the conduct of the trials as outlined in the IND and impose a clinical hold. In this case, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can begin.

Following commencement of a clinical trial under an IND, the FDA may also place a clinical hold or partial clinical hold on that trial due to safety concerns or non-compliance with specific FDA requirements. A clinical hold is an order issued by the FDA to the sponsor to delay a proposed clinical investigation or to suspend an ongoing investigation. A partial clinical hold is a delay or suspension of only part of the clinical work requested under the IND. No more than 30 days after imposition of a clinical hold or partial clinical hold, the FDA will provide the sponsor a written explanation of the basis for the hold. Following issuance of a clinical hold or partial clinical hold, an investigation may only resume after the FDA has notified the sponsor that the investigation may proceed. The FDA will base that determination on information provided by the sponsor correcting the deficiencies previously cited or otherwise satisfying the FDA that the investigation can proceed.

A sponsor may choose, but is not required, to conduct a foreign clinical study under an IND. When a foreign clinical study is conducted under an IND, all FDA IND requirements must be met unless waived. When the

foreign clinical study is not conducted under an IND, the FDA may accept data from such study if the sponsor ensures that the study is conducted in accordance with GCP, including review and approval by an independent ethics committee, or IEC, and informed consent from subjects. The FDA must also be able to validate the data from the study through an on-site inspection if necessary.

In addition to the foregoing IND requirements, an IRB representing each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must conduct continuing review of the study at least annually. The IRB must review and approve, among other things, the study protocol and informed consent information to be provided to study subjects. An IRB must operate in compliance with FDA regulations. An IRB can suspend or terminate approval of a clinical trial at its institution, or an institution it represents, if the clinical trial is not being conducted in accordance with the IRB's requirements or if the product candidate has been associated with unexpected serious harm to patients.

Additionally, some trials are overseen by an independent group of qualified experts organized by the trial sponsor, often known as a data safety monitoring board or committee. This group provides authorization for whether or not a trial may move forward at designated check points based on access that only the group maintains to available data from the study. Suspension or termination of development during any phase of clinical trials can occur if it is determined that the subjects or patients are being exposed to an unacceptable health risk. Other reasons for suspension or termination may be made by us based on evolving business objectives and/or competitive climate.

Information about certain clinical trials must be submitted within specific timeframes to the NIH for public dissemination on its ClinicalTrials.gov website. Information related to the product, patient population, phase of investigation, study sites and investigators and other aspects of the clinical trial is made public as part of the registration of the clinical trial. Although sponsors are obligated to disclose the results of their clinical trials after completion, disclosure of the results can be delayed in some cases for up to two years after the date of completion of the trial. Failure to timely register a covered clinical study or to submit study results as provided for in the law can give rise to civil monetary penalities and also prevent the non-compliant party from receiving future frant funds from the federal government. The NIH's Final Rule on ClinicalTrials.gov registration and reporting requirements became effective in 2017, and both NIH and FDA recently signaled the government's willingness to begin enforcing those requirements against non-compliant clinical trial sponsors.

Clinical Trials

The clinical stage of development involves the administration of the investigational product to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control, in accordance with GCP requirements, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, the parameters to be used to monitor subject safety and the effectiveness criteria to be evaluated.

Human clinical trials are typically conducted in three sequential phases, which may overlap or be combined:

- *Phase 1*. The drug is initially introduced into healthy human subjects or, in certain indications such as cancer, patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an early indication of its effectiveness and to determine optimal dosage.
- *Phase 2*. The drug is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.

- *Phase 3*. The drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to evaluate the efficacy and safety of the product for approval, to establish the overall risk-benefit profile of the product and to provide adequate information for the labeling of the product.

In August 2018, the FDA released a draft guidance entitled "Expansion Cohorts: Use in First-In-Human Clinical Trials to Expedite Development of Oncology Drugs and Biologics," which provides information for drug developers regarding the design and conduct of first-in-human clinical trials designed to expedite the clinical development of cancer drugs, including biological products, through multiple expansion cohort trials. Expansion cohort trials are designed to expedite development by seamlessly proceeding from the initial determination of a potentially effective dose to individual cohorts that have trial objectives typical of Phase 2 trials, such as evaluation of anti-tumor activity, or confirming the safety of a RP2D. Information to support the design of individual expansion cohorts are included in IND applications and assessed by FDA.

Post-approval trials, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication and are commonly intended to generate additional safety data regarding use of the product in a clinical setting. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA or BLA.

Progress reports detailing the results of the clinical trials, among other information, must be submitted at least annually to the FDA and written IND safety reports must be submitted to the FDA and the investigators 15 days after the trial sponsor determines the information qualifies for reporting for serious and unexpected suspected AEs, findings from other studies or animal or *in vitro* testing that suggest a significant risk for human subjects and any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must also notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction as soon as possible but in no case later than seven calendar days after the sponsor's initial receipt of the information.

Phase 1, Phase 2, Phase 3 and other types of clinical trials may not be completed successfully within any specified period, if at all. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug or biologic has been associated with unexpected serious harm to patients. Concurrent with clinical trials, companies usually complete additional animal studies and also must develop additional information about the chemistry and physical characteristics of the drug or biologic as well as 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 and, among other things, companies must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidates do not undergo unacceptable deterioration over their shelf life.

FDA Review Process

Following completion of the clinical trials, data are analyzed to assess whether the investigational product is safe and effective for the proposed indicated use or uses. The results of preclinical studies and clinical trials are then submitted to the FDA as part of an NDA or BLA, along with proposed labeling, chemistry and manufacturing information to ensure product quality and other relevant data. The NDA or BLA is a request for approval to market the drug or biologic for one or more specified indications and must contain proof of safety and efficacy for a drug or safety, purity and potency for a biologic. The application may include both negative and ambiguous results of preclinical studies and clinical trials, as well as positive findings. Data may come from company-

sponsored clinical trials intended to test the safety and efficacy of a product's use or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and efficacy of the investigational product to the satisfaction of FDA. FDA approval of an NDA or BLA must be obtained before a drug or biologic may be marketed in the United States.

Under the Prescription Drug User Fee Act, or PDUFA, as amended, each NDA or BLA must be accompanied by a user fee. FDA adjusts the PDUFA user fees on an annual basis. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on NDAs or BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

The FDA reviews all submitted NDAs and BLAs before it accepts them for filing, and may request additional information rather than accepting the NDA or BLA for filing. The FDA must make a decision on accepting an NDA or BLA for filing within 60 days of receipt, and such decision could include a refusal to file by the FDA. Once the submission is accepted for filing, the FDA begins an in-depth review of the NDA or BLA. Under the goals and policies agreed to by the FDA under PDUFA, the FDA targets ten months, from the filing date, in which to complete its initial review of a new molecular entity NDA or original BLA and respond to the applicant, and six months from the filing date of a new molecular entity NDA or original BLA designated for priority review. The FDA does not always meet its PDUFA goal dates for standard and priority NDAs or BLAs, and the review process is often extended by FDA requests for additional information or clarification.

Before approving an NDA or BLA, the FDA will conduct a pre-approval inspection of the manufacturing facilities for the new product to determine whether they comply with cGMP requirements. The FDA will not approve the product 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. The FDA also may audit data from clinical trials to ensure compliance with GCP requirements. Additionally, the FDA may refer applications for novel products or products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions, if any. The FDA is not bound by recommendations of an advisory committee, but it considers such recommendations when making decisions on approval. The FDA likely will reanalyze the clinical trial data, including in connection with an advisory committee meeting, which could result in extensive discussions between the FDA and the applicant during the review process. After the FDA evaluates an NDA or BLA, it will issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug or biologic with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application will not be approved in its present form. A Complete Response Letter usually describes all of the specific deficiencies in the NDA or BLA identified by the FDA. The Complete Response Letter may require the applicant to obtain additional clinical data, including the potential requirement to conduct additional pivotal clinical trial(s) and/or to complete other significant and time-consuming requirements related to clinical trials, or to conduct additional preclinical studies or manufacturing activities. If a Complete Response Letter is issued, the applicant may either resubmit the NDA or BLA, addressing all of the deficiencies identified in the letter, or withdraw the application or request an opportunity for a hearing. Even if such data and information are submitted, the FDA may decide that the NDA or BLA does not satisfy the criteria for approval.

Expedited Development and Review Programs

A sponsor may seek to develop and obtain approval of its product candidates under programs designed to accelerate the development, FDA review and approval of new drugs and biologics that meet certain criteria. For example, the FDA has a fast track program that is intended to expedite or facilitate the process for reviewing new drugs and biologics that are intended to treat a serious or life threatening disease or condition and demonstrate

the potential to address unmet medical needs for the condition. Fast track designation applies to both the product and the specific indication for which it is being studied. For a fast track-designated product, the FDA may consider sections of the NDA or BLA for review on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the application, 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. The sponsor can request the FDA to designate the product for fast track status any time before receiving NDA or BLA approval, but ideally no later than the pre-NDA or pre-BLA meeting.

A product submitted to the FDA for marketing, including under a fast track program, may be eligible for other types of FDA programs intended to expedite development or review, such as priority review and accelerated approval. Priority review means that, for a new molecular entity or original BLA, the FDA sets a target date for FDA action on the marketing application at six months after accepting the application for filing as opposed to ten months. A product is eligible for priority review if it is designed to treat a serious or life-threatening disease condition and, if approved, would provide a significant improvement in safety and effectiveness compared to available therapies. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug or biologic designated for priority review in an effort to facilitate the review. If criteria are not met for priority review, the application for a new molecular entity or original BLA is subject to the standard FDA review period of ten months after FDA accepts the application for filing. Priority review designation does not change the scientific/medical standard for approval or the quality of evidence necessary to support approval.

A product may also be eligible for accelerated approval if it is designed to treat a serious or life-threatening disease or condition and demonstrates an effect on either 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, or IMM, that is reasonably likely to predict an effect on IMM or other clinical benefit, taking into account the severity, rarity, or prevalence of the disease or condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a drug or biologic receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. 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. FDA may withdraw approval of a drug or indication approved under accelerated approval if, for example, the confirmatory trial fails to verify the predicted clinical benefit of the product.

Additionally, a drug or biologic may be eligible for designation as a breakthrough therapy if the product is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over currently approved therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. If the FDA designates a breakthrough therapy, it may take actions appropriate to expedite the development and review of the application, which may include holding meetings with the sponsor and the review team throughout the development of the therapy; providing timely advice to, and interactive communication with, the sponsor regarding the development of the drug to ensure that the development program to gather the nonclinical and clinical data necessary for approval is as efficient as practicable; involving senior managers and experienced review staff, as appropriate, in a collaborative, cross-disciplinary review; assigning a cross-disciplinary project lead for the FDA review team to facilitate an efficient review of the development program and to serve as a scientific liaison between the review team and the sponsor; and considering alternative clinical trial designs when scientifically appropriate, which may result in smaller trials or more efficient trials that require less time to complete and may minimize the number of patients exposed to a potentially less efficacious treatment. Breakthrough therapy designation comes with all of the benefits of fast track designation, which means that the sponsor may file sections of the BLA for review on a rolling basis if certain conditions are satisfied, including an agreement with the FDA on the proposed schedule for submission of portions of the application and the payment of applicable user fees before the FDA may initiate a review.

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 the time period for FDA review or approval may not be shortened. Furthermore, fast track designation, priority review, accelerated approval and breakthrough therapy designation do not change the standards for approval.

Post-Marketing Requirements

Following approval of a new product, the manufacturer and the approved product are subject to continuing regulation by the FDA, including, among other things, monitoring and record-keeping activities, reporting of adverse experiences, complying with promotion and advertising requirements, which include restrictions on promoting products for unapproved uses or patient populations (known as "off-label use") and limitations on industry-sponsored scientific and educational activities. Although physicians may prescribe legally available products for off-label uses, manufacturers may not market or promote such uses. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability, including investigation by federal and state authorities. Prescription drug promotional materials must be submitted to the FDA in conjunction with their first use or first publication. Further, if there are any modifications to the drug or biologic, including changes in indications, labeling or manufacturing processes or facilities, the applicant may be required to submit and obtain FDA approval of a new NDA/BLA or NDA/BLA supplement, which may require the development of additional data or preclinical studies and clinical trials.

The FDA may also place other conditions on approvals including the requirement for a Risk Evaluation and Mitigation Strategy, or REMS, to assure the safe use of the product. If the FDA concludes a REMS is needed, the sponsor of the NDA or BLA must submit a proposed REMS. The FDA will not approve the NDA or BLA without an approved REMS, if required. A REMS 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. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Product approvals may be withdrawn for non-compliance with regulatory standards or if problems occur following initial marketing.

FDA regulations require that products be manufactured in specific approved facilities and in accordance with cGMP regulations. Manufacturers must comply with cGMP regulations that require, among other things, quality control and quality assurance, the maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Manufacturers and other entities involved in the manufacture and distribution of approved drugs or biologics 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 cGMP requirements and other laws. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance. The discovery of violative conditions, including failure to conform to cGMP regulations, could result in enforcement actions, and the discovery of problems with a product after approval may result in restrictions on a product, manufacturer or holder of an approved NDA or BLA, including recall.

Once an approval is granted, the FDA may issue enforcement letters or withdraw the approval of the product if compliance with regulatory requirements and standards is not maintained or if problems occur after the drug or biologic reaches the market. Corrective action could delay drug or biologic distribution and require significant time and financial expenditures. Later discovery of previously unknown problems with a drug or biologic, including AEs 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 trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or voluntary product recalls;

- fines, warning or untitled letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending NDAs or supplements to approved NDAs, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs and biologics may be promoted only for the approved indications and in accordance with the provisions of the approved label. However, companies may share truthful and not misleading information that is otherwise consistent with a product's FDA approved labeling. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

In addition, the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act, or PDMA, which regulates the distribution of drugs and drug samples at the federal level, and sets minimum standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution.

Hatch-Waxman Amendments

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) 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, known as a reference listed drug, or RLD. 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.

Non-Patent Exclusivity

Under the Hatch-Waxman Amendments, the FDA may not approve (or in some cases accept) an ANDA or 505(b)(2) application until any applicable period of non-patent exclusivity for the RLD has expired. The FDCA provides a period of five years of non-patent data exclusivity for a new drug containing a new chemical entity, or NCE. For the purposes of this provision, an NCE is a drug that contains no active moiety that has previously been approved by the FDA in any other NDA. An active moiety is the molecule or ion responsible for the physiological or pharmacological action of the drug substance. In cases where such NCE exclusivity has been granted, non 505(b)(2) NDA referencing the approved product or ANDA may be filed for substantive review by the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification,

which states the proposed 505(b)(2) or generic drug will not infringe one or more of the already approved product's listed patents or that such patents are invalid or unenforceable, in which case the applicant may submit its application four years following the original product approval.

The FDCA also provides for a period of three years of exclusivity for non-NCE drugs if the NDA or a supplement to the NDA includes reports of one or more new clinical investigations, other than bioavailability or bioequivalence studies, that were conducted by or for the applicant and are essential to the approval of the application or supplement. This three-year exclusivity period often protects changes to a previously approved drug product, such as a new dosage form, route of administration, combination or indication, but it generally would not protect the original, unmodified product from generic competition. Unlike five-year NCE exclusivity, an award of three-year exclusivity does not block the FDA from accepting 505(b)(2) NDAs referencing the approved drug product or ANDAs seeking approval for generic versions of the drug as of the date of approval of the original drug product; it only prevents FDA from approving such 505(b)(2) NDAs or ANDAs.

Hatch-Waxman Patent Certification and the 30-Month Stay

In seeking approval of an NDA or a supplement thereto, NDA sponsors are required to list with the FDA each patent with claims that cover the applicant's product or an approved method of using the product. Upon approval, each of the patents listed by the NDA sponsor is published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Upon submission of an ANDA or 505(b)(2) NDA, an applicant is required to certify to the FDA concerning any patents listed for the RLD in the Orange Book that:

- no patent information on the drug product that is the subject of the application has been submitted to the FDA;
- such patent has expired;
- the date on which such patent expires; or
- such patent is invalid, unenforceable 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 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. If the drug has NCE exclusivity and the ANDA or 505(b)(2) NDA is submitted four years after approval, the 30-month stay is extended so that it expires seven and a half years after approval of the innovator drug, unless the patent expires or there is a decision in the infringement case that is favorable to the ANDA or 505(b)(2) NDA applicant before then.

Patent Term Restoration and Extension

Depending upon the timing, duration and specifics of FDA approval of our future product candidates, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit restoration of the patent term of up to five years as compensation for patent term lost during the FDA regulatory review process. Patent-term restoration, however, cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date and only those claims covering such approved drug product, a method for using it or a method for manufacturing it may be extended. The patent-term restoration period is generally one-half the time between the effective date of an IND and the submission date of an NDA or BLA plus the time between the submission date of an NDA or BLA and the approval of that application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved drug is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may apply for restoration of patent term for our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant NDA or BLA.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biological product intended to treat a rare disease or condition, which is generally 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 and for which there is no reasonable expectation that the cost of developing and making the product available in the United States for this type of disease or condition will be recovered from sales of the product.

Orphan drug designation must be requested before submitting an NDA or BLA. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and 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 exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication for seven years from the date of such approval, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity by means of greater effectiveness, greater safety or providing a major contribution to patient care or in instances of drug supply issues. Competitors, however, may receive approval of either a different product for the same indication or the same product for a different indication but that could be used off-label in the orphan indication. If an orphan designated product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan exclusivity. Orphan drug status in the European Union has similar, but not identical, requirements and benefits.

Pediatric Information and Pediatric Exclusivity

Under the Pediatric Research Equity Act, or PREA, certain NDAs and BLAs and certain supplements to an NDA or BLA must contain data to assess the safety and efficacy of the drug 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 may grant deferrals for submission of pediatric data or full or partial waivers. The Food and Drug Administration Safety and Innovation Act, or FDASIA, amended the FDCA to require that a sponsor who is planning to submit a marketing application for a drug 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, or PSP, within 60 days of an end-of-Phase 2 meeting or, if there is no such meeting, as early as practicable before the initiation of the Phase 3 or Phase 2/3 study. The initial PSP must include an outline of the pediatric study or studies that the sponsor plans to conduct, including study objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA and the sponsor must reach an agreement on the PSP. A sponsor can submit amendments to an agreed-upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from preclinical studies, early phase clinical trials and/or other clinical development programs.

A drug or biologic 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.

Biosimilars and Exclusivity

Certain of our product candidates are regulated as biologics. An abbreviated approval pathway for biological products shown to be similar to, or interchangeable with, an FDA-licensed reference biological product was created by the Biologics Price Competition and Innovation Act of 2009, or BPCI Act, as part of the Affordable Care Act, or the ACA. This amendment to the PHSA, in part, attempts to minimize duplicative testing. Biosimilarity, which requires that the biological product be highly similar to a biologic already licensed by the FDA pursuant to a BLA notwithstanding minor differences in clinically inactive components and that there be no clinically meaningful differences between the product and the reference product in terms of safety, purity and potency, can be shown through analytical studies, animal studies and a clinical trial or trials. Interchangeability requires that a biological product be biosimilar to the reference product and that the product can be expected to produce the same clinical results as the reference product in any given patient and, for products administered multiple times to an individual, that the product and the reference product 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 biological product without such alternation or switch. Complexities associated with the larger, and often more complex, structure of biological products as compared to small molecule drugs, as well as the processes by which such products are manufactured, pose significant hurdles to implementation that are still being worked out by the FDA.

A reference biological product is granted four and twelve year exclusivity periods from the time of first licensure of the product. FDA will not accept an application for a biosimilar or interchangeable product based on the reference biological product until four years after the date of first licensure of the reference product, and FDA will not approve an application for a biosimilar or interchangeable product based on the reference biological product until twelve years after the date of first licensure of the reference product. "First licensure" typically means the initial date the particular product at issue was licensed in the United States. Date of first licensure does not include the date of licensure of (and a new period of exclusivity is not available for) a biological product if the licensure is for a supplement for the biological product or for a subsequent application by the same sponsor or manufacturer of the biological product (or licensor, predecessor in interest, or other related entity) for a change (not including a modification to the structure of the biological product) that results in a new indication, route of administration, dosing schedule, dosage form, delivery system, delivery device or strength, or for a modification to the structure of the biological product that does not result in a change in safety, purity, or potency. Therefore, one must determine whether a new product includes a modification to the structure of a previously licensed product that results in a change in safety, purity, or potency to assess whether the licensure of the new product is a first licensure that triggers its own period of exclusivity. Whether a subsequent application, if approved, warrants exclusivity as the "first licensure" of a biological product is determined on a case-by-case basis with data submitted by the sponsor.

U.S. Government Regulation of Medical Devices

General Requirements

Under the FDCA, a medical device is an instrument, apparatus, implement, machine, contrivance, implant, *in vitro* reagent, or other similar or related article, including any component part, or accessory which is: (i) recognized in the official National Formulary, or the U.S. Pharmacopoeia, or any supplement to them; (ii) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals; or (iii) intended to affect the structure or any function of the body of man or other animals, and which does not achieve any of its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes.

In the United States, medical devices are subject to extensive regulation by the FDA under the FDCA, and its implementing regulations, and certain other federal and state statutes and regulations. The laws and regulations govern, among other things, the research and development, design, testing, manufacture, packaging, storage, recordkeeping, approval, labeling, promotion, post-approval monitoring and reporting, distribution and import and export of medical devices. Failure to comply with applicable requirements may subject a device and/or its manufacturer to a variety of administrative sanctions, such as FDA refusal to approve pending premarket applications, issuance of warning letters, mandatory product recalls, import detentions, civil monetary penalties, and/or judicial sanctions, such as product seizures, injunctions, and criminal prosecution. Unless an exemption applies, medical devices require marketing clearance or approval from the FDA prior to commercial distribution. The two primary types of FDA marketing authorization applicable to a medical device are premarket notification, also called 510(k) clearance, and premarket approval, or PMA approval; however, other devices may be commercialized after the FDA grants a *de novo* request.

The 510(k) Process

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 control needed to provide reasonable assurances with respect to safety and effectiveness.

Class I devices are those for which safety and effectiveness can be reasonably assured by adherence to a set of regulations, referred to as General Controls, which require compliance with the applicable portions of the FDA's Quality System Regulation, or QSR, which sets forth cGMP requirements for medical devices, facility registration and product listing, reporting of AEs and malfunctions, and appropriate, truthful and non-misleading labeling and promotional materials. Most Class I products are exempt from the premarket notification requirements.

Class II devices are those that are subject to the General Controls, as well as Special Controls, which can include performance standards, guidelines and post market surveillance. Most Class II devices are subject to premarket review and clearance by the FDA. Premarket review and clearance by the FDA for Class II devices is accomplished through the 510(k) premarket notification process. Under the 510(k) process, the manufacturer must submit to the FDA a premarket notification, demonstrating that the device is "substantially equivalent," as defined in the statute, to either:

- a device that was legally marketed prior to May 28, 1976, the date upon which the Medical Device Amendments of 1976 were enacted, or
- another commercially available, similar device that was cleared through the 510(k) process.

To be "substantially equivalent," the proposed device must have the same intended use as the predicate device, and either have the same technological characteristics as the predicate device or have different technological characteristics and not raise different questions of safety or effectiveness than the predicate device. Clinical data are sometimes required to support substantial equivalence.

After a 510(k) notice is submitted, the FDA determines whether to accept it for substantive review. If it lacks necessary information for substantive review, the FDA will refuse to accept the 510(k) notification. If it is accepted for filing, the FDA begins a substantive review. If the FDA agrees that the device is substantially equivalent, it will grant clearance to commercially market the device.

The De Novo and PMA Processes

If the FDA determines that the device is not "substantially equivalent" to a predicate device, or if the device is classified into Class III by operation of law, the device sponsor must then fulfill the much more rigorous premarketing requirements of the PMA process, or seek classification of the device through the *de novo* process by submitting a *de novo* request. A manufacturer can also submit a direct *de novo* request if the manufacturer is unable to identify an appropriate predicate device and the new device or new use of the device presents a moderate or low risk.

In response to a *de novo* request, FDA may classify the device into class I or II. Under the FDCA, FDA must make a classification determination for the device that is the subject of the *de novo* request by written order within 120 days of the request. However, in accordance with the performance goals and procedures agreed to by FDA for the medical device user fee program in the Medical Device User Fee Amendments of 2017, or MDUFA IV, FDA has committed to issuing a MDUFA decision within 150 FDA days of receipt of the submission for 65 percent of *de novo* requests received in fiscal year 2021. During the pendency of FDA's review, FDA may issue an additional information letter, which places the *de novo* request on hold and stops the review clock pending receipt of the additional information requested. In the event the *de novo* requestor does not provide the requested information within 180 calendar days, FDA will consider the *de novo* request to be withdrawn.

If FDA determines that General Controls or General Controls and Special Controls are insufficient to provide reasonable assurance of safety and effectiveness or the information and/or the data provided in the *de novo* request are insufficient to determine whether General Controls or General Controls and Special Controls can provide a reasonable assurance of safety and effectiveness, FDA will decline the *de novo* request. If a *de novo* request is declined, FDA issues a written order to the *de novo* requestor identifying the reasons for declining the *de novo* request and the device remains in class III and may not be marketed. The *de novo* requestor may submit a PMA or collect additional information to address the issues identified by FDA and submit a new *de novo* request that includes the additional information. Alternatively, in the event FDA determines the data and information submitted demonstrate that General Controls or General and Special Controls are adequate to provide reasonable assurance of safety and effectiveness, FDA will grant the *de novo* request. When FDA grants a *de novo* request, the device is granted marketing authorization and further can serve as a predicate for future devices of that type, including for 510(k)s. In December 2018, the FDA issued proposed regulations to govern the *de novo* classification process, which include requirements beyond what has historically been required in *de novo* submissions. If finalized, these regulations could further impact this path to market.

Class III devices include devices deemed by the FDA to pose the greatest risk such as life-supporting or life-sustaining devices, or implantable devices, in addition to those deemed not substantially equivalent following the 510(k) process. The safety and effectiveness of Class III devices cannot be reasonably assured solely by the General Controls and Special Controls described above. Therefore, these devices are subject to the PMA application process, which is generally more costly and time consuming than the 510(k) process. Through the PMA application process, the applicant must submit data and information demonstrating reasonable assurance of the safety and effectiveness of the device for its intended use to the FDA's satisfaction. Accordingly, a PMA application typically includes, but is not limited to, extensive technical information regarding device design and development, preclinical and clinical study data, manufacturing information, labeling and financial disclosure information for the clinical investigators in device studies. The PMA application must provide valid scientific evidence that demonstrates to the FDA's satisfaction reasonable assurance of the safety and effectiveness of the device for its intended use. Overall, the FDA review of a PMA application generally takes between one and three years, but may take significantly longer.

Exempt Devices

If a manufacturer's device falls into a generic category of Class I or Class II devices that FDA has exempted by regulation, a premarket notification is not required before marketing the device in the United States. Manufacturers of such devices are required to register their establishments and list the generic category or classification name of their devices. Some 510(k)-exempt devices are also exempt from QSR requirements, except for the QSR's complaint handling and recordkeeping requirements.

Pre-Submission Meetings

The FDA has mechanisms to provide companies with guidance prior to formal submission of either a 510(k), *de novo* request or PMA. One such mechanism is the pre-submission program in which a company has a "pre-submission" meeting as outlined in the FDA guidance document "Requests for Feedback and Meetings for Medical Device Submissions: The Q-Submission Program" that was issued in May 2019. The main purpose of the pre-submission meeting is to provide companies with guidance from the FDA on matters of significance to product development and/or submission preparation. Prior to the pre-submission meeting, the company provides a briefing document to the FDA. The FDA is not obligated to follow the recommendations it provides to companies as a result of a pre-submission meeting.

Clinical Trials

A clinical trial is almost always required to support a PMA application or *de novo* request and is sometimes required for a premarket notification. For significant risk devices, the FDA regulations require that human clinical investigations conducted in the United States be approved via an investigational device exemption, or IDE, which must become effective before clinical testing may commence. A significant risk device is one that presents a potential for serious risk to the health, safety or welfare of a subject 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. A nonsignificant risk device does not require FDA approval of an IDE; however, the clinical trial must still be conducted in compliance with abbreviated IDE regulations, such as those relating to trial monitoring, informed consent, and labeling and record-keeping. In some cases, one or more smaller studies may precede a pivotal clinical trial intended to demonstrate the safety and effectiveness of the investigational device. A 30-day waiting period after the submission of each IDE is required prior to the commencement of clinical testing in humans. If the FDA determines that there are deficiencies or other concerns with an IDE that require modification, the FDA may permit a clinical trial to proceed under a conditional approval. If the FDA disapproves the IDE within this 30-day period, the clinical trial proposed in the IDE may not begin.

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 application must also include a description of product manufacturing and controls, and a proposed clinical trial protocol. FDA typically grants IDE approval for a specified number of patients to be treated at specified study centers. During the study, the sponsor must comply with the FDA's IDE requirements for investigator selection, trial monitoring, reporting, and record keeping. The investigators must obtain patient informed consent, rigorously follow the investigational plan and study protocol, control the disposition of investigational devices, and comply with all reporting and record keeping requirements. Certain IDE requirements apply to all investigational devices, whether such devices are considered significant or nonsignificant risks. Prior to granting PMA approval, the FDA typically inspects the records relating to the conduct of the study and the clinical data supporting the PMA application for compliance with IDE requirements.

Clinical trials must be conducted: (i) in compliance with federal regulations, including those related to good clinical practices, or GCPs, which are intended to protect the rights and health of patients and to define the roles of clinical trial sponsors, investigators, and monitors; and (ii) under protocols detailing the objectives of the trial,

the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated. Clinical trials are typically conducted at geographically diverse clinical trial sites, and are designed to permit FDA to evaluate the overall benefit-risk relationship of the device and to provide adequate information for the labeling of the device. Clinical trials for both significant and nonsignificant risk devices, must be approved by an IRB for each trial site.

The FDA may order the temporary, or permanent, discontinuation of a clinical trial at any time, or impose other sanctions, if it believes that the clinical trial either is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial subjects. An IRB may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the IRB's requirements, or may impose other conditions.

Although the QSR does not fully apply to investigational devices, the requirement for controls on design and development does apply. The sponsor also must manufacture the investigational device in conformity with the quality controls described in the IDE application and any conditions of IDE approval that FDA may impose with respect to manufacturing. Investigational devices may only be distributed for use in an investigation, and must bear a label with the statement: "CAUTION—Investigational device. Limited by Federal law to investigational use."

Information about certain clinical trials must be submitted within specific timeframes to the NIH for public dissemination on its ClinicalTrials.gov website.

Post-Marketing Requirements

After a device is placed on the market, numerous regulatory requirements apply. These include:

- annual and updated establishment registration and device listing with the FDA;
- the QSR requirements, which require manufacturers to follow stringent design, testing, control, documentation, complaint handling and other quality assurance procedures during all aspects of the design and manufacturing process;
- advertising and promotion requirements;
- restrictions on sale, distribution or use of a device;
- labeling and marketing regulations, which require that promotion is truthful, not misleading, and provide adequate directions for use and that all claims are substantiated, and also prohibit the promotion of products for unapproved or "off-label" uses and impose other restrictions on labeling;
- 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; and
- complying with the federal law and regulations requiring Unique Device Identifiers on devices and also requiring the submission of certain information about each device to the FDA's Global Unique Device Identification Database.

FDA enforces these requirements by inspection and market surveillance. If the FDA finds a violation, it can institute a wide variety of enforcement actions, ranging from a public warning letter to more severe sanctions such as:

- warning letters, untitled letters, fines, injunctions, consent decrees, and civil penalties;

- recall, withdrawals, or administrative detention or seizure of products;
- operating restrictions, partial suspension or total shutdown of production;
- refusing or delating requests for 510(k) clearance or PMA approval of new products or modified products;
- withdrawing PMA approvals or 510(k) clearances already granted;
- refusal to grant export or import approvals for marketing products; and
- criminal prosecution.

Discovery of previously unknown problems with a product or the failure to comply with applicable FDA requirements can have negative consequences, including adverse publicity, judicial or administrative enforcement, warning letters from the FDA, mandated corrective advertising or communications with doctors, and civil or criminal penalties, among others. Newly discovered or developed safety or effectiveness data may require changes to a product's approved labeling, including the addition of new warnings and contraindications, and also may require the implementation of other risk management measures. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of products under development.

Device Modifications

Some changes to an approved PMA device, including changes in indications, labeling, or manufacturing processes or facilities, require submission and FDA approval of a new PMA or PMA supplement, as appropriate, before the change can be implemented. Supplements to a PMA often require the submission of the same type of information required for an original PMA, except that the supplement is generally limited to that information needed to support the proposed change from the product covered by the original PMA. The FDA uses the same procedures and actions in reviewing PMA supplements as it does in reviewing original PMAs.

Modifications to a device that received 510(k) clearance may require a new 510(k) submission if those changes could significantly affect the safety or effectiveness of the device, or if the modifications represent a major change in intended use. If the manufacturer determines that a modification could not substantially affect the safety or effectiveness of the device, it should document the changes and rationale for not submitting a new 510(k). Though the manufacturer is responsible for the initial assessment, FDA may disagree, and later require the manufacturer to submit a 510(k) for the modified device. FDA could require the manufacturer to cease marketing the modified device while the 510(k) notification is awaiting clearance.

European Union Drug Development

In the European Union, our future products and product candidates also may be subject to extensive regulatory requirements. As in the United States, medicinal products can be marketed only if a marketing authorization from the competent regulatory agencies has been obtained.

Similar to the United States, the various phases of preclinical and clinical research in the European Union are subject to significant regulatory controls. Although the EU Clinical Trials Directive 2001/20/EC has sought to harmonize the EU clinical trials regulatory framework, setting out common rules for the control and authorization of clinical trials in the European Union, the EU Member States have transposed and applied the provisions of the Directive differently. This has led to significant variations in the Member State regimes. Under the current regime, before a clinical trial can be initiated it must be approved in each of the EU countries where the trial is to be conducted by two distinct bodies: the National Competent Authority, or NCA, and one or more Ethics Committees, or ECs. Under the current regime all suspected unexpected serious adverse reactions to the investigated drug that occur during the clinical trial have to be reported to the NCA and ECs of the Member State where they occurred.

In April 2014, the EU passed the new Clinical Trials Regulation, (EU) No 536/2014, which will replace the current Clinical Trials Directive 2001/20/EC. To ensure that the rules for clinical trials are harmonized throughout the European Union, the new EU clinical trials legislation was passed as a regulation that is directly applicable in all EU member states. All clinical trials performed in the European Union are required to be conducted in accordance with the Clinical Trials Directive 2001/20/EC until the new Clinical Trials Regulation (EU) No 536/2014 becomes applicable. It is expected that the new Clinical Trials Regulation (EU) No 536/2014 will apply following confirmation of full functionality of the Clinical Trials Information System, or CTIS, the centralized European Union portal and database for clinical trials foreseen by the regulation, through an independent audit. The regulation becomes applicable six months after the European Commission publishes notice of this confirmation with a three-year transition period. It will overhaul the current system of approvals for clinical trials in the European Union. Specifically, the new regulation, which will be directly applicable in all member states, aims at simplifying and streamlining the approval of clinical trials in the European Union. For instance, the new Clinical Trials Regulation provides for a streamlined application procedure via a single point and strictly defined deadlines for the assessment of clinical trial applications.

European Union Drug Marketing

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 European Union and in the UK. The provision of benefits or advantages to physicians is governed by national anti-bribery laws, such as the UK Bribery Act 2010. Infringement of these laws could result in substantial fines and imprisonment.

Payments made to physicians in certain European Union Member States and in the UK must be publicly disclosed. Moreover, agreements with physicians often must be the subject of prior notification and 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 the national laws, industry codes or professional codes of conduct, applicable in the EU Member States and in the UK. Failure to comply with these requirements could result in reputational risk, public reprimands, administrative penalties, fines or imprisonment.

European Union Drug Review and Approval

In the European Economic Area, or EEA, which is comprised of the 27 Member States of the European Union (together with Norway), Iceland and Liechtenstein, medicinal products can only be commercialized after obtaining a Marketing Authorization, or MA. There are two types of marketing authorizations.

- The Community MA is 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 EMA, and is valid throughout the entire territory of the EEA. The Centralized Procedure is mandatory for certain types of products, such as biotechnology medicinal products, orphan medicinal products, advanced-therapy medicines such as gene-therapy, somatic cell-therapy or tissue-engineered medicines and medicinal products containing a new active substance indicated for the treatment of HIV, AIDS, cancer, neurodegenerative disorders, diabetes, autoimmune and other immune dysfunctions and viral diseases. The Centralized Procedure is optional for products containing a new active substance not yet authorized in the EEA, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the European Union.
- National MAs, which are issued by the competent authorities of the Member States of the EEA and only cover their respective territory, are available for products not falling within the mandatory scope of the Centralized Procedure. Where a product has already been authorized for marketing in a Member State of the EEA, this National MA can be recognized in another 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 SPC, and a draft of the labeling and package leaflet, which are sent to the other Member States (referred to as the Member States Concerned) for their approval. If the Member States Concerned raise no objections, based on a potential serious risk to public health, to the assessment, SPC, 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 Member States Concerned).

Under the above described procedures, before granting the MA, the EMA or the competent authorities of the Member States of the EEA make an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

European Union New Chemical Entity Exclusivity

In the European Union, new chemical entities, sometimes referred to as new active substances, qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity. The data exclusivity, if granted, prevents regulatory authorities in the European Union from referencing the innovator's data to assess a generic application for eight years, after which generic marketing authorization can be submitted, and the innovator's data may be referenced, but not approved for two years. 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 marketing authorization 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.

European Union Orphan Designation and Exclusivity

In the European Union, the EMA's Committee for Orphan Medicinal Products grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention or treatment of life-threatening or chronically debilitating conditions affecting not more than 5 in 10,000 persons in the European Union community (or where it is unlikely that the development of the medicine would generate sufficient return to justify the investment) and for which no satisfactory method of diagnosis, prevention or treatment has been authorized (or, if a method exists, the product would be a significant benefit to those affected).

In the European Union, orphan drug designation entitles a party to financial incentives such as reduction of fees or fee waivers and ten years of market exclusivity is granted following medicinal product approval. This period may be reduced to six years if the orphan drug designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity. Additionally, marketing authorization may be granted to a similar product for the same indication at any time, if (i) the holder of the marketing authorization for the original orphan medicinal product consents to a second orphan medicinal product application, (ii) the holder of the marketing authorization for the original orphan medicinal product cannot supply sufficient quantities of the orphan medicinal product, or (iii) the second applicant can establish that the second medicinal product, although similar, is safer, more effective or otherwise clinically superior to the authorized orphan medicinal product. Orphan drug designation must be requested before submitting an application for marketing approval. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

European Pediatric Investigation Plan

In the EEA, MAAs for new medicinal products not authorized have to include the results of studies conducted in the pediatric population, in compliance with a pediatric investigation plan, or PIP, agreed 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 marketing authorization 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 marketing authorization is obtained in all Member States of the European Union and trial results are included in the product information, even when negative, the product is eligible for six months' supplementary protection certificate extension.

European Union Device Development

In the European Union, medical devices are regulated under the European Union Directive (93/42/EEC), also known as the Medical Device Directive, or the MDD. Active Implantable Medical Devices are regulated under Directive 90/385/EEC, and In-Vitro Diagnostic Devices under Directive 98/79/EC (the IVDD). An authorized third party, also called a Notified Body, must approve products for CE marking (except lower risk, or "Class 1", medical devices) and conducts periodic inspections to ensure applicable regulatory requirements are met. The CE mark is contingent upon continued compliance to the applicable regulations and the quality system requirements of the ISO 13485 standard.

The new European Medical Devices Regulation (2017/745), or the EU MDR, and Regulation 2017/746 on In-Vitro Diagnostic Devices, or the EU IVDR, which were published in May 2017 with a transition period until May 26, 2021, replace the MDD and IVDD. Starting May 26, 2021, the new EU MDR will apply and no new applications under the previous directives will be permitted. During the four-year transition period, companies need to update their technical documentation and other quality management system processes to meet the new EU MDR (or, as applicable, IVDR) requirements. Under the new EU MDR requirements, CE certificates issued under the MDD or IVDD prior to May 25, 2017 will remain valid in accordance with their term, beyond the expiration of the transition period; however, certain limitations set forth in the EU MDR (or, as applicable, the EU IVDR), such as the need to use classifications that are different from the previous directives, would apply, as well as the requirements of the EU MDR (or, as applicable, EU IVDR) relating to post-market surveillance, vigilance and registration of economic operators and devices will apply in place of the corresponding requirements of the MDD. CE certificates issued under the MDD or IVDD from May 25, 2017 until May 25, 2021 will remain valid in accordance with their term, but shall not exceed five years and shall become void after May 26, 2024. However, devices already placed on the market before May 26, 2024 under the previous directives may continue to be made available until May 26, 2026.

Brexit and the Regulatory Framework in the United Kingdom

On June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the European Union, commonly referred to as "Brexit". In October 2019, a withdrawal agreement, or the Withdrawal Agreement, setting out the terms of the United Kingdom's exit from the European Union, and a political declaration on the framework for the future relationship between the United Kingdom and European Union was agreed between the UK and EU governments. Under the terms of the EU Withdrawal Agreement, the United Kingdom withdrew from membership of the European Union on 31 January 2020 and entered into a 'transition period' which is due to expire on 31 December 2020. Since the regulatory framework for pharmaceutical products in the United Kingdom covering quality, safety and efficacy of pharmaceutical products, clinical trials, marketing authorization, commercial sales and distribution of pharmaceutical products is derived from European Union directives and regulations, Brexit could materially impact the future regulatory regime which applies to products and the approval of product candidates in the United Kingdom. It remains to be seen how, if at all, Brexit will impact regulatory requirements for product candidates and products in the United Kingdom.

European and United Kingdom Data Collection Regulation

In the event we decide to conduct clinical trials in the European Union and/or the United Kingdom, we may be subject to additional data protection requirements. The collection and use of personal data (which includes health information) in the European Union is governed by the provisions of the General Data Protection Regulation 2016/679, or GDPR, and in the United Kingdom, after the transition period, governed by the Data Protection Act 2018 (however, until the end of the transition period, the GDPR will continue to apply to the UK). The GDPR applies to any company established in the EEA and to companies established outside the EEA that process personal data in connection with the offering of goods or services to data subjects in the EU or the monitoring of the behavior of data subjects in the European Union. The GDPR enhances data protection obligations for controllers of personal data, including requiring controllers to: ensure legal bases they rely on to process personal data are aligned to the legal bases prescribed under the GDPR; individuals are informed as to what personal data is collected from them, how it is used and how they can exercise certain rights in line with the increased disclosures; conduct data protection impact assessments for "high risk" processing; only retain personal data for as long as it is needed in line with the purpose it was obtained; ensure an appropriate level of security in line with the nature and scope of the personal data being processed, and where there has been a personal data breach (i.e. a breach to security which had led to personal data being compromised), notify the relevant supervisory authority and/or individuals affected; embed "privacy by design" practices into new technologies which involve the processing of personal data; enter into data processing terms and carry out appropriate due diligence on any service provider which processes personal data on behalf of the controller (and therefore qualifying as a processor). The GDPR also imposes strict rules on the transfer of personal data outside of the EEA to countries that do not ensure an adequate level of protection, like the U.S. Failure to comply with the requirements of the GDPR and the related national data protection laws of the EEA Member States may result in fines up to 20 million Euros or 4 percent of a company's global annual revenues for the preceding financial year, whichever is higher. Moreover, the GDPR grants data subjects the right to claim for material and non-material damages resulting from infringement of the GDPR. Given the breadth and depth of these data protection obligations, maintaining compliance with the GDPR will require significant time, resources and expense, and as an ongoing compliance measure we may be required to put in place additional mechanisms which help to ensure our compliance with the data protection rules. This may be onerous and adversely affect our business, financial condition, results of operations and prospects.

Rest of the World Regulation

For other countries outside of the European Union 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 and Privacy 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 CMS, including the Office of Inspector General and Office for Civil Rights, other divisions of the Department of 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 privacy 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. Violations are subject to civil and criminal fines and penalties for each violation, plus up to three times the remuneration involved, imprisonment, and exclusion from government healthcare programs. In addition, the government may assert that a claim that includes items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act;
- 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 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. When an entity is determined to have violated the federal civil False Claims Act, the government may impose civil fines and penalties for each false claim, plus treble damages, and exclude the entity from participation in Medicare, Medicaid and other federal healthcare programs;

- 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;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH and their respective implementing regulations, including the Final Omnibus Rule published in January 2013, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions;
- the federal transparency requirements known as the federal Physician Payments Sunshine Act, under the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively the Affordable Care Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies to report annually to the Centers for Medicare & Medicaid Services, or CMS, within the U.S. Department of Health and Human Services, or HHS, information related to payments and other transfers of value made by that entity to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by the physicians described above and their immediate family members. Effective January 1, 2022, these reporting obligations will extend to include transfers of value made to certain non-physician providers such as physician assistants and nurse practitioners. In addition, many states also require the reporting of payments or other transfers of value. In addition, many states also require reporting of payments or other transfers of value, many of which differ from each other in significant ways, are often not pre-empted, and may have a more prohibitive effect than the Sunshine Act, thus further complicating compliance efforts;
- 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;
- many state laws govern the privacy of personal information in specified circumstances, for example, in California the California Consumer Protection Act, or CCPA, which went into effect on January 1, 2020, establishes a new privacy framework for covered businesses by creating an expanded definition of personal information, establishing new data privacy rights for consumers in the State of California, imposing special rules on the collection of consumer data from minors, and creating a new and potentially severe statutory damages framework for violations of the CCPA and for businesses that fail to implement reasonable security procedures and practices to prevent data breaches. While clinical trial data and information governed by HIPAA are currently exempt from the current version of the CCPA, other personal information may be applicable and possible changes to the CCPA may broaden its scope; 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. State and foreign laws, including for example the European Union General Data Protection Regulation, also govern the privacy and security of personal data, including health information, in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Insurance Coverage

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, 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 drug and other medical products exists among third-party payors. Therefore, 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.

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.

Current and Future Legislation

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 Affordable Care Act, which, among other things, includes changes to the coverage and payment for products under government health care programs. The Affordable Care Act includes 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 new 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, and we expect there will be additional challenges and amendments to the ACA in the

future. For example, since January 2017, President Trump has signed various Executive Orders and other directives designed to delay the implementation of or otherwise circumvent certain provisions of the Affordable Care Act. While Congress has not passed comprehensive repeal legislation, it has enacted laws that modify certain provisions of the Affordable Care Act such as removing penalties, starting January 1, 2019, for not complying with the Affordable Care Act's individual mandate to carry health insurance, delaying the implementation of certain Affordable Care Act-mandated fees, and increasing the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D. On December 14, 2018, a Texas U.S. District Court Judge ruled that the Affordable Care Act is unconstitutional in its entirety because the "individual mandate" was repealed by Congress as part of the Tax Cuts and Jobs Act of 2017. On December 18, 2019, the U.S. Court of Appeals for the 5th Circuit ruled that the individual mandate was unconstitutional but remanded the case back to the District Court to determine whether the remaining provisions of the ACA are invalid as well. On March 2, 2020, the U.S. Supreme Court granted the petitions for writs of certiorari to review the case, although it is unclear when a decision will be made or how the Supreme Court will rule. The Trump administration and CMS, have stated that the ruling will have no immediate effect pending appeal of the decision. Litigation and legislation related to the ACA are likely to continue, with unpredictable and uncertain results. We will continue to evaluate the effect that the ACA and its possible repeal and replacement has on our business.

Other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, included aggregate reductions of Medicare payments to providers of 2 percent per fiscal year, which went into effect in April 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2027 unless additional Congressional action is taken. However, pursuant to the Coronavirus Aid, Relief and Economic Security Act, or CARES Act, these Medicare sequester reductions will be suspended from May 1, 2020 through December 31, 2020 due to the COVID-19 pandemic. 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.

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. At the federal level, the Trump administration's budget for fiscal year 2021 includes a $135 billion allowance to support legislative proposals seeking to reduce drug prices, increase competition, lower out-of-pocket drug costs for patients, and increase patient access to lower-cost generic and biosimilar drugs.. On March 10, 2020, the Trump administration sent "principles" for drug pricing to Congress, calling for legislation that would, among other things, cap Medicare Part D beneficiary out-of-pocket pharmacy expenses, provide an option to cap Medicare Part D beneficiary monthly out-of-pocket expenses, and place limits on pharmaceutical price increases. Additionally, on July 24, 2020, President Trump signed four Executive Orders aimed at lowering drug prices. The Executive Orders direct the Secretary of the Department of Health and Human Services to: (1) eliminate protection under an Anti-Kickback Statute safe harbor for certain retrospective price reductions provided by drug manufacturers to sponsors of Medicare Part D plans or pharmacy benefit managers that are not applied at the point-of-sale; (2) allow the importation of certain drugs from other countries through individual waivers, permit the re-importation of insulin products, and prioritize finalization of FDA's December 2019 proposed rule to permit the importation of drugs from Canada; (3) ensure that payment by the Medicare program for certain Medicare Part B drugs is not higher than the payment by other comparable countries (depending on whether pharmaceutical manufacturers agree to other measures); and (4) allow certain low-income individuals receiving insulin and epinephrine purchased by a Federally Qualified Health Center, or FQHC, as part of the 340B drug program to purchase those drugs at the discounted price paid by the FQHC. On September 13, 2020, President Trump signed an Executive Order

directing HHS to implement a rulemaking plan to test a payment model, pursuant to which Medicare would pay, for certain high-cost prescription drugs and biological products covered by Medicare Part B, no more than the most-favored-nation price (i.e., the lowest price) after adjustments, for a pharmaceutical product that the drug manufacturer sells in a member country of the Organization for Economic Cooperation and Development that has a comparable per-capita gross domestic product. Although a number of these, and other proposed measures will require authorization through additional legislation to become effective, Congress and the current administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs.

While some proposed measures may require additional authorization to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. 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.

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, but the manufacturer must develop an internal policy and respond to patient requests according to that policy. 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 European Union, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed. 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 European Union 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. European Union 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 European Union 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 European Union. 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 European Union 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.

Facilities

We lease approximately 50,858 square feet of office and laboratory space in Boston, Massachusetts of which we sublease approximately 11,852 square feet to a third party. This facility serves as our corporate headquarters. Certain of our Founded Entities sublease space from us and reimburse us at market rates. We also lease approximately 4,170 square feet of laboratory space in Boston, Massachusetts. We believe that our existing facilities are adequate to meet our current needs for the foreseeable future, and that suitable additional alternative spaces will be available in the future on commercially reasonable terms if needed.

Legal Proceedings

As of the date of this registration statement, 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.

C. ORGANIZATIONAL STRUCTURE

As of June 30, 2020, we had one significant subsidiary. The following table sets out for each of our principal subsidiaries, the country of incorporation, percentage ownership and voting interest held by us (directly or indirectly through subsidiaries):

Company	Country of incorporation	Percentage ownership and voting interest	Main activity
PureTech Health LLC	United States	100.0%	Biotherapeutics

D. PROPERTY, PLANTS AND EQUIPMENT

We lease approximately 50,858 square feet of office and laboratory space in Boston, Massachusetts of which we sublease approximately 11,852 square feet to a third party. This facility serves as our corporate headquarters. Certain of our Founded Entities sublease space from us and reimburse us at market rates. We also lease approximately 4,170 square feet of laboratory space in Boston, Massachusetts. We believe that our existing facilities are adequate to meet our current needs for the foreseeable future, and that suitable additional alternative spaces will be available in the future on commercially reasonable terms if needed.

ITEM 4A. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

You should read the following discussion and analysis together with "Selected Consolidated Financial Data" and our consolidated financial statements, including the notes thereto, included elsewhere in this registration statement. Some of the information contained in this discussion and analysis or set forth elsewhere in this registration statement, 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 of this registration statement, 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, 2019, 2018 and 2017 have been prepared in accordance with the International Financial Reporting Standards, International Accounting Standards, and Interpretations (collectively "IFRS") as issued by the International Accounting Standards Board ("IASB") as adopted by the European Union (adopted IFRSs).

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 in this registration statement. For additional information regarding our operating structure, see "—Basis of Presentation and Consolidation" below.

A. OPERATING RESULTS

Overview

We are a clinical-stage biotherapeutics company dedicated to discovering, developing and commercializing highly differentiated medicines for devastating diseases, including inflammatory and immunological conditions, intractable cancers, lymphatic and gastrointestinal diseases and neurological and neuropsychological disorders, among others. The product candidates within our Wholly Owned Pipeline and the products and product candidates being developed by our Founded Entities were initiated by our experienced research and development team and our extensive network of scientists, clinicians and industry leaders. These product candidates are protected by a growing intellectual property portfolio of more than 600 patents and patent applications, of which more than 200 are issued.

Since our inception, we have devoted substantially all of our resources to conducting research and development of our Wholly Owned product candidates and those being developed by our Founded Entities, in-licensing and acquiring rights to our Wholly Owned and our Founded Entities' product candidates, building our intellectual property portfolio and providing general and administrative support for our operations. To date, we have raised a total of $439.3 million from external funding sources such as major investment funds and other leading investors. We raised $196.0 million when we completed our initial public offering, or IPO, on the London Stock Exchange in June 2015, plus an additional $101.2 million as a follow-on offering that we completed in April 2018. Prior to our IPO, we raised a total of $142.1 million in consecutive private financing rounds. In the period from January 2017 through June 2020, our Founded Entities strengthened their collective balance sheets by attracting $1,084.2 million in investments and non-dilutive funding, including $997.6 million from third parties. The balance of the funding is between PureTech Health plc and its Founded Entities. For a description of our structure and relationships with our Founded Entities, see "Business Overview" included elsewhere in this

registration statement. As of June 30, 2020, we had cash, cash equivalents and short-term investments of $340.1 million, which included aggregate proceeds of $12.3 million and $245.9 million from our sales of resTORbio and Karuna shares, respectively.

Our Founded Entities, Gelesis, Inc., or Gelesis, and Akili Interactive Labs, Inc., or Akili, in which we lost control in 2019 and 2018, respectively, have products cleared for sale, but we and our Controlled Founded Entities have not generated any revenue from product sales. 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 our Controlled Founded Entities' product candidates, which may never occur. For the years ended December 31, 2019, 2018 and 2017 and the six months ended June 30, 2020, we recognized income of $366.1 million, incurred a loss of $70.7 million, incurred a loss of $75.1 million and recognized income of $123.7 million, respectively. We had retained earnings as of June 30, 2020 of $378.4 million.

We have deconsolidated a number of our Founded Entities during the past three fiscal years, including resTORbio, Inc., or resTORbio, in November 2017, Akili, in May 2018, Vor Biopharma Inc. and Karuna Therapeutics, Inc., or Karuna, during the first half of 2019 and Gelesis Inc., or Gelesis, during the second half of 2019. We expect this trend to continue into the foreseeable future as our Founded Entities raise additional funding. 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 subsidiary's assets and liabilities and as a result we derecognize the assets, liabilities and non controlling interests related to the subsidiary 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 expect our expenses to continue to increase substantially in connection with our ongoing development activities related to our preclinical and clinical programs. In addition, upon the completion of the U.S. listing to which this registration statement relates, we expect to incur additional costs associated with operating as a public company in the United States. We 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 product candidates that successfully complete clinical trials;
- add clinical, scientific, operational financial and management information systems and personnel, including personnel to support our product development and potential future commercialization claims; and
- operate as a U.S. public company.

In addition, we expect our internal research and development spend to increase in the foreseeable future as we initiate clinical studies for LYT-100, LYT-200, LYT-210 and LYT-300, and as we continue to progress our programs related to lymphatic targeting, oral biotherapeutics and brain and central nervous system lymphatics.

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 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 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.

As a result, we may need substantial additional funding to support our continuing operations and pursue our growth strategy. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through a combination of public or private equity or debt financings or other sources, which may include monetization of certain of our interests in our Founded Entities and collaborations with third parties. 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 fail to raise capital or enter into such agreements as, and when needed, we may have to significantly delay, scale back or discontinue the development and commercialization of one or more of our Wholly Owned product candidates.

License and Collaboration Agreements

We have a disciplined strategy to maximize the value of our Wholly Owned Pipeline, or Internal segment, and have partnered, and plan to continue to partner, product candidates that we believe have promising utility in disease areas or patient populations that are better served by resources of larger biopharmaceutical companies. We are party to a collaboration and license agreement with Boehringer Ingelheim, or BI, to evaluate the feasibility of applying our lymphatic targeting technology to advance certain of BI's IO product candidates.

See "Business Overview—License Agreements" for a detailed description of our collaboration agreements.

We have also entered into exclusive license agreements with each of NYU, Monash University, University of Louisville, Memorial Sloan Kettering Cancer Center and University of Virginia, pursuant to which we have in-licensed certain early stage technology for our Wholly Owned Programs. Pursuant to these agreements, the universities are entitled to non-material payments upon the achievement of certain specified development and sales based milestones. Additionally, the universities are entitled to low single digit royalty payments on net sales of any products covered by their intellectual property.

COVID-19

In December 2019, illnesses associated with COVID-19 were reported and the virus has since caused widespread and significant disruption to daily life and economies across geographies. The World Health Organization has classified the outbreak as a pandemic. Our business, operations and financial condition and results have not been significantly impacted during the six months ended June 30, 2020 as a result of the COVID-19 pandemic. In response to the COVID-19 pandemic, we have taken swift action to ensure the safety of our employees and other stakeholders. We continue to monitor the latest developments regarding the COVID-19 pandemic on our business, operations, and financial condition and results, and have made certain assumptions regarding the pandemic for purposes of our operational planning and financial projections, including assumptions regarding the duration and severity of the pandemic and the global macroeconomic impact of the pandemic. Despite careful tracking and planning, however, we are unable to accurately predict the extent of the impact of the pandemic on our business, operations, and financial condition and results in future periods due to the uncertainty of future developments. We are focused on all aspects of our business and are implementing measures aimed at mitigating issues where possible including by using digital technology to assist operations for our R&D and enabling functions.

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 at least quarterly for the purposes of allocating resources and assessing performance. We have determined that each 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 four reportable segments which are outlined below. Substantially all of our revenue and profit generating activities are generated within the United States and, accordingly, no geographical disclosures are provided.

Internal

The Internal segment (the "Internal segment"), is advancing a pipeline fueled by recent discoveries in lymphatics and immune cell trafficking to modulate disease in a tissue-specific manner. These programs leverage the transport and biodistribution of various immune system components for the targeted treatment of diseases with major unmet needs, including cancers, autoimmune diseases, and neuroimmune disorders. The Internal segment is comprised of the technologies that 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 June 30, 2020, this segment included PureTech LYT, Inc. (formerly Ariya Therapeutics Inc.) and PureTech LYT 100, Inc.

Controlled Founded Entities

The Controlled Founded Entities segment (the "Controlled Founded Entity 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 June 30, 2020 , this segment included Alivio Therapeutics, Inc., Entrega, Inc., Follica, Incorporated, Sonde Health, Inc. and Vedanta Biosciences, Inc. This segment also included Commense Inc. for all periods presented through December 31, 2019 (beginning in 2020, Commense Inc. was an inactive subsidiary).

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 (i) no longer holds majority voting control as a shareholder and (ii) no longer has the right to elect a majority of the members of the entity's 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 its reportable segments. As of June 30, 2020, the Non-Controlled Founded Entities segment included Akili Interactive Labs, Inc. ("Akili"), Vor Biopharma, Inc. ("Vor"), Karuna Therapeutics, Inc. ("Karuna"), and Gelesis, Inc. ("Gelesis"). This segment also included resTORbio, Inc. ("resTORbio") for all periods through December 31, 2017.

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 following the date of deconsolidation is included in the Parent Company and Other segment (the "Parent Company and Other segment").

Parent Company and Other segment

The Parent Company and Other segment 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. This segment 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, gain on loss of significant influence, and the share of net loss of associates accounted for using the equity method. As of June 30, 2020, this segment included PureTech Health plc, PureTech Health LLC, PureTech Management, Inc. and PureTech Securities 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 June 30, 2020:

Internal Segment	
PureTech LYT	100.0%
PureTech LYT-100, Inc.	100.0%
Controlled Founded Entities	
Alivio Therapeutics, Inc.	91.9%
Entrega, Inc.	83.1%
Follica, Incorporated	85.4%
Sonde Health, Inc.	52.3%
Vedanta Biosciences, Inc.	59.9%
Non-Controlled Founded Entities	
Akili Interactive Labs, Inc.	41.9%
Gelesis, Inc.	26.2%
Karuna Therapeutics, Inc.	17.8%
Vor Biopharma Inc.	16.4%
Parent Segment (1)	
Puretech Health plc	100.0%
PureTech Health LLC	100.0%
PureTech Securities 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 revenue from product sales and we do not expect to generate any revenue from product sales for the foreseeable 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 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 collaborations. 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 that 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.

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 Founded Entities' product 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' product 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. Costs for certain development activities are recognized based on an evaluation of the progress to completion of specific tasks using information and data provided to us by our vendors and third-party service providers.

Research and development activities are central to our business model. Product 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' product 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 product candidates. We are also unable to predict when, if ever, material net cash inflows will commence from our Wholly Owned or our Founded Entities' product candidates. This is due to the numerous risks and uncertainties associated with developing products, including the uncertainty of:

- progressing research and development of our product pipeline, including LYT-100, LYT-200, LYT-210, LYT-300 and our programs related to lymphatic targeting, oral biotherapeutics and brain and central nervous system lymphatics and other potential product candidates within our Wholly Owned Programs;

- establishing an appropriate safety profile with investigational new drug application enabling studies to advance our preclinical programs into clinical development;
- the success of our Founded Entities and their need for additional capital;
- identifying new product candidates to add to our development 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' product 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' product candidates;
- continued acceptable safety profile of our products, 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 product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, the U.S. Food and Drug Administration, or FDA, the European Medicines Agency, or 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 product 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 product candidates or focus on others. Identifying potential product 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' product 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 product candidates. We also expect to incur increased expenses associated with being a public company in the United States, including costs of accounting, audit, information systems, legal, regulatory and tax compliance services, director and officer insurance costs and investor and public relations costs.

Total Other Income/(Loss)

Gain on Deconsolidation

Upon losing 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).

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, ResTORbio (until its sale in 2020) and certain insignificant investments. Our ownership in Akili, Gelesis and Vor is in preferred shares and our ownership of Karuna was in preferred shares until its IPO in June 2019 when such shares were converted into common shares. When Karuna's preferred shares converted into common shares, our equity interest in Karuna investment was removed from Investments Held at Fair Value and accounted for under the equity method as we still retained significant influence in Karuna at such time. On December 2, 2019 we lost significant influence in Karuna and, beginning on that date, we accounted for our investment in Karuna in accordance with IFRS 9 as an Investment Held at Fair Value. 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.

Gain on Loss of Significant Influence

Gain on loss of significant influence relates to the assessment in connection with our ability to exert significant influence over an investment in a Non-Controlled Founded Entity. As of June 30, 2020, only our common share investment in Gelesis meets the scope of equity method accounting. For the years ended December 31, 2019 and 2018, we recognized gains on loss of significant influence in Karuna and resTORbio, respectively.

Other Income (Expense)

Other income (expense) consists primarily of gains and losses related to the sale of an asset and certain investments as well as 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. Finance income consists of interest income on funds invested in U.S. treasuries.

Share of Net Gain (Loss) of Associates Accounted for Using the Equity Method, 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 its net investment in the investee, 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 determines the need for impairment and reversal of impairment losses.

Income Tax

We must make certain estimates and judgments in determining income tax expense for financial statement purposes. 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. 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.

Results of Operations

The following table, which has been derived from our audited financial statements for the years ended December 31, 2019, 2018 and 2017 and our unaudited condensed consolidated financial statements for the six months ended June 30, 2020 and 2019 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)	2019	2018	2017	Change (2018 to 2019)	Change (2017 to 2018)
Contract revenue	$ 8,688	$ 16,371	$ 650	$ (7,683)	$ 15,721
Grant revenue	1,119	4,377	1,885	(3,258)	2,492
Total revenue	**9,807**	**20,748**	**2,535**	**(10,941)**	**18,213**
Operating expenses:					
General and administrative expenses	(59,358)	(47,365)	(46,283)	(11,993)	(1,082)
Research and development expenses	(85,848)	(77,402)	(71,672)	(8,445)	(5,730)
Operating income/(loss)	**(135,399)**	**(104,019)**	**(115,420)**	**(31,380)**	**11,401**
Other income/(expense):					
Gain/(loss) on deconsolidation	264,409	41,730	85,016	222,679	(43,286)
Gain/(loss) on investments held at fair value	(37,863)	(34,615)	57,334	(3,248)	(91,949)
Loss realized on sale of investment			—	—	—
Loss on impairment of intangible asset	—	(30)	—	30	(30)
Gain/(loss) on disposal of assets	(82)	4,060	—	(4,142)	4,060
Gain on loss of significant influence	445,582	10,287	—	435,295	10,287
Other income/(expenses)	121	(278)	14	399	(292)
Other income/(loss)	**672,167**	**21,154**	**142,364**	**651,013**	**(121,210)**
Net finance income/(costs)	**(46,147)**	**25,917**	**(80,047)**	**(72,065)**	**105,964**
Share of net gain/(loss) of associates accounted for using the equity method	30,791	(11,490)	(17,608)	42,281	6,118
Impairment of investment in associate	(42,938)	—	—	(42,938)	—
Income/(loss) before income taxes	**478,474**	**(68,438)**	**(70,711)**	**546,911**	**2,273**
Taxation	(112,409)	(2,221)	(4,383)	(110,188)	2,162
Net income/(loss) including non-controlling interest	**366,065**	**(70,659)**	**(75,094)**	**436,724**	**4,435**
Net (loss)/income attributable to the Company	**$ 421,144**	**$ (43,654)**	**$ 26,472**	**$ 464,798**	**$ (70,126)**

(in thousands)	Six Months Ended June 30, 2020	2019	Change
Contract revenue	$ 5,465	$ 3,955	$ 1,510
Grant revenue	1,379	432	947
Total revenue	**6,844**	**4,387**	**2,457**
Operating expenses:			
General and administrative expenses	(21,376)	(29,196)	7,820
Research and development expenses	(38,250)	(45,507)	7,257
Operating income/(loss)	**(52,782)**	**(70,317)**	**17,534**
Other income/(expense):			
Gain on deconsolidation	—	108,395	(108,395)
Gain/(loss) on investments held at fair value	276,910	52,375	224,535
Loss realized on sale of investment	(44,539)	—	(44,539)
Loss on impairment of intangible asset	—	—	—
Gain/(loss) on disposal of assets	—	—	—
Gain on loss of significant influence	—	—	—
Other income/(expense)	482	(41)	522
Other income/(loss)	**232,852**	**160,729**	**72,122**
Net finance income/(costs)	**1,685**	**(34,126)**	**35,811**
Share of net gain/(loss) of associates accounted for using the equity method	(7,271)	—	(7,271)
Impairment of investment in associate	—	—	—
Income/(loss) before income taxes	**174,483**	**56,287**	**118,196**
Taxation	(50,775)	(25,142)	(25,633)
Net income/(loss) including non-controlling interest	**123,708**	**31,145**	**92,563**
Net (loss)/income attributable to the Company	**$123,957**	**$ 73,506**	**$ 50,450**

Comparison of the Years Ended December 31, 2018 and 2017

Total Revenue

(in thousands)	Year Ended December 31, 2018	2017	Change
Contract Revenue:			
Internal Segment	$ 2,110	$ —	$ 2,110
Controlled Founded Entities	14,233	625	13,608
Non-Controlled Founded Entities	—	—	—
Parent Company and other	29	25	4
Total Contract Revenue	**$16,371**	**$ 650**	**$15,721**
Grant Revenue:			
Internal Segment	$ 86	$ —	$ 86
Controlled Founded Entities	4,271	1,255	3,016
Non-Controlled Founded Entities	20	630	(610)
Parent Company and other	—	—	—
Total Grant Revenue	**$ 4,377**	**$1,885**	**$ 2,492**

Our total revenue was $20.7 million for the year ended December 31, 2018, an increase of $18.2 million, or 718.5 percent compared to the year ended December 31, 2017. The growth was attributable to increases of $13.6 million in contract revenue and $3.0 million in grant revenue in the Controlled Founded Entities segment for the year ended December 31, 2018, which was driven primarily by contract revenue earned under Vedanta's milestone-based JBI collaboration agreement and its CARB-X grant agreement. The growth was further attributable to an increase of $2.1 million in revenue earned in the Internal segment under the Orasome collaboration and license agreement with Roche for the year ended December 31, 2018.

Research and Development Expenses

	Year Ended December 31,		
(in thousands)	**2018**	**2017**	**Change**
Research and Development Expenses:			
Internal Segment	$ (8,929)	$ (1,515)	$ 7,414
Controlled Founded Entities	(36,930)	(25,553)	11,377
Non-Controlled Founded Entities	(29,851)	(41,395)	(11,544)
Parent Company and other	(1,692)	(3,209)	(1,517)
Total Research and Development Expenses:	**$(77,402)**	**$(71,672)**	**$ 5,730**

Our research and development expenses were $77.4 million for the year ended December 31, 2018, an increase of $5.7 million, or 8.0 percent compared to the year ended December 31, 2017. The change was attributable to increases of $7.4 million in the Internal segment and $11.4 million in the Controlled Founded entities segment for the year ended December 31, 2018, which were primarily due to increased headcount and increased clinical trial expense. The increases were offset partially by a decline of $11.5 million owing to the deconsolidation of resTORbio during the year ended December 31, 2017 and the deconsolidation of Akili during the year ended December 31, 2018.

General and Administrative Expenses

	Year Ended December 31,		
(in thousands)	**2018**	**2017**	**Change**
General and Administrative Expenses:			
Internal Segment	$ (1,498)	$ (402)	$1,096
Controlled Founded Entities	(10,212)	(10,671)	(459)
Non-Controlled Founded Entities	(16,385)	(17,064)	(679)
Parent Company and other	(19,270)	(18,146)	1,124
Total General and Administrative Expenses	**$(47,365)**	**$(46,283)**	**$1,082**

Our general and administrative expenses were $47.4 million for the year ended December 31, 2018, an increase of $1.1 million, or 2.3 percent compared to the year ended December 31, 2017. The change was attributable to increases of $1.1 million in the Parent segment and $1.1 million in the Internal segment, which were primarily due to increased headcount and increased professional fees. The increases were partially offset by a decline of $0.7 million in the Non-Controlled Founded Entities segment, primarily owing to the deconsolidation of resTORbio during the year ended December 31, 2017 and the deconsolidation of Akili during the year ended December 31, 2018, as well as a decline of $0.5 million in the Controlled Founded Entities segment for year ended December 31, 2018.

Total Other Income (Loss)

Total other income was $21.2 million for the year ended December 31, 2018, a decrease of $121.2 million, or 85.1 percent as compared to the year ended December 31, 2017. The decline was attributable to a $91.9 million

increase in fair value accounting losses on certain investments held at fair value for the year ended December 31, 2018 and a $43.3 million decline in gain on deconsolidation as we recognized a gain of $41.7 million for the deconsolidation of Akili during the year ended December 31, 2018 compared to a gain of $85.0 million for the deconsolidation of resTORbio during the year ended December 31, 2017. The decline was partially offset by gains of $10.3 million on loss of significant influence of resTORbio and $4.1 million on disposal of assets for the year ended December 31, 2018.

Net Finance Income (Costs)

Net finance income was $25.9 million for the year ended December 31, 2018, an increase of $106.0 million in income, or 132.4 percent as compared to the year ended December 31, 2017. The income growth was attributable to a $103.8 million decline in the change in the fair value of our preferred shares, warrant and convertible note liabilities held by third parties for the year ended December 31, 2018.

Share of Net Gain (Loss) in Associates Accounted for Using the Equity Method, and Impairment of Investment in Associate

The share of net loss in associates was $11.5 million for the year ended year ended December 31, 2018, a decline of $6.1 million, or 34.7 percent as compared to the year ended December 31, 2017. The decline in share of associate net loss was attributable to the results of resTORbio for the year ended December 31, 2018.

Taxation

Income tax expense was $2.2 million for the year ended December 31, 2018, a decrease of $2.2 million, or 49.3 percent as compared to the year ended December 31, 2017. The decline in income tax expense was primarily attributable to the enactment of the Tax Cuts and Jobs Act of 2017 by U.S. Congress in November 2017 and subsequent tax provision benefits realized for the year ended December 31, 2018.

Comparison of the Years Ended December 31, 2019 and 2018

Total Revenue

	Year Ended December 31,		
(in thousands)	**2019**	**2018**	**Change**
Contract Revenue:			
Internal Segment	$6,064	$ 2,110	$ 3,954
Controlled Founded Entities	2,487	14,233	(11,745)
Non-Controlled Founded Entities	—	—	—
Parent Company and other	137	29	108
Total Contract Revenue	**$8,688**	**$16,371**	**$ (7,683)**
Grant Revenue:			
Internal Segment	$ 15	$ 86	$ (72)
Controlled Founded Entities	1,104	4,271	(3,167)
Non-Controlled Founded Entities	—	20	(20)
Parent Company and other	—	—	—
Total Grant Revenue	**$1,119**	**$ 4,377**	**$ (3,258)**

Our total revenue was $9.8 million for the year ended December 31, 2019, a decrease of $10.9 million, or 52.7 percent compared to the year ended December 31, 2018. The decline was attributable to decreases of $11.7 million in contract revenue and $3.2 million in grant revenue in the Controlled Founded Entities segment

for the year ended December 31, 2019, which was driven primarily by Vedanta's contract revenue earned under its milestone-based JBI collaboration agreement and grant revenue earned pursuant to its CARB-X agreement. The decline in Controlled Founded Entities segment's contract and grant revenues, was partially offset by a $4.0 million increase in contract revenue in the Internal segment, which was driven by increases in contract revenue earned under the Orasome collaboration and license agreement with Roche and the Lymphatic Targeting platform collaboration and license agreement with Boehringer Ingelheim entered into in July 2019 for the year ended December 31, 2019.

Research and Development Expenses

	Year Ended December 31,		
(in thousands)	**2019**	**2018**	**Change**
Research and Development Expenses:			
Internal Segment	$(25,977)	$ (8,929)	$ 17,048
Controlled Founded Entities	(42,780)	(36,930)	5,850
Non-Controlled Founded Entities	(15,555)	(29,851)	(14,296)
Parent Company and other	(1,536)	(1,692)	(156)
Total Research and Development Expenses:	**$(85,848)**	**$(77,402)**	**$ 8,446**

Our research and development expenses were $85.8 million for the year ended December 31, 2019, an increase of $8.4 million, or 10.9 percent compared to the year ended December 31, 2018. The change was attributable to an increase of $17.0 million in research and development expenses incurred by the Internal segment for the year ended December 31, 2019. In 2019, we continued to shift our focus towards the Internal segment, investing in research and development activities to advance a wholly owned pipeline of lymphatic system and related immuno-oncology programs. We progressed LYT-100 to first patient dosing in 2020 and prepared for LYT-200 to begin a Phase 1 clinical study in solid tumors during the second half of 2020. Research and development expenses in the Controlled Founded Entities segment also increased $5.9 million, as Vedanta progressed its candidates VE202, VE303, VE416 and VE800 to meaningful milestones. The increases were partially offset by a decline of $14.3 million in the Non-Controlled Founded Entities segment owing to the deconsolidation of Akili during the year ended December 31, 2018 and the deconsolidation of Vor, Karuna and Gelesis during the year ended December 31, 2019.

General and Administrative Expenses

	Year Ended December 31,		
(in thousands)	**2019**	**2018**	**Change**
General and Administrative Expenses:			
Internal Segment	$ (2,385)	$ (1,498)	$ 887
Controlled Founded Entities	(14,436)	(10,212)	4,224
Non-Controlled Founded Entities	(10,439)	(16,385)	(5,946)
Parent Company and other	(32,098)	(19,270)	12,828
Total General and Administrative Expenses	**$(59,358)**	**$(47,365)**	**$11,993**

Our general and administrative expenses were $59.4 million for the year ended December 31, 2019, an increase of $12.0 million, or 25.3 percent compared to the year ended December 31, 2018. The change was attributable to an increase of $12.8 million in the Parent segment for the year ended December 31, 2019, which was primarily driven by increased professional fees incurred in the exploration of an ADR listing and increased non-cash depreciation and amortization expenses incurred in the implementation of IFRS 16 *Leases* and the lease we entered into during the year ended December 31, 2019 for our new headquarters. Controlled Founded Entities

segment's general and administrative expenses also increased $4.2 million. The increases in the Internal and Controlled Founded Entities segment's were offset by the deconsolidation of Akili during the year ended December 31, 2018 and the deconsolidation of Vor, Karuna and Gelesis during the year ended December 31, 2019.

Total Other Income (Loss)

Total other income was $672.2 million for the year ended December 31, 2019, an increase of $651.0 million, as compared to the year ended December 31, 2018. The growth was attributable to an increase of $435.3 million in gain on loss of significant influence for the year ended December 31, 2019. For the year ended December 31, 2019 we recognized a gain on loss of significant influence of $445.6 million with respect to Karuna, while for the year ended December 31, 2018 we recognized a gain on loss of significant influence of $10.3 million with respect to resTORbio. The growth was further attributable to an increase of $222.7 million in gain on deconsolidation as we recognized a gain of $264.4 million for the deconsolidation of Vor, Karuna and Gelesis during the year ended December 31, 2019, as compared to a gain of $41.7 million for the deconsolidation of Akili during the year ended December 31, 2018. The gains were partially offset by a decline of $4.1 million in income related to asset disposals and an increase in fair value accounting losses of $3.2 million on certain investments held at fair value for the year ended December 31, 2019.

Net Finance Income (Costs)

Net finance costs were $46.1 million for the year ended December 31, 2019, an increase of $72.1 million in costs, or 278.1 percent compared to net finance income of $25.9 million for the year ended December 31, 2018. The change was primarily attributable to a $69.1 million increase in the change in the fair value of our preferred shares, warrant and convertible note liabilities held by third parties for the year ended December 31, 2019.

Share of Net Gain (Loss) in Associates Accounted for Using the Equity Method, and Impairment of Investment in Associate

The share of net income in associates was $30.8 million for the year ended December 31, 2019, an increase of $42.3 million, or 368.0 percent as compared to a net loss for the year ended December 31, 2018. The change in associate income was attributable to the deconsolidation of Karuna and Gelesis and subsequent equity method accounting from the date of deconsolidation to December 31, 2019. We recorded equity method income of $37.1 million with respect to Gelesis, which was partially offset by our share of net loss in Karuna of $6.3 million for the year ended December 31, 2019. Additionally, we recorded an impairment charge of $42.9 million for the year ended December 31, 2019, related to our investment in common shares held in Gelesis. See Note 6 to the financial statements for the year ended December 31, 2019 included elsewhere in this registration statement.

Taxation

Income tax expense was $112.4 million for the year ended December 31, 2019, an increase of $110.2 million, or 4961.2 percent as compared to the year ended December 31, 2018. The growth in income tax expense was primarily attributable to the gains realized on the loss of significant influence on Karuna for the year ended December 31, 2019 and the gains recognized on deconsolidation of Vor, Karuna and Gelesis during the year ended December 31, 2019.

Comparison of the Six Months Ended June 30, 2020 and June 30, 2019

Total Revenue

(in thousands)	Six Months Ended June 30, 2020	2019	Change
Contract Revenue:			
Internal Segment	$3,916	$2,479	$1,436
Controlled Founded Entities	1,549	1,262	287
Non-Controlled Founded Entities	—	—	—
Parent Company and other	—	213	(213)
Total Contract Revenue	**$5,465**	**$3,955**	**$1,510**
Grant Revenue:			
Internal Segment	$ —	$ 15	$ (15)
Controlled Founded Entities	1,379	418	961
Non-Controlled Founded Entities	—	—	—
Parent Company and other	—	—	—
Total Grant Revenue	**$1,379**	**$ 432**	**$ 947**

Our total revenue was $6.8 million for the six months ended June 30, 2020, an increase of $2.5 million, or 56.0 percent compared to the six months ended June 30, 2019. The growth was attributable to an increase in Internal segment contract revenue of $1.4 million, which was primarily driven by $2.4 million earned under the Lymphatic Targeting platform collaboration and license agreement with Boehringer Ingelheim entered into in July 2019, and was partially offset by a $1.0 million decrease in revenue earned under the Orasome collaboration and license agreement with Roche for the six months ended June 30, 2020. The growth in contract revenue was further augmented by increases in Controlled Founded Entities segment's grant revenue of $1.0 million, which was driven by $0.5 million and $0.4 million increases in grant revenue earned by Alivio and Vedanta, respectively, for the six months ended June 30, 2020.

Research and Development Expenses

(in thousands)	Six Months Ended June 30, 2020	2019	Change
Research and Development Expenses:			
Internal Segment	$(17,616)	$(10,757)	$ 6,859
Controlled Founded Entities	(20,594)	(18,534)	2,061
Non-Controlled Founded Entities	—	(15,555)	(15,555)
Parent Company and other	(40)	(662)	(621)
Total Research and Development Expenses:	**$(38,250)**	**$(45,507)**	**$ (7,257)**

Our research and development expenses were $38.3 million for the six months ended June 30, 2020, a decrease of $7.3 million, or 15.9 percent as compared to the six months ended June 30, 2019. The decrease was attributable to the deconsolidation of Vor and Karuna during the six months ended June 30, 2019 and Gelesis during the six months ended December 31, 2019. The decline owing to deconsolidation was partially offset, primarily, by an increase of $6.9 million in the Internal segment during the six months ended June 30, 2020. We progressed LYT-100 to first patient dosing in a Phase 1 multiple ascending dose study in March 2020 and plan to initiate a proof-of-concept study for the treatment of breast cancer-related, upper limb secondary lymphedema later in 2020. We also advanced LYT-100 towards first patient dosing in a Phase 1 trial which is anticipated to begin in the second half of 2020 for the treatment of Long COVID respiratory complications and related sequelae. Additionally, we further prepared LYT-200 for first patient dosing in its Phase 1 trial for solid tumors which is anticipated to begin in 2020.

General and Administrative Expenses

(in thousands)	Six Months Ended June 30, 2020	2019	Change
General and Administrative Expenses:			
Internal Segment	$ (1,495)	$ (1,157)	$ 338
Controlled Founded Entities	(6,229)	(6,391)	(161)
Non-Controlled Founded Entities	—	(10,439)	(10,439)
Parent Company and other	(13,652)	(11,210)	2,442
Total General and Administrative Expenses	**$(21,376)**	**$(29,196)**	**$ (7,820)**

Our general and administrative expenses were $21.4 million for the six months ended June 30, 2020, a decrease of $7.8 million or 26.8 percent as compared to the six months ended June 30, 2019. The decrease was attributable to the decline in general and administrative expenses within the Non-Controlled Founded Entities segment owing to the deconsolidation of Vor and Karuna during the six months ended June 30, 2019 and Gelesis during the six months ended December 31, 2019. The decline was partially offset by growth of $2.4 million in the Parent segment, which was primarily driven by non-cash increases of $1.5 million in stock based compensation expense and $0.7 million in depreciation expense for the six months ended June 30, 2020.

Total Other Income (Loss)

Total other income was $232.9 million for the six months ended June 30, 2020, an increase of $72.1 million, or 44.9 percent as compared to the six months ended June 30, 2019. The growth in other income was attributable to an increase in fair value accounting gains of $224.5 on certain investments held at fair value, which was partially offset by a decline in gain on deconsolidation of $108.4 million for the six months ended June 30, 2020. During the six months ended June 30, 2019 we recognized a gain of $108.4 million for the deconsolidation of Vor and Karuna, while during the six months ended June 30, 2020 we recognized no deconsolidation related income or losses. The growth in other income was further offset by $44.5 million in realized losses owing to blockage discount on the sale of Karuna shares for the six months ended June 30, 2020.

Net Finance Income (Costs)

Total net finance income was $1.7 million for the six months ended June 30, 2020, as compared to net finance costs of $34.1 million for the six months ended June 30, 2019, an increase in income of $35.8 million, or 104.9 percent as compared to the six months ended June 30, 2019. The increase in finance income was primarily attributable to a $34.8 million decline in losses resulting from the change in fair value of our subsidiary preferred shares, warrant and convertible note liabilities held by third parties for the six months ended June 30, 2020.

Share of Net Gain (Loss) in Associates Accounted for Using the Equity Method, and Impairment of Investment in Associate

The share of net loss in associates was $7.3 million for the six months ended June 30, 2020, an increase of $7.3 million as compared to the six months ended June 30, 2019. The growth in associate loss was attributable to the deconsolidation of Gelesis during the six months ended December 31, 2019 and subsequent equity method accounting for the six months ended June 30, 2020.

Taxation

Income tax expense was $50.8 million for the six months ended June 30, 2020, an increase of $25.6 million, or 102.0 percent as compared to the six months ended June 30, 2019. The growth in income tax expense was

primarily attributable to fair value accounting gains on certain investments held at fair value for the six months ended June 30, 2020.

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 IFRS as issued by the 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 registration statement, 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, and whether that obligation will be settled by exchanging a fixed amount of cash or other financial assets for a fixed number of its own 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 of the future earnings potential of the subsidiary businesses, appropriate discount rate and earnings multiple to be applied, marketability and other industry and company specific risk factors.

Revenue recognition:

We follow the five step model instituted by IFRS 15 to recognize revenue. This includes making certain judgements when determining the appropriate accounting treatment of key customer contract. In particular, judgement is required to determine the performance obligations in a contract (if promised goods and services are distinct or not) and timing of revenue recognition (on delivery or over a period of time).

For overtime recognition, we determine progress based on costs completed to total estimated contract costs. As such we need to make certain estimates of costs to be incurred for meeting our obligations under the contract. The costs are for research and development activity and the estimation uncertainty is regarding the level of activity required to meet the performance obligation and the timing in which that arises during the term of the contract.

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 consider, among others, activities that most significantly affect the returns of the investee, its voting shares, representation on the board, rights to appoint management, investee dependence on the Company 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 its net investment in an equity accounted investee, 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 and are more akin to debt like securities, 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.

Judgment 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.

Income Taxes

We must make certain estimates and judgments in determining income tax expense for financial statement purposes. 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 amounts 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 enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities for a change in tax rates is recognized in income in the period that includes the enactment date. Net deferred tax assets are not recorded if we do not assess their realization as probable.

We apply the provisions of the authoritative guidance on accounting for uncertainty in income taxes that was issued by the IASB. Pursuant to this guidance, we may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the tax benefit will be realized.

Share-based Payments

Share-based payments includes stock options, restricted stock units ("RSUs") as well as service, market and performance-based RSU awards in which the expense is recognized based on the grant date fair value of these awards

In accordance with IFRS 2, "Share-based Payments," the fair value of the share option awards is estimated on the grant date using the Black-Scholes option-valuation model which requires the input of certain assumptions, including the expected life of the share-based award, share price volatility, dividend yield and interest rate. The expected life and volatility are based on our historical data for the purposes of the Black-Scholes option-valuation model. Expected life is based on the median expected term. Volatility is calculated by taking the weighted-average of the historical volatilities of our shares. We have not declared dividends and we do not plan to pay any dividends in the future. The risk-free interest rate for periods in the expected life of the option is based on the U.S. Treasury constant maturities in effect at the time of the grant.

We recognize the estimated fair value of service, market and performance-based awards as share-based compensation expense over the vesting period based upon its determination of whether it is probable that the performance targets will be achieved. We assess 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 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.

Recent Accounting Pronouncements

For information on recent accounting pronouncements, see our consolidated financial statements and the related notes found elsewhere in this registration statement.

Internal Control over Financial Reporting

Prior to the U.S. listing to which this registration statement relates, we have been a public company on the London Stock Exchang, or LSE, with limited requirements to implement and test internal controls under a UK framework. As such, we have not been subject to the internal control over financial reporting requirements of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and the standards of the PCAOB and our independent registered public accounting firm has not conducted an audit of our internal control over financial reporting in accordance with such rules. As a U.S. public company, Section 404 of the Sarbanes-Oxley will require that our management assess our internal control over financial reporting and include a report of management on our internal control over financial reporting in our annual report on Form 20-F beginning with our second annual report. Although we have adhered to and will continue to adhere to all internal control requirements made relevant by the governance of the LSE, the requirements pertaining to the design and implementation of internal controls over financial reporting as contemplated under the Sarbanes-Oxley Act had not been considered in the production of financial statements for the years ended December 31, 2019, 2018 and 2017 for our annual report issued in the United Kingdom.

In connection with the audits of our consolidated financial statements as of and for each of the years ended December 31, 2019, 2018 and 2017 we and our independent registered public accounting firm identified a material weakness in our internal controls over financial reporting. SEC guidance defines a material weakness as a deficiency or combination of deficiencies in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

The material weakness relates to several significant deficiencies that were identified which, in aggregate, rise to the level of a material weakness. These significant deficiencies relate to our process around accounting for costs attributed to individual projects, contract and consolidated review, segregation of duties, expense identification, allocation of employee stock compensation expense, and tax provision relating to underlying investments and related party identification. We have taken steps to remediate the material weakness, including increasing the depth and experience within our accounting and finance organization, designing and implementing improved processes and internal controls based on the COSO framework, and internally testing the effectiveness of our internal controls. As with any internal control framework, we cannot be certain that these efforts will be sufficient to remediate our material weaknesses, prevent future material weaknesses or significant deficiencies from occurring.

B. LIQUIDITY AND CAPITAL RESOURCES

Sources of Liquidity

Since our inception, we have not generated any revenue from product sales and have incurred significant operating losses. Our Wholly Owned Programs and most of the product candidates in our Founded Entities are at various phases of preclinical and clinical development. We do not expect to generate significant revenue from sales of product candidates in our Wholly Owned Pipeline for several years, if at all. To date, PureTech Health plc and its predecessor entity has raised a total of $439.3 million from external funding sources such as major investment funds and other leading investors. We raised $196.0 million when we completed our IPO on the London Stock Exchange in June 2015, plus an additional $101.2 million as a follow-on offering that we completed in April 2018. Prior to our IPO, we raised a total of $142.1 million in consecutive private financing rounds. In the period from January 2017 through June 2020, our Founded Entities strengthened their collective balance sheets by attracting $1,084.2 million in equity investments and non-dilutive funding, including $997.6 million from third parties. The balance of the funding is between PureTech Health plc and its Founded Entities. For a description of our structure and relationships with our Founded Entities, see “Business Overview” included elsewhere in this registration statement on Form 20-F.

Our cash flows may fluctuate and are difficult to forecast and will depend on many factors. As of June 30, 2020, we had cash, cash equivalents and short-term investments of $340.1 million, which included aggregate proceeds of $12.3 million and $245.9 million from our sales of resTORbio and Karuna shares, respectively.

Cash Flows

The following table summarizes our cash flows for each of the periods presented:

	Years Ended December 31,			Six Months Ended June 30,	
(in thousands)	2019	2018	2017	2020	2019
Net cash used in operating activities	$(98,156)	$ (72,796)	$(88,685)	$ (56,098)	$(55,326)
Net cash provided by/(used in) investing activities	63,659	(39,645)	83,682	266,052	37,000
Net cash provided by/(used in) financing activities	49,910	156,887	14,696	(2,194)	33,405
Effect of exchange rates on cash and cash equivalents	(104)	(44)	(3)	—	(82)
Net increase in cash and cash equivalents	$ 15,309	$ 44,402	$ 9,690	$207,760	$ 14,997

Operating Activities

Net cash used in operating activities was $72.8 million for the year ended December 31, 2018, as compared to $88.7 million for the year ended December 31, 2017. The decline in outflows was primarily due to the $4.4 million decrease in our operating loss and a decline of $4.5 million in non-cash items, which had no impact on the cash used in operating activities, as well as increases of $5.6 million in deferred revenues and $1.3 million in other financial assets for the year ended December 31, 2018.

Net cash used in operating activities was $98.2 million for the year ended December 31, 2019, as compared to $72.8 million for the year ended December 31, 2018. The increase in outflows was primarily due to our increased operating loss that resulted from increased research and development activities. In 2019, our income resulted from increased non-cash gains, that had no impact on the cash used in operating activities.

Net cash used in operating activities was $56.1 million for the six months ended June 30, 2020, as compared to $55.3 million for the six months ended June 30, 2019. Decreased outflows due to our lower operating loss were offset by the decline in deferred revenues of $8.5 million and increased outflows resulting from the decline in accounts payable and accrued expenses of $8.8 million.

Investing Activities

Net cash used in investing activities was $39.6 million for the year ended December 31, 2018, as compared to net cash provided by investing activities of $83.7 million for the year ended December 31, 2017. The increase in outflows was due to the purchase of short-term investments of $166.5 million, the derecognition of $13.4 million in cash held at Akili which was deconsolidated during the year ended December 31, 2018, the purchase of property and equipment of $4.4 million, the purchase of shares in resTORbio totaling $3.5 million, which was offset by the maturity of short-term investments of $148.1 million

Net cash provided by investing activities was $63.7 million for the year ended December 31, 2019, as compared to outflows of $39.6 million for the year ended December 31, 2018. Cash provided by the maturity of short-term investments of $174.0 million was offset by the purchase of short-term investments of $69.5 million as well as the purchase of fixed assets totaling $12.1 million and the purchase of intangible assets totaling $0.4 million. The inflow was further offset by our investment in Gelesis convertible promissory notes totaling $6.5 million and Gelesis Series 3 Growth preferred shares and Karuna Series B preferred shares totaling $15.2 million. The inflow was further offset by the derecognition of cash totaling $16.0 million held by Vor, Karuna and Gelesis upon deconsolidation.

Net cash provided by investing activities was $266.1 million for the six months ended June 30, 2020, as compared to $37.0 million for the six months ended June 30, 2019. Increased inflows were largely attributable to proceeds attained from the sale of investments held at fair value, Karuna and resTORbio, totaling $249.0 million and to the maturity of investments in U.S. Treasuries with durations of less than two years which totaled $30.1 million. The cash inflows were partially offset by the purchase of fixed assets totaling $2.1 million and the investment in Gelesis Series 3 Growth and Vor Series B preferred share financings totaling $10.6 million and $0.5 million, respectively.

Financing Activities

Net cash provided by financing activities was $156.9 million for the year ended December 31, 2018, as compared to net inflows of $14.7 million for the year ended December 31, 2017. The net inflow was primarily attributable to aggregate proceeds of the issuance of $139.6 million received from the Vedanta Series C, Gelesis Series 2 Growth, Akili Series C and Karuna Series A preferred share financings.

Net cash provided by financing activities was $49.9 million for the year ended December 31, 2019, as compared to $156.9 million for the year ended December 31, 2018. The net inflow was primarily attributable to aggregate

proceeds of the issuance of $51.0 million received from the Vedanta Series C and C-2, Gelesis Series 2 Growth and Sonde Series A-2 preferred share financings. Further inflows of $1.6 million were attributable to the proceeds from the issuance of convertible notes by Karuna. The inflows were partially offset by payment of our lease liability totaling $1.7 million and $1.3 million in tax payments related to the settlement of 2016 RSU awards granted to certain executives.

Net cash used in financing activities was $2.2 million for the six months ended June 30, 2020, as compared to net inflows of $33.4 million for the six months ended June 30, 2019. The decline was primarily attributable to the $12.5 million cash settlement of 2017 RSU awards granted to certain executives and the payment of our lease liability totaling $1.3 million . The outflows were partially offset by aggregate proceeds of $11.2 million received from the Vedanta Series C-2 and Sonde Series A-2 preferred share financings.

Funding Requirements

We have incurred operating losses since inception, and we have retained earnings of $378.4 million at June 30, 2020. Based on our current plans, we believe our existing cash and cash equivalents and short-term investments will be sufficient to fund our operations and capital expenditure requirements into at least 2024. We expect to incur substantial additional expenditures in the near term to support our ongoing activities. Additionally, we expect to incur additional costs as a result of operating as a U.S. public company. We expect to continue to incur net losses for the foreseeable future. Our ability to fund our product development and clinical operations as well as commercialization of our Wholly Owned product candidates, will depend on the amount and timing of cash received from planned financings. 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 product 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 product development activities of actions taken by the FDA, EMA or other regulatory authorities;
- our degree of success in commercializing our Wholly Owned product candidates, if and when approved; and
- the number and types of future products 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 product candidates could significantly change the costs and timing associated with the development of that product candidate. Further, our operating plans may change in the future, and we may need additional funds to meet operational needs and capital requirements associated with such operating plans.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our operations through a combination of equity financings, debt financings, collaborations with other companies or other strategic transactions. We do not currently have any committed external source of funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making acquisitions or capital expenditures or declaring dividends. If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties,

we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or other arrangements when needed, we may be required to delay, limit, reduce or terminate our research, product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

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 committed sources of capital. Because of the numerous risks and uncertainties associated with the development and commercialization of our Wholly Owned product candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated product development programs.

Quantitative and Qualitative Disclosures about Financial Risks

Interest Rate Sensitivity

As of June 30, 2020, we had cash, cash equivalents and short-term investments of $340.1 million. 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 U.S. debt obligations 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. We recorded foreign currency losses of zero and $0.1 million for the periods ended June 30, 2020 and 2019, respectively, which are included in other expense in our Unaudited Condensed Consolidated Statements of Comprehensive Income/(Loss). Translation adjustments are not included in determining net income (loss) but are included in our foreign exchange adjustment to other comprehensive loss, a component of shareholders' equity.

We do not currently engage in currency hedging activities in order to reduce our currency exposure, but we may begin to do so in the future. Instruments that may be used to hedge future risks include foreign currency forward and swap contracts. These instruments may be used to selectively manage risks, but there can be no assurance that we will be fully protected against material foreign currency fluctuations.

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.

Non-Controlled Founded Entity Investments

We maintain certain investments in Non-Controlled Founded Entities which are deemed associates and accounted for under the equity method. Our exposure to investments in associates in limited to the initial carrying amount upon recognition as an associate. We are not exposed to further contractual obligations or contingent liabilities beyond the value of initial investment. As of June 30, 2020, Gelesis was the only associate. The initial carrying amount of the investment in Gelesis as an associate was $16.4 million. Accordingly, we view the risk as high.

Equity Price Risk

As of June 30, 2020, we held 4,739,897 common shares of Karuna. The fair value of our investment in the common stock of Karuna was $528.3 million.

The investment in Karuna is 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 as of June 30, 2020 would have been a loss of approximately $52.8 million 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, 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. However, due to the conservative nature of our investments and relatively short duration, interest rate risk is mitigated. 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 assess the credit quality of customers on an ongoing basis, taking into account its financial position, past experience and other factors. The credit quality of financial assets that are neither past due nor impaired can be assessed by reference to credit ratings (if available) or to historical information about counterparty default rates. We are also potentially subject to concentrations of credit risk in its accounts receivable. Concentrations of credit risk with respect to receivables is owed to the limited number of companies comprising our customer base. Our exposure to credit losses is low, however, due to the credit quality of its larger collaborative partners such as Boehringer Ingelheim and Eli Lilly.

JOBS Act Exemptions and Foreign Private Issuer Status

We qualify as an “emerging growth company” as defined in the U.S. Jumpstart Our Business Startups Act of 2012. An emerging growth company may take advantage of specified reduced reporting and other requirements that are otherwise applicable generally to public companies. This includes an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002. We may take advantage of this exemption for up to five years or such earlier time

that we are no longer an emerging growth company. We will cease to be an emerging growth company if we have more than $1.07 billion in total annual gross revenue, have more than $700.0 million in market value of our ordinary shares held by non-affiliates or issue more than $1.0 billion of non-convertible debt over a three-year period. We may choose to take advantage of some but not all of these provisions that allow for reduced reporting and other requirements.

We are considering whether we will take advantage of the extended transition period provided under Section 7(a)(2)(B) of the Securities Act of 1933, as amended, for complying with new or revised accounting standards. Since IFRS makes no distinction between public and private companies for purposes of compliance with new or revised accounting standards, the requirements for our compliance as a private company and as a public company are the same.

Upon completion of the U.S. listing to which this registration statement relates, we will 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. Even after we no longer qualify as an emerging growth company, 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. RESEARCH AND DEVELOPMENT, PATENTS AND LICENSES

For a discussion of our research and development activities, see the sections of this registration statement titled “Item 4.B.—Business Overview” and “Item 5.A.—Operating Results.”

D. TREND INFORMATION

For a discussion of trends and uncertainties relating to our business, see the sections of this registration statement titled “Item 5A.—Operating Results.”

E. OFF-BALANCE SHEET ARRANGEMENTS

As of June 30, 2020, 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.

F. TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

Contractual Obligations and Commitments

The following table summarizes our contractual commitments and obligations as of as of December 31, 2019:

	Payments Due By Period				
(in thousands)	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Operating lease obligations (1) (2)	$ 37,843	$ 2,929	$ 6,964	$ 9,305	$18,645
Subsidiary notes payable	1,455	1,455	—	—	—
Warrants	7,997	7,997	—	—	—
Subsidiary preferred shares	100,989	100,989	—	—	—
Total	$148,284	$113,370	$ 6,964	$ 9,305	$18,645

(1) Represents the minimum lease payments due under our operating leases for office and/or laboratory space. For a more detailed description of our operating leases, see Note 21 to our consolidated financial statements found elsewhere in this document. We are subject to new lease accounting guidance as of January 1, 2019. We recognized an asset and a corresponding lease liability for an amount that is less than ten percent of our total consolidated assets.

(2) Amounts include lease commitments of Vedanta.

We have certain payment obligations under various license and collaboration agreements. Under these agreements we are required to make milestone payments upon successful completion and achievement of certain intellectual property, clinical, regulatory and sales milestones. The payment obligations under the license and collaboration agreements are contingent upon future events such as our achievement of specified development, clinical, regulatory and commercial milestones, and we will be required to make development milestone payments and royalty payments in connection with the sale of products developed under these agreements. As the achievement and timing of these future milestone payments are not probable or estimable, such amounts have not been included in our unaudited condensed consolidated financial statements as of and for the six months ended June 30, 2020 and June 30, 2019 and consolidated financial statements as of and for the years ended December 31, 2019, 2018 and 2017, or in the contractual obligations table above. For additional information regarding certain of our license and collaboration agreements, see “—License and Collaboration Agreements” above.

We also enter into contracts in the normal course of business with CROs, contract manufacturing organizations and other third parties for clinical trials, preclinical research studies and testing and manufacturing services. These contracts are cancellable by us upon prior written notice. Payments due upon cancellation consist only of payments for services provided or expenses incurred, including noncancellable obligations of our service providers, up to the date of cancellation. These payments are not included in the preceding table as the amount and timing of such payments are not known.

G. SAFE HARBOR

This registration statement contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act and as defined in the Private Securities Litigation Reform Act of 1995. See “Special Note with Respect to Forward Looking Statements” included elsewhere in this registration statement.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. DIRECTORS AND SENIOR MANAGEMENT

For information about our directors and senior management, see "Item 1A. Identity of Directors, Senior Management and Advisers – Directors and Senior Management."

B. COMPENSATION

Executive Compensation

For the year ended December 31, 2019, we paid an aggregate of $4.94 million in cash compensation and benefits to our executive officers, including those who serve as directors. For the year ended December 31, 2019, we paid an aggregate of $0.2 million for pension, retirement and similar benefits for our executive officers.

The following table sets forth information regarding compensation awarded to, earned by or paid to our Chief Executive Officer and Chief Operating Officer during 2019.

NAME AND PRINCIPAL POSITION	YEAR	SALARY ($)	BONUS ($)	STOCK AWARDS ($) (1)	ALL OTHER COMPENSATION ($) (2)	TOTAL ($)
Daphne Zohar *Chief Executive Officer*	2019	601,960	601,960	2,101,401	33,536	3,338,857
Stephen Muniz, J.D. *Chief Operating Officer*	2019	421,057	421,057	730,148	32,123	1,604,384

(1) The amounts reported in the "Stock Awards" column reflects the aggregate grant date fair value of share-based compensation awarded during the year computed in accordance with the provisions of International Financial Reporting Standards (IASB), or IFRS 2, Share-Based Payment, based on maximum performance. See Notes 1 and 8 to our financial statements appearing at the end of this registration statement regarding assumptions underlying the valuation of equity awards.

(2) Amounts reflect Company matching contributions to our 401(k) plan; medical, dental and disability insurance; and parking reimbursement.

Outstanding Equity Awards at 2019 Year End

The following table sets forth information regarding outstanding equity awards held by our executive officers as of December 31, 2019:

NAME	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS EXERCISABLE (#)	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS UNEXERCISABLE (#)	OPTION EXERCISE PRICE (£/SHARE)	OPTION EXPIRATION DATE	EQUITY INCENTIVE PLAN AWARDS: NUMBER OF UNEARNED SHARES, UNITS OR OTHER RIGHTS THAT HAVE NOT VESTED (#)	EQUITY INCENTIVE PLAN AWARDS: MARKET OR PAYOUT VALUE OF UNEARNED SHARES, UNITS OR OTHER RIGHTS THAT HAVE NOT VESTED ($) (1)
Daphne Zohar	—	—	—	—	1,362,393(2)	5,726,710
	—	—	—	—	1,035,628(3)	4,353,179
	—	—	—	—	644,668(4)	2,709,810
Stephen Muniz, J.D.	—	—	—	—	455,039(2)	1,912,720
	—	—	—	—	346,644(3)	1,457,090
	—	—	—	—	223,995(4)	941,545

(1) Market value as of December 31, 2019 is based on the closing price of our ordinary shares on December 31, 2019 of £3.17 per share, at the conversion rate on such date of 1 GBP to 1.326 USD.

(2) These restricted stock unit awards were granted on May 19, 2017 and vest based on the achievement of the following performance conditions over the performance period of January 1, 2017 to December 31, 2019: 50 percent of the shares underlying the award will vest based on growth in TSR, 25 percent of the shares underlying the award will vest based on growth in NAV, and 25 percent of the shares underlying the award will vest based on the achievement of strategic objectives. These restricted stock unit awards became fully vested and were settled in cash in June 2020.

(3) These restricted stock unit awards were granted on June 15, 2018 and vest based on the achievement of the following performance conditions over the performance period of January 1, 2018 to December 31, 2020: 50 percent of the shares underlying the award will vest based on growth in TSR, 12.5 percent of the shares underlying the award will vest based on relative TSR against the FTSE SmallCap Index (excluding Investment Trusts), 12.5 percent of the shares underlying the award will vest based on relative TSR against the MSCI Europe Health Care Index, and 25 percent of the shares underlying the award will vest based on the achievement of strategic objectives.

(4) These restricted stock unit awards were granted on December 20, 2019 and vest based on the achievement of the following performance conditions over the performance period of January 1, 2019 to December 31, 2021: 50 percent of the shares underlying the award will vest based on growth in TSR, 12.5 percent of the shares underlying the award will vest based on relative TSR against the FTSE 250 Index, 12.5 percent of the shares underlying the award will vest based on relative TSR against the MSCI Europe Health Care Index, and 25 percent of the shares underlying the award will vest based on the achievement of strategic objectives.

Employment Arrangements

We have entered into employment offer letters with each of our executive officers. Except as noted below, these employment arrangements provide for “at will” employment.

Daphne Zohar

We entered into an amended and restated employment offer letter with Ms. Zohar in June 2015. Such offer letter provides for an annual base salary and an annual performance bonus equal to 50 percent of her base salary at target and 100 percent of her base salary at maximum performance.

In the event Ms. Zohar’s employment is terminated by us without cause or she resigns for good reason (as each such term is defined in her employment offer letter), she shall be entitled to receive salary continuation for the 365-day period following the termination of her employment, subject to her execution of a release of claims in favor of us. Ms. Zohar must provide us with six months’ notice of any resignation of her employment without good reason, provided that we may elect to have her cease providing active services during such period and continue to pay her base salary and benefits during such period.

Ms. Zohar is also subject to a 12-month non-competition and non-solicitation agreement.

Stephen Muniz

We entered into an amended and restated employment offer letter with Mr. Muniz in June 2015. Such offer letter provides for an annual base salary and an annual performance bonus equal to 50 percent of his base salary at target and 100 percent of his base salary at maximum performance.

In the event Mr. Muniz’s employment is terminated by us without cause or he resigns for good reason (as each such term is defined in his employment offer letter), he shall be entitled to receive salary continuation for the 365-day period following the termination of his employment, subject to his execution of a release of claims in favor of us (provided that the Remuneration Committee may elect to reduce such severance period to a period of not less than 60 days if the period applicable to Mr. Muniz’s non-competition and non-solicitation restrictions are similarly reduced). In addition, Mr. Muniz must provide us with 60 days’ notice of any resignation of his employment without good reason, provided that we may elect to have Mr. Muniz cease providing active services during such period and continue to pay him his base salary and benefits during such period.

Mr. Muniz is also subject to a 12-month non-competition and non-solicitation agreement, subject to reduction as described above.

Share Option and Other Compensation Plans

Performance Share Plan

In June 2015, we adopted the Performance Share Plan, or PSP. Participation in the PSP is open to the Executive Directors, senior managers and employees of, and other individuals providing services to, the Company and its subsidiaries. Awards may be granted in the form of share options, share appreciation rights, restricted or unrestricted share awards, restricted share units and other share-based awards.

Under the PSP, (i) in any ten year period, awards in respect of an aggregate of 10 percent of the company's ordinary share capital from time to time may be subject to awards granted under the PSP (and any other share plan operated by the Company), (ii) in any ten year period, no more than 5 percent of the Company's ordinary share capital from time to time may be granted under awards under the PSP (and any other share plan operated by the Company) to the Company's directors, executive officers, senior managers or senior service providers and (iii) no more than 22,724,800 ordinary shares may be issued pursuant to incentive stock options. Shares which are subject to awards which lapse or are released, cancelled or surrendered, or which were granted pursuant to other share plans operated by the Company prior to its original initial public offering on the London Stock Exchange are not counted for purposes of these limits.

The maximum total market value of shares in which an award may be granted to any grantee in any fiscal year may not exceed 400 percent of his or her annual base salary for such year (or for the preceding year, if higher).

Our remuneration committee has acted as administrator of the PSP. The administrator has full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted, and to determine the specific terms and conditions of each award, subject to the provisions of our PSP Plan. Vesting of awards may be tied to achievement of performance or other conditions.

The PSP permits the granting of (1) options to purchase ordinary shares intended to qualify as incentive stock options under Section 422 of the Code and (2) options that do not so qualify. The option exercise price of each option is determined by the administrator but may not be less than 100 percent of the fair market value of the ordinary shares on the date of grant in the case of incentive stock options and, in the case of nonqualified options, may be less than fair market value of the ordinary shares to the extent compliant with Section 409A of the Code. The administrator determines at what time or times each option may be exercised.

The PSP permits the award of share appreciation rights subject to such conditions and restrictions as it may determine. Share appreciation rights entitle the recipient to ordinary shares or a cash payment equal to the value of the appreciation in our share price over the exercise price. The exercise price may not be less than 100 percent of the fair market value of our ordinary shares on the date of grant. The term of each share appreciation right will be fixed by the administrator but may not exceed ten years from the date of grant. The administrator will determine at what time or times each share appreciation right may be exercised.

The PSP permits the award of restricted ordinary shares and restricted share units to participants subject to such conditions and restrictions as it may determine. These conditions and restrictions may include the achievement of certain pre-established performance goals and/or continued employment with us through a specified period. The PSP also permits the award of other share-based awards in such amounts, on such terms and conditions, and for such consideration as the administrator shall determine.

If there is a change of control of the Company (or certain other corporate events) the number of ordinary shares over which awards will vest will normally be calculated by reference to the extent to which the performance conditions applicable to those awards have been satisfied and the time elapsed to the change of control event. Our remuneration committee has discretion not to apply time pro-rating.

Where appropriate, and with the consent of the acquiring company, participants may exchange awards so as to operate over shares in the acquiring company.

On the occurrence of any demerger, reorganization, reconstruction or amalgamation, distribution or other transaction of the Company which in the reasonable opinion of our remuneration committee may affect the value of any award, awards may be varied so as to preserve the overall value of the award. Such alteration may include amending the performance condition and/or the terms on which an award vests, and may provide for immediate vesting on such event.

No awards may be granted under the PSP after the date that is ten years from its approval by our shareholders.

Annual Bonus Plan

Our annual bonus program is intended to drive and reward our executive officers for meeting individual and/or corporate performance goals for a fiscal year. Annual bonuses will be payable in cash, and may range between 50 percent of base salary for the achievement of "target" goals and objectives and up to 100 percent of base salary for the achievement of "stretch" goals and objectives. For 2019, bonus targets were focused on (i) financial and strategic goals designed to incentivize the team to complete important deals, execute strategic partnerships and operate within our 2019 budget, (ii) clinical development goals designed to incentivize the team to generate valuable clinical data in support of our programs, (iii) innovation goals designed to incentivize the team to create innovative programs, obtain patent protection for our technologies, obtain publication of the technologies in top tier medical and science journals and establish state of the art laboratory and operations teams, and (iv) commercial goals designed to incentivize the team to take all steps necessary to commercially launch products. The executives' stretch goals for 2019 involved raising capital and entering into business development transactions.

401(k) Retirement Plan

We sponsor a 401(k) retirement plan which is intended to be a tax-qualified defined contribution plan under Section 401(k) of the Internal Revenue Code. In general, all of our employees are eligible to participate, beginning two months after the commencement of their employment. The 401(k) plan includes a salary deferral arrangement pursuant to which participants may elect to reduce their current compensation by up to the statutorily prescribed limit and have the amount of the reduction contributed to the 401(k) plan. We currently contribute to each employee's 401(k) account, in the first quarter of each year, 3 percent of his or her eligible earnings from the prior year up to the statutorily prescribed limit.

Limitations on Liability and Indemnification

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or controlling persons, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell our ordinary shares on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from the director or officer. The director or officer may amend or terminate the plan in some circumstances. Our directors and executive officers may also buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

NON-EMPLOYEE DIRECTOR COMPENSATION

The following table sets forth information regarding compensation earned by our non-employee directors during the year ended December 31, 2019. We also reimburse non-employee members of our board of directors for reasonable travel expenses. The compensation of our Chief Executive Officer and our Chief Operating Officer are discussed above in "Compensation of Executive Officers and Directors."

NAME	FEES EARNED OR PAID IN CASH($)	TOTAL($)
Joichi Ito (1)	89,285	89,285
Raju Kucherlapati, Ph.D.	95,000	95,000
John LaMattina, M.D.	105,000	105,000
Robert Langer, Sc.D. (2)	245,000	245,000
Dame Marjorie Scardino	90,000	90,000
Kiran Mazumdar-Shaw(3)	—	—
Bennett Shapiro, M.D.(4)	95,000	95,000
Christopher Viehbacher	107,074	107,074

(1) Mr. Ito resigned from our board of directors in September 2019.
(2) Dr. Langer provides certain intellectual property know how and technology transfer services to Alivio and Entrega related to certain know how underlying their programs, for which he was paid an aggregate of approximately $140,000 in the year ended December 31, 2019.
(3) Ms. Mazumdar-Shaw joined our board of directors in September 2020.
(4) Dr. Shapiro retired from our board of directors in June 2020.

Non-Employee Director Compensation Policy

We currently pay directors in accordance with the following non-employee director compensation policy. Such amounts are subject to annual adjustment, as determined by the Remuneration Committee.

Each non-employee director is paid an annual retainer of $75,000 for their services on our board of directors, and the non-executive chair of the board of directors receives an extra $50,000 for his contributions in leading our board of directors.

Our non-employee directors also receive $5,000 annually if they serve on a committee of our board of directors, and $10,000 annually if they chair the committee. Additionally, non-employee directors may receive an additional retainer of up to $20,000 per year for service on the board of one of our Founded Entities. While these payments are initially made by us, we are reimbursed by the Founded Entity for such payments. Such cash retainers are paid quarterly, and may be pro-rated based on the number of actual days served by the director during such calendar quarter.

Each non-employee director may also be paid fees for advisory services provided by certain of the directors to us beyond the typical duties of a director.

C. BOARD PRACTICES

Board Composition

Our board of directors currently consists of eight members: the non-executive chairman, five additional non-executive directors and two executive directors.

As a foreign private issuer, under the listing requirements and rules of the Nasdaq Global Market, we are not required to have independent directors on our board of directors, except that our audit committee is required to consist fully of independent directors, subject to certain phase-in schedules. However, our board of directors has determined that Christopher Viehbacher, Dame Marjorie Scardino, Raju Kucherlapati, John LaMattina, Robert Langer and Kiran Mazumdar-Shaw do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of director and that each of these directors is

"independent" as that term is defined under Nasdaq rules. There are no family relationships among any of our directors or senior management.

Corporate Governance and Committees of the Board

Corporate Governance

Our board of directors is responsible for overall corporate governance and for supervising the general affairs and business of our company and its subsidiaries. As a company listed on the main market of the London Stock Exchange, we are subject to the continuing requirements of the Listing Rules as published by the Financial Conduct Authority in the United Kingdom from time to time. Our board of directors also adheres to the principles of the U.K. Corporate Governance Code in such respects as it considers appropriate for our size and the nature of our business.

Our board of directors is responsible for creating value for shareholders, providing entrepreneurial 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. All key operational and investment decisions are subject to board approval.

There is a clear separation of the roles of chief executive officer and non-executive chairman. The chairman is responsible for the leadership and conduct of the board of directors and for ensuring effective communication with shareholders. The chief executive officer is responsible for leading the execution of our strategy and the executive management of the company.

All of our directors are subject to election by shareholders at the first annual general meeting after their appointment to our board of directors. Our board of directors has also adopted a policy that all directors will seek annual re-election by shareholders. The appointment of each of the executive directors and non-executive directors is therefore subject to re-election at our 2021 annual general meeting.

Other Corporate Governance Matters

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 us in lieu of Nasdaq rules are described below:

- We do not intend to 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 intend to follow Nasdaq's requirements that non-management directors meet on a regular basis without management present. Our board of directors may choose to meet in executive session at their discretion.

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 the Exchange Act. They will, however, be subject to the obligations to report changes in share ownership under Section 13 of the Exchange Act and related SEC rules.

Committees of the Board

Our board of directors has established an audit committee, a nomination committee and a remuneration committee. Each of these committees operates under a charter that has been approved by our board of directors.

Audit Committee

The members of our audit committee are Mr. Viehbacher, Dr. Kucherlapati and Dame Scardino. Mr. Viehbacher is the chair of the audit committee. Our audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence, objectivity and effectiveness of our registered public accounting firm;
- overseeing the work of our independent registered public accounting firm, including through the receipt and consideration of reports from that firm;
- monitoring the integrity of our financial statements by reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- reviewing and monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct;
- reviewing and monitoring the effectiveness of our internal audit function;
- overseeing our risk assessment and risk management policies;
- establishing policies regarding procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with our internal auditing staff, if any, our independent registered public accounting firm and management; and
- reviewing and approving or ratifying any related person transactions.

All audit and non-audit services, other than *de minimis* non-audit services, to be provided to us by our independent registered public accounting firm must be approved in advance by our audit committee.

Our board of directors has determined that Mr. Viehbacher is an "audit committee financial expert" as defined in Item 16A of Form 20-F.

In order to satisfy the independence criteria for audit committee members set forth in Rule 10A-3 under the Exchange Act, each member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries. We believe that the composition of our audit committee will meet the requirements for independence under current Nasdaq and SEC rules and regulations.

Remuneration Committee

The members of our remuneration committee are Dr. Kucherlapati, Dr. LaMattina and Ms. Mazumdar-Shaw. Dr. LaMattina is the chair of the remuneration committee. Our remuneration committee's responsibilities include:

- reviewing and approving, or making recommendations to our board of directors with respect to, the compensation of our directors and executive management;

- overseeing an evaluation of our executive management; and
- overseeing and administering our employee share option scheme or equity incentive plans in operation from time to time.

In order to satisfy the independence criteria for remuneration committee members set forth in Rule 10C-1 under the Exchange Act, all factors specifically relevant to determining whether a director has a relationship to such company which is material to that director's ability to be independent from management in connection with the duties of a remuneration committee member must be considered, including, but not limited to: (1) the source of compensation of the director, including any consulting advisory or other compensatory fee paid by such company to the director; and (2) whether the director is affiliated with the company or any of its subsidiaries or affiliates. We believe the composition of our remuneration committee will meet the requirements for independence under current Nasdaq and SEC rules and regulations.

Nomination Committee

The members of our nomination committee are Dr. Langer, Dame Scardino and Ms. Mazumdar-Shaw. Dame Scardino is the chair of the nomination committee. Our nomination committee's responsibilities include:

- identifying individuals qualified to become members of our board of directors;
- recommending to our board of directors the persons to be nominated for election as directors and to each of our board of directors' committees;
- overseeing a periodic evaluation of our board of directors;
- reviewing and making recommendations to our board of directors with respect to our board leadership structure;
- reviewing and making recommendations to our board of directors with respect to management succession planning; and
- developing and recommending to our board of directors corporate governance principles.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serves, or in the past year has served, as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any other entity that has one or more of its executive officers serving as a member of our board of directors or our compensation committee. None of the members of our compensation committee is, or has ever been, an officer or employee of our company.

D. EMPLOYEES

As of June 30, 2020, we had 61 full-time PureTech employees. 60 of our employees are based in the United States and one employee is based in the Netherlands. All of our employees were engaged in administrative, management or research and development functions. These figures do not include individuals employed by our Founded Entities. One PureTech employee splits his time between PureTech and our Controlled Founded Entity Entrega. None of our employees is subject to a collective bargaining agreement or represented by a trade or labor union. We consider our relationship with our employees to be good.

E. SHARE OWNERSHIP

For information regarding the share ownership of our directors and management, see "Item 6.B.—Compensation" and "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 285,743,794 ordinary shares outstanding as of September 30, 2020.

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 September 30, 2020 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 Stockholders	
Invesco Asset Management Limited (1)	29.1%
Baillie Gifford & Co (2)	10.0%
Lansdowne Partners Limited (3)	7.5%
Recordati S.p.A. (4)	3.3%
Executive Officers and Directors	
Daphne Zohar (5)	4.3%
Stephen Muniz, J.D.	1.0%
Raju Kucherlapati, Ph.D.	*
John LaMattina, Ph.D.	*
Robert Langer, Sc.D.	1.0%
Kiran Mazumdar-Shaw	*
Dame Marjorie Scardino	*
Christopher Viehbacher	*

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

(1) Consists of 83,153,792 shares beneficially held. The address for Invesco Asset Management Limited is c/o 43-45 Portman Square, London W1H GLY, United Kingdom.

(2) Consists of 28,573,033 shares beneficially held. The address for Baillie Gifford & Co. is c/o Calton Square, 1 Greenside Row, Edinburgh EH1 3AN, United Kingdom.

(3) Consists of 21,456,302 shares beneficially held. The address for Lansdowne Partners Limited is c/o 15 Davies Street, London W1K 3AG, United Kingdom.

(4) Consists of 9,544,140 shares beneficially held. The address for Recordati S.p.A. is c/o Via Civitali, 1, 20148 Milano, Italy.
(5) Consists of an aggregate of 12,197,307 ordinary 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 directly. Ms. Zohar owns or has a beneficial interest in 100 percent of the share capital of Zohar LLC.

To our knowledge there has been no significant change in the percentage ownership held by the major shareholders listed above in the last three years, except as described in "Related Party Transactions" included in this registration statement.

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.

B. RELATED PARTY TRANSACTIONS

The following is a description of related party transactions we have entered into with the beneficial owners of 10 percent or more of our ordinary shares, which are our only voting securities, senior management and members of our board of directors, since January 1, 2017.

Agreements with Our Executive Officers and Directors

We have entered into employment agreements with our executive officers and director compensation agreements with our non-executive directors. See "Compensation of Executive Officers and Directors." These agreements contain customary provisions and representations, including confidentiality, non-competition and non-solicitation undertakings by the executive officers. However, the enforceability of the non-competition provisions may be limited under applicable law.

Invesco Relationship Agreement

In June 2015, we entered into a Relationship Agreement with Invesco Asset Management Limited, or Invesco, which came into force at the time our initial public offering in the United Kingdom. The principal purpose of the Relationship Agreement is to ensure that the Company is capable at all times of carrying on its business independently of Invesco. If any person acquires control of our Company or we cease to be admitted to the Official List, the Relationship Agreement may be terminated by Invesco. If Invesco, together with its associates, ceases to hold 30 percent or more of the voting rights over our shares, the Relationship Agreement will terminate save for certain specified provisions. As of June 30, 2020, Invesco held approximately 29 percent of our ordinary shares.

The Relationship Agreement provided that Invesco undertake to use all reasonable endeavors to procure that its associates and any person with whom it is acting in concert shall:

- conduct all agreements, arrangements, transactions and relationships with any member of the Company on an arm's length basis and on a normal commercial basis and in accordance with the related party transaction requirements of Chapter 11 of the Listing Rules; and

- not exercise any of its voting rights attaching to the shares held by it to procure any amendment to our Articles of Association of which would be inconsistent with, undermine or breach any of the provisions of the Relationship Agreement.

The terms of the Relationship Agreement enabled us to carry on our business independently from Invesco and its affiliates, and ensure that all transactions and relationships between us and Invesco were and will be, at arm's length and on a normal commercial basis.

resTORbio Series A Financing

From March 2017 to October 2017, resTORbio issued and sold shares of its Series A preferred stock for aggregate proceeds of approximately $30.0 million. PureTech Health LLC participated in such financing and invested $5.5 million in March 2017, $4.5 million in August 2017 and $9.0 million in October 2017. Our executive officer Bharatt Chowrira was elected to the board of directors of resTORbio in connection with this financing, but he was not compensated by us for his services on the board of directors.

Alivio Convertible Promissory Notes

In July 2017, Alivio issued a convertible promissory note, or the July 2017 Note, to PureTech Health LLC in the principal amount of $1.2 million. In April 2018, Alivio issued a second convertible promissory note, or the April 2018 Note, in the principal of $2.2 million. In November 2018, Alivio issued a third convertible promissory note, or the November 2018 note, in the principal of $631,071. Each of the July 2017 Note, the April 2018 Note and the November 2018 Note accrues interest at a rate of 10 percent per year. At the time of these financings, our director Robert Langer, our executive officer Eric Elenko, and our directors and executive officers Daphne Zohar and Stephen Muniz were on Alivio's board of directors, and our executive officer Joep Muijrers was elected to replace Daphne Zohar on Alivio's Board of Directors in connection with closing the November 2018 Note, but they were not compensated by us for their services on the board of directors.

Karuna Convertible Promissory Notes

In August 2017, Karuna issued a convertible promissory note, or the Initial August 2017 Note, to PureTech Health LLC in the principal amount of $345,819. On the same date, Karuna issued a second convertible promissory note, or the Second August 2017 Note, and together with the Initial August 2017 Note, the 2017 Notes, to PureTech Health LLC in the principal amount of up to $6.5 million. The Second August 2017 Note was payable in installments, with $3.5 million of the note drawn down upon execution of the note and an additional $3.0 million drawn down upon Karuna's receipt of permission from the FDA to dose a second cohort in its Phase 2 clinical trial and confirmation that a material adverse event had not occurred. This second draw down occurred in January 2018. In June 2018, Karuna issued an additional convertible promissory note to PureTech Health LLC in the principal amount of $4.0 million, or the 2018 Note. The 2017 Notes and the 2018 Note accrued interest at a rate of 10 percent per year. The 2017 Notes converted at a 25 percent discount in Karuna's Series A preferred stock financing, as further described below, and the 2018 Notes converted at no discount. Our executive officers Bharatt Chowrira, Eric Elenko, and Stephen Muniz were the board of directors of Karuna at the time of this financing, but they were not compensated by us for their services on the board of directors.

Entrega Series A-2 Financing

In December 2017, Entrega issued and sold Series A-2 preferred stock for aggregate proceeds of $11.0 million. Approximately $8.4 million of outstanding principal and interest on convertible promissory notes issued by Entrega to PureTech Health LLC converted into Series A-2 preferred stock in this financing in accordance with their terms. Our directors Robert Langer and Stephen Muniz were on the board of directors of Entrega at the time of the financing but they were not compensated by us for their services on the board of directors.

Entrega Series A-2 Financing

In December 2017, Entrega issued and sold Series A-2 preferred stock for aggregate proceeds of $11.0 million. Approximately $8.4 million of outstanding principal and interest on convertible promissory notes issued by Entrega to PureTech Health LLC converted into Series A-2 preferred stock in this financing in accordance with their terms. Our directors Robert Langer and Stephen Muniz were on the board of directors of Entrega at the time of the financing but they were not compensated by us for their services on the board of directors.

resTORbio Initial Public Offering

In January 2018, resTORbio closed its initial public offering of 6,516,667 shares of common stock at a public offering price of $15.00 per share, which included the exercise in full by the underwriters of their option to purchase up to 850,000 additional shares. The gross proceeds from the offering were $97.8 million, before deducting underwriting discounts and commissions and estimated offering expenses. PureTech Health LLC purchased 233,333 shares of resTORbio's common stock in the offering for an aggregate purchase price of $3.5 million. Daphne Zohar, our executive officer and director, was a member of resTORbio's board of directors at the time of the offering, but she was not compensated by us for her services on the board of directors.

Gelesis Financing

In February 2018, Gelesis issued and sold shares of preferred stock for aggregate proceeds of approximately $30 million. PureTech Health LLC invested $5 million in the financing. Our directors Raju Kucherlapati, John LaMattina and Stephen Muniz were members of the board of directors at the time of this financing, but they were not compensated by us for their services on the board of directors.

UK Offering

In April 2018, we completed an offering in which we issued 45,000,000 ordinary shares at 160 pence per share, which were admitted to the premium listing segment of the Official List of the Financial Conduct Authority and are trading on the main market for listed securities of the London Stock Exchange plc. The placing represented a discount of approximately 3.0 percent to the closing price of the Company's ordinary shares on March 12, 2018. We received gross proceeds of £72 million, or $101.2 million, in the offering.

The following table sets forth the aggregate cash purchase price of the ordinary shares purchased by our 5 percent stockholders and their affiliates and the number of ordinary shares issued in consideration of such amounts.

NAME	CASH PURCHASE PRICE (GBP)	NUMBER OF ORDINARY SHARES
Invesco Asset Management Limited	£ 22,984,000	14,365,000
Lansdowne Partners Limited	£ 7,194,101	4,496,313
Baillie Gifford & Co	£ 8,000,000	5,000,000
Jupiter Asset Management	£ 4,500,000	2,812,500
Total	**£ 42,678,101**	**26,673,813**

Karuna Series A Financing

In August 2018, Karuna issued and sold Series A preferred stock for aggregate proceeds of approximately $42.1 million. PureTech Health LLC participated in the financing and invested $4.0 million. Additionally, approximately $8.1 million of outstanding principal and interest on convertible promissory notes issued by Karuna to PureTech Health LLC, including the 2017 Notes, converted into Series A preferred stock in this

financing in accordance with their terms. Our executive officers Stephen Muniz, Eric Elenko and Bharatt Chowrira were on Karuna's board of directors at the time of the financing but they were not compensated by us for their services on the board.

Vedanta Series C Financing

In December 2018 and May 2019, Vedanta Biosciences, Inc., or Vedanta, issued and sold shares of Series C preferred stock for aggregate proceeds of approximately $45.5 million. PureTech invested $5.0 million in this financing. Our directors John LaMattina and Christopher Viehbacher and our executive officer Bharatt Chowrira were on the board of directors of Vedanta at the time of the financing but they were not compensated by us for their services on the board.

Vor Series A-2 Financing

In February 2019, Vor issued and sold shares of Series A-2 preferred stock for aggregate proceeds of approximately $25.1 million. PureTech Health LLC participated in such offering and invested $0.6 million. Additionally, approximately $7.4 million of outstanding principal and interest on convertible promissory notes issued by Vor to PureTech Health LLC converted into Series A-2 preferred stock in this financing in accordance with their terms. In February 2020, Vor, issued and sold shares of Series A-2 preferred stock for aggregate proceeds of approximately $17.8 million. PureTech Health LLC participated in such offering and invested $0.7 million. Our executive officer Bharatt Chowrira was on Vor's board of directors at the time of the financings but he was not compensated by us for his services on the board.

Karuna Series B Financing

In March and April 2019, Karuna issued and sold shares of Series B preferred stock for aggregate proceeds of approximately $82.1 million. PureTech Health LLC invested approximately $5.0 million in the financing. Our executive officers Stephen Muniz, Eric Elenko and Bharatt Chowrira were on Karuna's board of directors at the time of the financing but they were not compensated by us for their services on the board.

Sonde Series A-2 Financing

In April 2019, Sonde issued and sold shares of Series A-2 preferred stock for aggregate proceeds of $11.0 million. Approximately $5.8 million of outstanding principal and interest on convertible promissory notes issued by Sonde to PureTech converted into Series A-2 preferred stock in this financing in accordance with their terms. In August 2019, Sonde sold an additional 1,052,632 shares of its Series A-2 preferred stock for aggregate proceeds of $2.0 million. In January 2020 and April 2020, Sonde sold additional shares of Series A-2 preferred stock for aggregate proceeds of $4.8 million. Our executive officer Eric Elenko was on the board of directors of Sonde at the time of each of these financings, our executive officer Daphne Zohar was on the on the board of directors of Sonde at the time of the April 2019 closing and our executive officer Joep Muijrers was on the board of directors of Sonde at the time of the August 2019 closing and both 2020 closings, but they were not compensated by us for their services on the board.

Gelesis Issuance of Convertible Promissory Notes

In August 2019, Gelesis issued a convertible note, or the Gelesis Note, to us in the principal amount of up to $6.5 million. The Gelesis Note was payable in installments, with $2.0 million of the note drawn down upon execution of the note and an additional $3.3 million and $1.2 million drawn down on October 7, 2019 and November 5, 2019, respectively. Our director Raju Kucherlapati was a member of Gelesis's board of directors at the time the Gelesis Note was issued, but he was not compensated by us for his services on the board.

Gelesis Series 3 Growth Preferred Stock Financing

In December 2019, Gelesis issued 2,973,270 shares of its Series 3 Growth Preferred Stock for aggregate proceeds of $50.1 million, including approximately $10.9 million of outstanding principal and interest on convertible promissory notes issued by Gelesis, including the Gelesis Note, which converted into Series 3 Growth Preferred Stock in this financing in accordance with their terms. In addition to the 422,443 shares of Series 3 Growth Preferred Stock issued to us upon conversion of the Gelesis Note, we also purchased 464,389 shares of Series 3 Growth Preferred Stock for an aggregate purchase price of $8.0 million. In April 2020, Gelesis issued 818,990 shares of its Series 3 Growth Preferred Stock for aggregate proceeds of $14.1 million, of which we purchased 579,038 shares of Series 3 Growth Preferred Stock for an aggregate purchase price of $10.0 million. In June 2020 and August 2020, Gelesis issued 2,316,154 shares of its Series 3 Growth Preferred Stock for aggregate proceeds of $40.0 million. Our director Raju Kucherlapati was a member of Gelesis's board of directors at the time of the financing, but he was not compensated by us for his services on the board.

Follica A-3 Preferred Stock Note Conversion Agreement

In July 2019, $18.0 million in combined principal and interest of Follica's convertible debt converted into 17,639,204 shares of Follica's Series A-3 Preferred Stock and 14,200,044 shares of Follica's common stock pursuant to a Series A-3 Note Conversion Agreement between Follica and the noteholders. We held $15.5 million of the converted $18.0 million in principal and interest. Our executive officers and board members Daphne Zohar and Stephen Muniz as well as our executive officer Joep Muijrers were on Follica's board of directors at the time of the financing, but they were not compensated by us for their services on the board.

Vedanta Series C-2 Financing

In September 2019 and May 2020, Vedanta issued and sold shares of Series C-2 preferred stock for aggregate proceeds of approximately $25.7 million. Our directors John LaMattina and Christopher Viehbacher as well as our executive officer Bharatt Chowrira were on the board of directors of Vedanta at the time of the financing, but they were not compensated by us for their services on the board.

Vor Series B Preferred Stock Financing

In July 2020, Vor Biopharma Inc., or Vor, announced a $110 Series B Financing, which financing included a June 2020 issuance and sale of shares of Series B preferred stock for aggregate proceeds of approximately $64.7 million. Vor has the potential to receive an additional $45.3 million based on the achievement of certain milestones. PureTech Health LLC participated in such offering and invested $0.5 million. Our executive officer Bharatt Chowrira was on Vor's board of directors at the time of the financings, but he was not compensated by us for his services on the board.

Vedanta Issuance of Secured Promissory Note

In September 2020, Vedanta issued a secured promissory note, or the Vedanta Note, to Oxford Finance LLC in the principal amount of $15.0 million. The Vedanta Note is secured by Vedanta's intellectual property, inventory and equipment. Our directors John LaMattina and Christopher Viehbacher as well as our executive Bharatt Chowrira were on the board of directors of Vedanta at the time of the financing, but they were not compensated by us for their services on the board.

Gelesis Sublease Agreement

In June 2019, we entered into a Sublease Agreement with Gelesis, pursuant to which we agreed to sublease certain office space in Boston, Massachusetts to Gelesis for the remainder of the term of our primary lease. Pursuant to this agreement, Gelesis is responsible for all of our payment obligations under the lease.

Patent License Agreement with Karuna

In March 2011, we entered into an exclusive license agreement, or the Patent License Agreement, with Karuna, pursuant to which we granted Karuna an exclusive license to patents relating to combinations of a muscarinic activator with a muscarinic inhibitor for the treatment of central nervous system disorders. In connection with the Patent License Agreement, Karuna has agreed to make milestone payments to us of up to an aggregate of $10 million upon the achievement of specified developmental, regulatory and commercial milestones. In addition, Karuna is obligated to pay us low single-digit royalties on the worldwide net sales of any commercialized product covered by the licenses granted under the Patent License Agreement. In the event that Karuna sublicenses any of the patent rights granted under the Patent License Agreement, Karuna will be obligated to pay us royalties within the range of 15 percent to 25 percent on any income Karuna receives from the sublicensee, excluding royalties. Karuna has not paid any fees to us to date pursuant to the Patent License Agreement.

Royalty and Sublicense Income Agreement with Gelesis

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 intellectual property 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.

Business Services Agreements

We were party to a business services, personnel and information management agreement with each of Vor, Akili, resTORbio and Karuna until, with respect to Vor and Akili, the date on which we no longer controlled a majority of the equity of such entities, and with respect to resTORbio and Karuna, the date of each such entity's initial public offering. Pursuant to such agreements, we provided each of these entities with strategic medical, clinical and scientific advice, in addition to providing certain operational and administrative resources, and were reimbursed for such services.

Voting and Investors' Rights Agreements

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

- We are party to an Amended and Restated Voting Agreement between Vor and certain of its investors, dated June 30, 2020. We held 42,656,404 shares of capital stock as of June 30, 2020, each of which is entitled to one vote and which represents, in the aggregate, 16.4 percent of the outstanding voting stock of Vor.
- Pursuant to an Amended and Restated Investors' Rights Agreement, as amended, between Vedanta and certain of its investors, dated December 21, 2018, 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. We currently have four designees as members of Vedanta's board of six directors and hold 5,635,020 shares of capital stock as of June 30, 2020, each of which is entitled to one vote and which represents, in the aggregate, 59.9 percent of the outstanding voting stock of Vedanta.

- Pursuant to the Ninth Amended and Restated Stockholders Agreement, as amended, between Gelesis and certain of its stockholders, dated December 5, 2019, we are entitled to designate two directors to Gelesis' board of directors for so long as PureTech Health LLC and its affiliates continue to hold at least 10 percent of Gelesis' capital stock held by PureTech Health LLC on the date of the agreement. We currently have one designee as a member of Gelesis' board of four directors and hold 5,173,142 shares of capital stock as of June 30, 2020, each of which is entitled to one vote and which represents, in the aggregate, 26.2 percent of the outstanding voting stock of Gelesis.
- Pursuant to a Voting Agreement between Sonde and certain of its investors, dated April 9, 2019, 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. We currently have two designees as members of Sonde's board of five directors and hold 7,074,241 shares of capital stock as of June 30, 2020, each of which is entitled to one vote and which represents, in the aggregate, 52.3 percent of the outstanding voting stock of Sonde.
- 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. We currently have four designees as members of Entrega's board of six directors and hold 6,300,375 shares of capital stock as of June 30, 2020, each of which is entitled to one vote and which represents, in the aggregate, 83.1 percent of the outstanding voting stock of Entrega.
- 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. We currently have three designees as members of Follica's board of three directors and hold 37,993,501 shares of capital stock as of June 30, 2020, each of which is entitled to one vote and which represents, in the aggregate, 85.4 percent of the outstanding voting stock of Follica.

Agreements with Founded Entities Restricting Sale of Shares in Connection with an Initial Public 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 after their initial public offerings as follows:

- Second Amended and Restated Investors' Rights Agreement between Akili and the investor parties named therein, dated May 8, 2018;
- 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 December 21, 2018;
- Investors' Rights Agreement between Entrega and the investor parties named therein, dated December 18, 2017;
- Ninth Amended and Restated Stockholders Agreement between Gelesis and the stockholder parties named therein, dated December 5, 2019;
- Investors' Rights Agreement between Sonde and the investor parties named therein, dated April 9, 2019; and

- Amended and Restated Investors' Rights Agreement between Vor and the investor parties named therein, dated June 30, 2020.

Family Relationships

Our chief executive officer, Daphne Zohar, and Yishai Zohar, the chief executive officer of Gelesis, one of our Non-Controlled Founded Entities, are husband and wife. As of June 30, 2020, we held 26.2 percent of Gelesis' outstanding equity. 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.

C. INTERESTS OF EXPERTS AND COUNSEL

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

Consolidated Financial Statements

Our audited consolidated financial statements for the fiscal years December 31, 2019, 2018 and 2017 are included in Item 18 of this registration statement.

Legal proceedings

From time to time, we may become involved in legal, governmental or arbitration proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any legal, governmental or arbitration proceeding. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Dividend Distribution Policy

We have never declared or paid any dividends on our ordinary shares, and we currently do not plan to declare or pay dividends on our ordinary shares in the foreseeable future. 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 (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 our board of directors.

B. SIGNIFICANT CHANGES

Except as otherwise disclosed in this registration statement, no significant change has occurred since the date of the most recent financial statements included in this registration statement.

ITEM 9. THE OFFER AND LISTING

A. OFFER AND LISTING DETAILS

The principal trading market for our ordinary shares is the main market of the London Stock Exchange, where our ordinary shares have been traded since June 2015 under the ticker code "PRTC."

We intend to apply to list the ADSs on the Nasdaq Global Market under the symbol "PRTC." For a description of the rights of our ADSs, see "Item 12. Description of Securities Other Than Equity Securities – D. American Depositary Shares."

B. PLAN OF DISTRIBUTION

Not applicable.

C. MARKETS

Our ordinary shares are trading on the London Stock Exchange. We are in the process of applying to have our ADSs listed on the Nasdaq Global Market under the symbol "PRTC." We make no representation that such application will be approved or that our ADSs will trade on such market either now or at any time in the future.

D. SELLING SHAREHOLDERS

Not applicable.

E. DILUTION

Not applicable.

F. EXPENSES OF THE ISSUE

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

A. SHARE CAPITAL

Issued Share Capital

Our issued share capital as of September 30, 2020 is 285,743,794 ordinary shares with a par value of £0.01 per ordinary share. Each issued ordinary share is fully paid. We currently have no deferred shares in our issued share capital.

Ordinary Shares

The holders of ordinary shares 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.

As an ADS holder, we will not treat you as one of our shareholders and your name will therefore not be entered into our share register. The depositary will be the holder of the shares underlying our ADSs. For discussion on

our ADSs and ADS holder rights see “Description of American Depositary Shares” in this registration statement. As an ADS holder, you have a right to receive the ordinary shares underlying your ADSs as discussed at “Description of American Depositary Shares—Your Right to Receive the Shares Underlying your ADSs” in this registration statement.

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.

Options

Under the PSP, awards of ordinary shares may be made to our directors, senior managers and employees of, and other individuals providing services to us and our subsidiaries up to a maximum authorized amount of 28,574,379 ordinary shares. During the twelve months ended December 31, 2019, we granted 3,634,183 stock option awards under the PSP.

Certain of our subsidiaries have also adopted stock option plans.

History of Share Capital

For the dates described below, the Company issued Ordinary Shares as follows:

Issue Date or Period	Type of Issuance	Number of Ordinary Shares Issued	Number of Shares after Issuance	Consideration Received
Fiscal year ended December 31, 2017	Exercise of stock options	41,745	237,429,696	(1)
Fiscal year ended December 31, 2018	Follow-on offering	45,000,000	282,429,696	(1)
Fiscal year ended December 31, 2018	Exercise of stock options	34,273	282,463,969	(1)
Fiscal year ended December 31, 2018	Executive RSU awards	29,898	282,493,867	(1)
Fiscal year ended December 31, 2019	Acquisition of Ariya Therapeutics, Inc. minority interest	2,126,338	284,620,205	(2)
Fiscal year ended December 31, 2019	Executive RSU awards	513,324	285,133,529	(1)
Fiscal year ended December 31, 2019	Exercise of stock options	237,090	285,370,619	(1)
Six months ended June 30, 2020	Exercise of stock options	141,842	285,512,461	(1)

(1) We received a cash consideration for this issuance.

(2) Prior to this issuance, we held a majority of the outstanding equity of Ariya Therapeutics, Inc., or Ariya. We issued these shares in exchange for consideration consisting of 1,775,000 shares of Ariya’s common stock and options to purchase 1,792,500 shares of Ariya’s common stock, such that we owned 100% of Ariya following the transaction.”

B. ARTICLES OF ASSOCIATION

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 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).

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.

	ENGLAND AND WALES	DELAWARE
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.

	ENGLAND AND WALES	DELAWARE
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	Under Delaware law, at any meeting of stockholders, a stockholder may designate another

	ENGLAND AND WALES	DELAWARE
	person to attend, speak and vote at the meeting on their behalf by proxy.	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.	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.

	ENGLAND AND WALES	DELAWARE
	default, breach of duty or breach of trust in relation to the company is void. 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).	can limit the liability of a director for: • 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	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.

	ENGLAND AND WALES	DELAWARE
	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.	
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	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

	ENGLAND AND WALES	DELAWARE
	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.	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

	ENGLAND AND WALES	DELAWARE
		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.

C. MATERIAL CONTRACTS

Except as otherwise set forth below or as otherwise disclosed in this registration statement, 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. See the section titled "License Agreements" in Section 4B herein.

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 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 registration statement, 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 2020/2021 by (i) an additional rate taxpayer is 38.1 percent, (ii) a higher rate taxpayer is 32.5 percent, and (iii) a basic rate taxpayer is 7.5 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.

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 2020/2021 tax year is £12,500. 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 summary of the material U.S. federal income tax consequences of the acquisition, ownership and disposition of our ordinary shares or ADSs is based upon current law and 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. This summary is based on current provisions of the Internal Revenue Code of 1986, as amended, or the Code, existing, final, temporary and proposed U.S. Treasury Regulations, administrative rulings and judicial decisions, in each case as available on the date of this registration statement. All of the foregoing are subject to change, which change could apply retroactively and could affect the tax consequences described below.

This section summarizes the material U.S. federal income tax consequences to U.S. holders and certain non-U.S. holders, each as defined below, of our ordinary shares or ADSs. This summary addresses only the U.S. federal income tax considerations for holders that acquire our ordinary shares or ADSs at their original issuance and hold our ordinary shares or ADSs as capital assets. This summary does not address all U.S. federal income tax matters that may be relevant to a particular holder. **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**. This summary 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:

- 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

- persons that hold the ordinary shares as part of a hedge, straddle, conversion, constructive sale or similar transaction involving more than one position;
- holders (whether individuals, corporations or partnerships) that are treated as expatriates for some or all U.S. federal income tax purposes;
- persons who acquired the ADSs as compensation for the performance of services;
- persons holding the ADSs in connection with a trade or business conducted outside of the United States;
- holders that own (or are deemed to own) 10 percent or more of our ordinary shares or ADSs, by vote or value; and
- holders that have a "functional currency" other than the U.S. dollar.

Further, this summary does not address any aspects of any U.S. state, local or non-U.S. tax law, alternative minimum tax, gift or estate consequences, the rules regarding qualified small business stock within the meaning of Section 1202 of the Code, any election to apply Section 1400Z-2 of the Code to gains recognized with respect to our ordinary shares, any other U.S. federal tax other than the income tax or the indirect effects on the holders of equity interests in entities that own our ordinary shares or ADSs.

For the purposes of this summary, a "U.S. holder" is a beneficial owner of 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, or other entity that is treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or 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 a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons have the authority to control all of the substantial decisions of such trust or has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

If a partnership holds ordinary shares or ADSs, the tax treatment of a partner will generally depend upon the status of the partner and upon the activities of the partnership. This discussion does not address the tax treatment of partnerships or other entities that are pass-through entities for U.S. federal income tax purposes or persons that hold their ordinary shares or ADSs through partnerships or other pass-through entities. A partner in a partnership or other pass-through entity that will 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.

We will not seek a ruling from the U.S. Internal Revenue Service, or IRS, with regard to the U.S. federal income tax treatment of an investment in our ordinary shares or ADSs, and we cannot assure you that the IRS will agree with the conclusions set forth below.

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 THE ORDINARY SHARES OR ADSs, INCLUDING THE APPLICABILITY OF U.S. FEDERAL, STATE AND LOCAL TAX LAWS.

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.

F. DIVIDENDS AND PAYING AGENTS

Not applicable.

G. STATEMENT BY EXPERTS

The consolidated financial statements of PureTech Health plc as of December 31, 2019 and 2018, and for each of the years in the three-year period ended December 31, 2019, have been included herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, appearing elsewhere herein, and upon the authority of said firm as experts in accounting and auditing.

H. DOCUMENTS ON DISPLAY

When this registration statement on Form 20-F becomes effective, we will be subject to the information reporting requirements of the Exchange Act applicable to foreign private issuers, and under those requirements will file reports with the SEC. The SEC also maintains a website at http://www.sec.gov from which filings may be accessed.

As a foreign private issuer, we will be exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and our officers, directors and principal shareholders will be exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we will not be required under the Exchange Act to file annual, quarterly and current reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act. However, for so long as we are listed on Nasdaq, or any other U.S. exchange, and are registered with the SEC, we will file with the SEC, within 120 days after the end of each fiscal year, or such applicable time as required by the SEC, an annual report on Form 20-F containing financial statements audited by an independent registered public accounting firm.

I. SUBSIDIARY INFORMATION

For information about our subsidiaries, see the section entitled “Organizational Structure” under Item 4C of this registration statement.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

For information about our quantitative and qualitative disclosures about market risk, see “Item 5B. Operating and Financial Review and Prospects—Liquidity and Capital Resources” under the sub-heading “Quantitative and Qualitative Disclosures about Financial Risks.”

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

Citibank, N.A. has agreed to act as the depositary bank for the 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 will appoint 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- 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 will 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 will under the terms of the deposit agreement be vested in the beneficial owners of the ADSs. The depositary bank, the custodian and their respective nominees will be 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 will be 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 an owner of ADSs, you will become a party to the deposit agreement and therefore will be 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. As an owner of ADSs you will be able to exercise the shareholders rights for the ordinary shares represented by your 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

Upon effectiveness of this registration statement, the ordinary shares will be deposited by us with the custodian. Upon receipt of confirmation of such deposit, the depositary bank will issue ADSs to the underwriters named in the registration statement.

After the effectiveness of this registration statement, 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 will be 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 will be 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 will 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 of Association. 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 of Association 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 "Description of Share Capital and Articles of Association—Articles of Association."

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 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

SERVICE	FEES
• 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 will maintain 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 will not be 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 of Association, 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 of Association 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 will be 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 will be 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.

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

Not applicable.

ITEM 16. RESERVED

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Not applicable.

ITEM 16B. CODE OF ETHICS

Not applicable.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Not applicable.

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

Not applicable.

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

Not applicable.

ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

Not applicable.

ITEM 16H. MINE SAFETY DISCLOSURE

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-112 of this registration statement.

ITEM 19. EXHIBITS

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

EXHIBIT INDEX

EXHIBIT NUMBER	DESCRIPTION OF EXHIBIT
3.1*	Articles of Association of the Registrant
4.1	Form of Deposit Agreement
4.2	Form of American Depositary Receipt (included in Exhibit 4.1)
10.1#*	Performance Share Plan
10.2#*	Form of Incentive Stock Option Deed of Agreement under the Performance Share Plan
10.3#*	Form of Nonstatutory Stock Option Deed of Agreement under the Performance Share Plan
10.4#*	Form of Restricted Share Units Agreement under the Performance Share Plan
10.5*	Lease Agreement, dated as of August 10, 2018, by and between the Registrant and RBK 1 TENANT, LLC
10.6#*	Form of Deed of Indemnity between the Registrant and each of its directors and executive officers
10.7†*	Asset Purchase Agreement, dated July 15, 2019, by and between Auspex Pharmaceuticals, Inc. and PureTech Health LLC
10.8†*	Royalty Agreement, dated as of July 23, 2013, by and between PureTech Ventures LLC and Follica, Incorporated
10.9*	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
10.10†*	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.
10.11*	Relationship Agreement, dated as of June 18, 2015, by and between PureTech Health PLC and Invesco Asset Management Limited
10.12†*	Ninth Amended and Restated Registration Rights Agreement, dated December 5, 2019, between Gelesis, Inc. and the stockholders party thereto
10.13†*	Ninth Amended and Restated Stockholders Agreement, dated December 5, 2019, between Gelesis, Inc. and the stockholders and executives party thereto
10.14†*	Second Amended and Restated Investors' Rights Agreement, dated May 8, 2018, between Akili Interactive Labs, Inc. and the stockholders party thereto
10.15†*	Amended and Restated First Refusal and Co-Sale Agreement, dated May 8, 2018, between Akili Interactive Labs, Inc. and the investors party thereto
10.16†*	Amended and Restated Investors' Rights Agreement, dated December 21, 2018, as amended on April 19, 2019, May 3, 2019 and September 11, 2019 by and among Vedanta Biosciences, Inc. and the stockholders party thereto
10.17†*	Fifth Amended and Restated Investors' Rights Agreement, dated July 19, 2019, by and among Follica, Incorporated and the investors party thereto
10.18†*	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
10.19†*	Fifth Amended and Restated Voting Agreement, dated July 19, 2019, between Follica, Incorporated and the stockholders party thereto
10.20†*	Amended and Restated Voting Agreement, dated June 30, 2020, between Vor Biopharma Inc. and the stockholders party thereto

EXHIBIT NUMBER	DESCRIPTION OF EXHIBIT
10.21†*	Amended and Restated Investors' Rights Agreement, dated June 30, 2020, by and between Vor Biopharma Inc. and the investors party thereto
10.22†*	Amended and Restated Right of First Refusal and Co-Sale Agreement, dated June 30, 2020, by and between Vor Biopharma Inc. and the investors and key holders party thereto
10.23†*	Voting Agreement, dated April 9, 2019, between Sonde Health, Inc. and the stockholders party thereto
10.24†*	Investors' Rights Agreement, dated April 9, 2019, by and between Sonde Health, Inc. and the investors party thereto
10.25†*	Right of First Refusal and Co-Sale Agreement, dated April 9, 2019, by and between Sonde Health, Inc. and the investors and key holders party thereto
10.26†*	Voting Agreement, dated December 18, 2017, between Entrega, Inc. and the stockholders party thereto
10.27†*	Investors' Rights Agreement, dated December 18, 2017, by and between Entrega, Inc. and the investors party thereto
10.28†*	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
10.29†*	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
21.1*	Subsidiaries of the Registrant
23.1	Consent of KPMG LLP, independent registered public accounting firm

* Previously filed.
\# Indicates a management contract or any compensatory plan, contract or arrangement.
† Portions of this exhibit (indicated by asterisks) have been omitted in accordance with the rules of the Securities and Exchange Commission.

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 registration statement on its behalf.

Date: November 9, 2020

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 of 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, 2019 and 2018, 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2019, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

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 Public Company Accounting Oversight Board (United States) (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.

/s/ KPMG LLP

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

KPMG LLP

London, United Kingdom

22 September 2020

Consolidated Statements of Comprehensive Income/(Loss)
For the years ended December 31,

	Note	**2019 $000s**	2018 $000s	2017 $000s
Contract revenue	3	**8,688**	16,371	650
Grant revenue	3	**1,119**	4,377	1,885
Total revenue		**9,807**	20,748	2,535
Operating expenses:				
General and administrative expenses	7	**(59,358)**	(47,365)	(46,283)
Research and development expenses	7	**(85,848)**	(77,402)	(71,672)
Operating income/(loss)		**(135,399)**	(104,019)	(115,420)
Other income/(expense):				
Gain on deconsolidation	5	**264,409**	41,730	85,016
Gain/(loss) on investments held at fair value	5	**(37,863)**	(34,615)	57,334
Loss on impairment of intangible asset		**—**	(30)	—
Gain/(loss) on disposal of assets	11	**(82)**	4,060	—
Gain/(loss) on loss of significant influence	6	**445,582**	10,287	—
Other income/(expense)		**121**	(278)	14
Other income/(expense)		**672,167**	21,154	142,364
Finance income/(costs):				
Finance income	9	**4,362**	3,358	1,750
Finance income/(costs)—subsidiary preferred shares	9	**(1,458)**	(106)	(9,509)
Finance income/(costs)—contractual	9	**(2,576)**	34	(553)
Finance income/(costs)—fair value accounting	9	**(46,475)**	22,631	(71,735)
Net finance income/(costs)		**(46,147)**	25,917	(80,047)
Share of net gain/(loss) of associates accounted for using the equity method	6	**30,791**	(11,490)	(17,608)
Impairment of investment in associate	6	**(42,938)**	—	—
Income/(loss) before taxes		**478,474**	(68,438)	(70,711)
Taxation	25	**(112,409)**	(2,221)	(4,383)
Income/(Loss) for the year		**366,065**	(70,659)	(75,094)
Other comprehensive income/(loss):				
Items that are or may be reclassified as profit or loss				
Foreign currency translation differences		**(10)**	(214)	408
Unrealized gain/(loss) on investments held at fair value		**—**	(26)	1,750
Total other comprehensive income/(loss)		**(10)**	(240)	2,158
Total comprehensive income/(loss) for the year		**366,055**	(70,899)	(72,936)
Income/(loss) attributable to:				
Owners of the Company		**421,144**	(43,654)	26,472
Non-controlling interests	18	**(55,079)**	(27,005)	(101,566)
		366,065	(70,659)	(75,094)
Comprehensive income/(loss) attributable to:				
Owners of the Company		**421,134**	(43,894)	28,630
Non-controlling interests	18	**(55,079)**	(27,005)	(101,566)
		366,055	(70,899)	(72,936)
Earnings/(loss) per share:		$	$	$
Basic earnings/(loss) per share	10	**1.49**	(0.16)	0.11
Diluted earnings/(loss) per share	10	**1.44**	(0.16)	0.11

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

Consolidated Statements of Financial Position
as of December 31,

	Note	**2019 $000s**	2018 $000s
Assets			
Non-current assets			
Property and equipment, net	11	**21,455**	8,323
Right of use asset, net	21	**22,383**	—
Intangible assets, net	12	**625**	3,080
Investments held at fair value	5	**714,905**	169,755
Investments in associates	6	**10,642**	—
Lease receivable—long-term	21	**2,082**	—
Deferred tax assets		**142**	449
Other non-current assets		**99**	370
Total non-current assets		**772,333**	181,977
Current assets			
Trade and other receivables		**1,977**	1,328
Prepaid expenses and other current assets		**1,946**	5,380
Lease receivable—short-term	21	**350**	—
Other financial assets	13, 22	**2,124**	2,199
Short-term investments	22	**30,088**	133,828
Cash and cash equivalents	22	**132,360**	117,051
Total current assets		**168,845**	259,786
Total assets		**941,178**	441,763
Equity and liabilities			
Equity			
Share capital	14	**5,408**	5,375
Share premium	14	**287,962**	278,385
Merger reserve	14	**138,506**	138,506
Translation reserve	14	**—**	10
Other reserve	14	**(18,282)**	20,923
Retained earnings/(accumulated deficit)	14	**254,444**	(167,692)
Equity attributable to the owners of the Company	14	**668,038**	275,507
Non-controlling interests	14, 18	**(17,640)**	(108,535)
Total equity	14	**650,398**	166,972
Non-current liabilities			
Deferred revenue	3	**1,220**	83
Deferred tax liability	25	**115,445**	6,428
Lease liability, non-current	21	**34,914**	—
Other long-term liabilities	20	**—**	2,516
Total non-current liabilities		**151,579**	9,027
Current liabilities			
Deferred revenue	3	**5,474**	6,560
Lease liability, current	21	**2,929**	—
Trade and other payables	19	**19,842**	15,875
Subsidiary:			
Notes payable	16, 17	**1,455**	12,010
Warrant liability	16	**7,997**	13,012
Preferred shares	15, 16	**100,989**	217,519
Other current liabilities		**515**	788
Total current liabilities		**139,201**	265,764
Total liabilities		**290,780**	274,791
Total equity and liabilities		**941,178**	441,763

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									
	Shares	Amount $000s	Share premium $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, 2017	237,387,951	4,609	181,658	138,506	(184)	13,412	(160,335)	177,666	(85,255)	92,411
Net income/(loss)	—	—	—	—	—	—	26,472	26,472	(101,566)	(75,094)
Foreign currency exchange	—	—	—	—	408	—	—	408	—	408
Unrealized gain on investments	—	—	—	—	—	—	1,750	1,750	—	1,750
Total comprehensive income/(loss) for the period	**—**	**—**	**—**	**—**	**408**	**—**	**28,222**	**28,630**	**(101,566)**	**(72,936)**
Gain/(loss) arising from change in non-controlling interests	—	—	—	—	—	(16)	—	(16)	28,449	28,433
Exercise of share-based awards	41,745	70	(70)	—	—	—	—	—	—	—
Subsidiary dividends	—	—	—	—	—	—	(91)	(91)	—	(91)
Buyback of shares, net of tax	—	—	—	—	—	—	(66)	(66)	—	(66)
Equity settled share-based payments	—	—	—	—	—	3,782	—	3,782	8,067	11,849
Balance December 31, 2017	**237,429,696**	**4,679**	**181,588**	**138,506**	**224**	**17,178**	**(132,270)**	**209,905**	**(150,305)**	**59,600**
Adjustment for the initial application of IFRS 9	**—**	**—**	**—**	**—**	**—**	**—**	**7,525**	**7,525**	**4,719**	**12,244**
Adjusted balance as of January 1, 2018	**237,429,696**	**4,679**	**181,588**	**138,506**	**224**	**17,178**	**(124,745)**	**217,430**	**(145,586)**	**71,844**
Net income/(loss)	—	—	—	—	—	—	(43,654)	(43,654)	(27,005)	(70,659)
Foreign currency exchange	—	—	—	—	(214)	—	—	(214)	—	(214)
Unrealized gain/(loss) on investments	—	—	—	—	—	—	(26)	(26)	—	(26)
Total comprehensive income/(loss) for the period	**—**	**—**	**—**	**—**	**(214)**	**—**	**(43,680)**	**(43,894)**	**(27,005)**	**(70,899)**
Deconsolidation of subsidiary	—	—	—	—	—	(4)	619	615	55,168	55,783
Issuance of placing shares	45,000,000	696	96,797	—	—	—	—	97,493	—	97,493
Exercise of share-based awards	64,171	—	—	—	—	—	122	122	—	122
Subsidiary dividends to non-controlling interests	—	—	—	—	—	—	(8)	(8)	—	(8)
Equity settled share-based payments	—	—	—	—	—	3,749	—	3,749	8,888	12,637
As at December 31, 2018	**282,493,867**	**5,375**	**278,385**	**138,506**	**10**	**20,923**	**(167,692)**	**275,507**	**(108,535)**	**166,972**
Adjustment for the initial application of IFRS16	**—**	**—**	**—**	**—**	**—**	**—**	**999**	**999**	**—**	**999**
Adjusted balance as of January 1, 2019	**282,493,867**	**5,375**	**278,385**	**138,506**	**10**	**20,923**	**(166,693)**	**276,506**	**(108,535)**	**167,971**
Net income/(loss)	—	—	—	—	—	—	421,144	421,144	(55,079)	366,065
Foreign currency exchange	—	—	—	—	(10)	—	—	(10)	—	(10)
Total comprehensive income/(loss) for the period	**—**	**—**	**—**	**—**	**(10)**	**—**	**421,144**	**421,134**	**(55,079)**	**366,055**
Deconsolidation of subsidiaries	—	—	—	—	—	—	—	—	97,178	97,178
Subsidiary note conversion and changes in NCI ownership interest	—	—	—	—	—	(20,631)	—	(20,631)	23,049	2,418

	Share Capital									
	Shares	Amount $000s	Share premium $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
Exercise of share-based awards	237,090	5	499	—	—	—	—	504	—	504
Purchase of subsidiary's non-controlling interest through issuance of shares	2,126,338	28	9,078	—	—	(33,145)	—	(24,039)	24,039	—
Revaluation of deferred tax assets related to share-based awards	—	—	—	—	—	3,061	—	3,061	—	3,061
Equity settled share-based payments	—	—	—	—	—	12,785	—	12,785	1,683	14,468
Vesting of restricted stock units	513,324	—	—	—	—	(1,280)	—	(1,280)	—	(1,280)
Other	—	—	—	—	—	5	(7)	(2)	25	23
Balance December 31, 2019	**285,370,619**	**5,408**	**287,962**	**138,506**	**—**	**(18,282)**	**254,444**	**668,038**	**(17,640)**	**650,398**

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

Consolidated Statements of Cash Flows

For the years ended December 31,

	Note	2019 $000s	2018 $000s	2017 $000s
Cash flows from operating activities				
Income/(loss) for the year		**366,065**	(70,659)	(75,094)
Adjustments to reconcile net operating loss to net cash used in operating activities:				
Non-cash items:				
Depreciation and amortization	11, 12	**6,665**	2,778	2,099
Impairment of intangible assets		**—**	30	637
Impairment of investment in associate	6	**42,938**	—	—
Equity settled share-based payment expense	8	**14,468**	12,637	11,849
(Gain)/loss on investments held at fair value	5	**37,863**	20,307	(57,334)
(Gain)/loss on short-term investments		**—**	(843)	219
Gain on deconsolidation	5	**(264,409)**	(41,730)	(85,016)
Gain on loss of significant influence	5	**(445,582)**	(10,287)	—
Conversion of debt to equity		**—**	349	—
Disposal of assets	11	**140**	111	—
Proceeds from sale of assets	11	**—**	50	—
Share of net (income)/loss of associate	6	**(30,791)**	11,491	17,608
Non-cash share of net loss for deconsolidated subsidiary		**—**	—	8,027
Deferred income taxes	25	**112,077**	1,723	4,257
Subsidiary research and development tax credit		**—**	—	(1,152)
Non-cash rent expense		**—**	—	106
Unrealized (gain)/loss on foreign currency transactions		**—**	(271)	342
Finance costs, net	9	**46,229**	(8,446)	81,797
Changes in operating assets and liabilities:				
Accounts receivable	22	**747**	467	(1,672)
Other financial assets	13	**(48)**	(1,327)	(30)
Prepaid expenses and other current assets		**(25)**	774	168
Deferred revenues	3	**186**	4,841	(725)
Accounts payable and accrued expenses	19	**11,166**	5,094	5,238
Other liabilities		**3,002**	115	(9)
Interest received		**3,648**	—	—
Interest paid	21	**(2,495)**	—	—
Net cash used in operating activities		**(98,156)**	(72,796)	(88,685)
Cash flows from investing activities:				
Purchase of property and equipment	11	**(12,138)**	(4,365)	(2,091)
Proceeds from sale of property and equipment		**—**	125	—
Purchases of intangible assets	12	**(400)**	(125)	(80)
Purchase of associate preferred shares held at fair value	5, 6	**(13,670)**	(3,500)	—
Purchase of investments held at fair value	5	**(1,556)**	—	—
Sale of investments held at fair value	5	**9,294**	—	—
Purchase of convertible note	6	**(6,480)**	—	—
Cash derecognized upon loss of control over subsidiary		**(16,036)**	(13,390)	(16,340)
Purchases of short-term investments	22	**(69,541)**	(166,452)	(147,203)
Receipt of payment for finance sub-lease	21	**191**	—	—
Proceeds from maturity of short-term investments	22	**173,995**	148,062	249,396
Net cash provided by/(used in) investing activities		**63,659**	(39,645)	83,682
Cash flows from financing activities:				
Proceeds from issuance of convertible notes	18	**1,606**	6,147	2,616
Payment of lease liability	21	**(1,678)**	—	—
Repayment of long-term debt		**(178)**	(185)	(163)
Distribution to Tal shareholders	27	**(112)**	—	—
Exercise of stock options		**504**	—	—
Proceeds from the issuance of shares and subsidiary preferred shares	15	**51,048**	152,030	12,400
Vesting of restricted stock units		**(1,280)**	—	—
Buyback of shares		**—**	(35)	(66)
Distribution to shareholders on dissolution of subsidiary		**—**	(1,062)	—
Subsidiary dividend payments		**—**	(8)	(91)
Net cash provided by financing activities		**49,910**	156,887	14,696
Effect of exchange rates on cash and cash equivalents		**(104)**	(44)	(3)
Net increase in cash and cash equivalents		**15,309**	44,402	9,690
Cash and cash equivalents at beginning of year		**117,051**	72,649	62,959
Cash and cash equivalents at end of year		**132,360**	117,051	72,649
Supplemental disclosure of non-cash investment and financing activities:				
Purchase of non controlling interest in consideration for issuance of shares and options		**9,106**	—	—
Purchase of intangible asset and investment held at fair value in consideration for issuance of warrant liability and assumption of other long and short-term liabilities		**15,894**	—	—
Leasehold improvements purchased through lease incentives (deducted from Right of Use Asset)		**10,680**	—	—
Conversion of subsidiary convertible note into preferred share liabilities		**4,894**	—	1,306
Conversion of subsidiary convertible note into subsidiary common stock (NCI)		**2,418**	—	—
Supplemental disclosure of cash paid for income taxes:				
Cash paid for income taxes		**176**	92	—

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 3AE, 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 for the years ended December 31, 2019, 2018 and 2017. The Group financial statements have been approved by the Directors on September 21, 2020 and are prepared in accordance with the International Financial Reporting Standards, International Accounting Standards, and Interpretations (collectively "IFRS") as issued by the International Accounting Standards Board ("IASB") as adopted by the European Union (adopted IFRSs).

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.

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 and financial instruments 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 applied in determining the following:

- Financial instruments valuations (Note 21): when estimating the fair value of subsidiary undertakings, subsidiary preferred shares and investments carried at fair value through profit and loss (FVTPL) according to IFRS 9 at initial recognition and upon subsequent measurement. This includes determining the appropriate valuation methodology and making certain estimates of the future earnings potential of the subsidiary businesses, appropriate discount rate and earnings multiple to be applied, marketability and other industry and company specific risk factors.
- Revenue recognition (Note 3): when estimating the costs to complete for overtime revenue recognition. This includes making certain estimates of costs to be incurred relating to contracts with customers in

meeting the overtime performance obligation. The costs are for research and development activity and the estimation uncertainty is regarding the level of activity required to meet the performance obligation and the timing in which that arises during the term of the contract.

Significant judgement is also applied in determining the following:

- Revenue recognition (Note 3): when determining the correct amount of revenue to be recognized. This includes making certain judgements when determining the appropriate accounting treatment of key customer contract terms in accordance with the applicable accounting standards. In particular, judgement is required to determine the performance obligations in a contract (if promised goods and services are distinct or not) and timing of revenue recognition (on delivery or over a period of time).
- Subsidiary preferred shares liability classification (Note 21): when determining the classification of financial instruments in terms of liability or equity. These judgements include an assessment of whether the financial instrument include any embedded derivative features, whether they include contractual obligations upon 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, representation on the board, rights to appoint management, investee dependence on the Company etc.
- 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.

Going Concern

After making inquiries and considering the impact of risks and opportunities on expected cash flows and based on the cash and cash equivalents available to the Group as of December 31, 2019, the Directors have a reasonable expectation that the Group had adequate cash to continue in operational existence into the first quarter of 2022 and, following the sale of 2,100,000 shares of Karuna common shares worth $200.9 million on January 22, 2020, the Group now has sufficient cash reserves to fund its operations into the first quarter of 2024, assuming broadly our expected level of required investments in businesses and other operating expenditures. The financial statements have been prepared using the going concern basis of accounting.

Basis of Consolidation

The consolidated financial information for each of the years ended December 31, 2019, 2018 and 2017 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. Unrealized gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

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, 2019 are reported within the Internal segment, Controlled Founded Entities segment or the Parent Company and Other segment (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 and board interest and holding. 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, 2019 and the Group's total voting percentage, based on outstanding voting common and preferred shares as of December 31, 2019, 2018 and 2017, is outlined below. All subsidiaries are domiciled within the United States and conduct business activities solely within the United States, with the exception of Gelesis, S.r.l. which is domiciled in Italy.

	Voting percentage at December 31, through the holdings in					
	2019		2018		2017	
Subsidiary	**Common**	**Preferred**	Common	Preferred	Common	Preferred
Subsidiary operating companies						
Alivio Therapeutics, Inc. [1,2]	**—**	**91.9**	—	92.0	—	92.0
Calix Biosciences, Inc. [2,10]	**—**	**—**	—	—	—	100.0
Entrega, Inc. (indirectly held through Enlight) [1,2]	**—**	**83.1**	—	83.1	—	83.1
Follica, Incorporated [1,2,5]	**28.7**	**56.7**	4.4	79.2	4.4	68.3
Glyph Biosciences, Inc. [1,2,10]	**—**	**—**	—	—	—	97.3
Nybo Therapeutics, Inc. [1,2,10]	**—**	**—**	—	—	—	94.7
PureTech LYT (formerly Ariya Therapeutics, Inc.) [10]	**—**	**100.0**	—	100.0	—	—
PureTech LYT-100	**—**	**100.0**	—	100.0	—	—
PureTech Management, Inc. [3]	**100.0**	**—**	100.0	—	100.0	—
PureTech Health LLC [3]	**100.0**	**—**	100.0	—	100.0	—
Sonde Health, Inc. [1,2]	**—**	**64.1**	—	96.4	—	96.4
Vedanta Biosciences, Inc. [1,2]	**—**	**61.8**	—	74.3	—	85.9
Vedanta Biosciences Securities Corp. (indirectly held through Vedanta) [1,2]	**—**	**61.8**	—	74.3	—	85.9
Deconsolidated former subsidiary operating companies						
Akili Interactive Labs, Inc. [1,2,9]	**—**	**41.9**	—	41.9	—	61.8
Akili Securities Corp. (indirectly held through Akili) [1,2,9]	**—**	**41.9**	—	41.9	—	61.8
Gelesis, Inc. [1,2,11]	**5.7**	**20.2**	7.3	18.4	7.3	18.7
Gelesis, S.r.l. (indirectly held through Gelesis) [7,11]	**5.7**	**20.2**	7.3	18.4	7.3	18.7
Gelesis, LLC (indirectly held through Gelesis) [1,8,11]	**5.7**	**20.2**	7.3	18.4	7.3	18.7
Gelesis 2012, Inc. (held indirectly through Gelesis) [2,11]	**5.7**	**20.2**	7.3	18.4	7.3	18.7
Karuna Pharmaceuticals, Inc. [1,2,13]	**—**	**28.4**	—	71.0	—	90.7
Vor Biopharma Inc. [1,2,14]	**—**	**47.5**	—	93.2	—	94.1
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	—
Inactive subsidiaries						
Appeering, Inc. [2]	**—**	**100.0**	—	100.0	—	100.0
Commense Inc. [2,6]	**—**	**99.1**	—	99.1	—	100.0
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	—
The Sync Project, Inc. [1,2]	**—**	**—**	—	—	—	77.6
Tal Medical, Inc. [1,2]	**—**	**100.0**	—	64.5	—	64.5

1. The ownership percentage includes liability classified preferred shares, which results in the ownership percentage not being the same as the ownership percentage used in allocations to non-controlling interests disclosed in Note 16. 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, except in the case of Enlight, Mandara and PureTech Health LLC in which 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 July 19, 2019, all of the outstanding notes, plus accrued interest, issued by Follica to PureTech converted into 15,216,214 shares of Series A-3 Preferred Shares and 12,777,287 shares of common share pursuant to a Series A-3 Note Conversion Agreement between Follica and the noteholders. Please refer to Note 16.
6. Commense turned inactive during 2019.
7. Registered address is Via Verde 188, 73021 Calmera (LE), Italy.
8. Registered address is 901 N. Market St., Suite 705, Wilmington, DE 19801, USA.
9. On May 8, 2018, PureTech lost control of Akili, Akili was deconsolidated from the Group's financial statements and is no longer considered a subsidiary. This results in only the profits and losses generated by Akili through the deconsolidation date being included in the Group's Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss).
10. On July 18, 2018, Calix Biopharma, Inc., Glyph Biosciences, Inc., and Nybo Therapeutics, Inc. merged into Ariya Therapeutics, Inc. Thus, the Group no longer holds interest in Calix, Glyph and Nybo and owns 100 per cent of Ariya as of December 31, 2018.
11. As of December 31, 2018, PureTech maintained control of Gelesis. On July 1, 2019 PureTech lost control of Gelesis and Gelesis was deconsolidated from the Group's financial statements, resulting in only the profits and losses generated by Gelesis through the deconsolidation date being included in the Group's Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss).
12. All subsidiaries are registered in the United States ("U.S.") except for Gelesis, S.r.l., which is registered in Italy.
13. On March 15, 2019, PureTech lost control of Karuna, Karuna was deconsolidated from the Group's financial statements and is no longer considered a subsidiary. This results in only the profits and losses generated by Karuna through the deconsolidation date being included in the Group's Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss).
14. On February 12, 2019, PureTech lost control of Vor, Vor was deconsolidated from the Group's financial statements and is no longer considered a subsidiary. This results in only the profits and losses generated by Vor through the deconsolidation date being included in the Group's Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss).

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. When the Group's share of losses exceeds its investment in an equity accounted investee, including the Group's investments in other long-term interests, the Group's carrying amount is reduced to nil and 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. To the extent the Group holds interests in associates that are not providing access to returns underlying ownership interests and are more akin to debt like securities, the instrument held by PureTech is accounted for in accordance with IFRS 9.

Change in Accounting Policy

As of January 1, 2019, the Group has adopted new accounting policies for the accounting for leases. See updated accounting policy for leases (IFRS 16) below.

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 Investments (LTI), as defined in IAS 28. The amendments provide the annual sequence in which both standards are to be applied in such a case. The amendment did not have an impact on the Group's financial statements as the Group has not yet had an investment in an associate where it applied the equity method losses against a LTI.

As of January 1, 2018 the Group has adopted new accounting policies for financial instruments and revenue. See updated accounting policies below.

IFRS 9, Financial Instruments

As of January 1, 2018, the Company adopted IFRS 9, Financial Instruments ("IFRS 9"), which replaced IAS 39, Financial Instruments: Recognition and Measurement. IFRS 9 addresses the classification, measurement and recognition of financial assets and liabilities. IFRS 9 retains but simplifies the mixed measurement model and establishes three primary measurement categories for financial assets: amortized cost, fair value through other comprehensive income ("FVOCI"), and fair value through the profit and loss statement ("FVTPL"). The basis of classification depends on the entity's business model and the contractual cash flow characteristics of the entity's business model and of the financial asset. Investments in equity instruments are required to be measured at FVTPL with the irrevocable option at inception to present changes in fair value in other comprehensive income. There is now a new expected credit losses model that replaces the incurred loss impairment model previously used in IAS 39. For financial liabilities there were no changes to classification and measurement except for the recognition of changes in the Company's own credit risk in Other Comprehensive Income/(Loss) for liabilities designated at FVTPL. IFRS 9 relaxes the requirements for hedge effectiveness by replacing the bright line hedge effectiveness tests. It requires an economic relationship between the hedged item and hedging instrument and for the hedged ratio to be the same as the one management uses for risk management purposes.

Contemporaneous documentation is still required but is different than what was prepared under IAS 39.

The Group reviewed the financial liabilities reported on its Consolidated Statements of Financial Position and completed an assessment between IAS 39 and IFRS 9 to identify any accounting changes. The financial liabilities

subject to this review were the Subsidiary notes payable, Derivative liability, Warrant liability, and Preferred share liability. Based on this assessment of the classification and measurement model, impairment and interest income, the accounting impact on financial liabilities was determined not to be material. As part of the transition requirement, entities have the option upon implementation of the new standard to designate a financial liability as measured at FVTPL. The Group re-assessed its financial liabilities and has elected not to split out embedded derivatives and retrospectively recorded changes in fair value of the entire financial liability instrument through the statement of profit and loss, leading to changes in the carrying value of the instruments when looked at in the aggregate.

The Group also reviewed the financial assets reported on its Consolidated Statements of Financial Position and notes no changes in the application of IFRS 9.

The Group has applied IFRS 9 retrospectively but has elected not to restate comparative information. As a result, the comparative information provided continues to be accounted for in accordance with the Group's previous accounting policy. The reclassification and adjustment arising from the adoption of the new accounting policy has been recognized in the opening statement of financial position as of January 1, 2018.

Financial Liability	IAS 39 as of December 31, 2017 $000s	Cumulative Effect Adjustment to Accumulated Deficit $000s	IFRS 9 As of January 1, 2018 $000s
Notes payable	7,455	6,435	13,890
Derivative liability	114,263	(114,263)	—
Warrant liability	13,095	—	13,095
Preferred shares	120,051	95,584	215,635
	254,864	**(12,244)**	**242,620**

The accounting policy (effective from January 1, 2018) is as follows:

Financial Instruments

Classification

From January 1, 2018, 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 will either be recorded in profit or loss or other comprehensive income. For investments in debt instruments, this will depend on the business model in which the investment is held. 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.

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 and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk. 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.

The Group has reviewed the financial assets and liabilities and determined the following impact from the adoption of the new standard:

Financial Assets

The Group's financial assets consist of cash and cash equivalents, trade and other receivables, debt and equity securities, other deposits and investments in associates' preferred shares and promissory notes. The Group's financial assets are classified into the following categories: investments held at fair value, trade and other receivables 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 non-derivative instruments that are designated in this category or not classified in any other category. 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. Financial assets that are recognized through FVOCI are presented in the Consolidated Statements of Financial Position as non-current assets, unless the Group intends to dispose of them within 12 months after the end of the reporting period. The Company has elected to record the changes in fair values for most financial assets falling under this category through profit and loss. Please refer to Note 5.

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 allowance for doubtful debts. Provisions are made where there is evidence of a risk of nonpayment, taking into account aging, previous experience and economic conditions. When a trade receivable is determined to be uncollectible, it is written off against the available provision and then to the Consolidated Statements of Comprehensive Income/(Loss). 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, 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 and subsidiary preferred shares without embedded derivatives are accounted for at amortized cost.

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

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 financial information for share capital and merger reserve account exclude amounts in relation to those shares.

The Group subsequently measures all equity investments at fair value. Where the Group's management has elected to present fair value gains and losses on equity investments in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognized in profit or loss as other income when the Group's right to receive payment is established.

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. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

IFRS 15, Revenue from Contracts with Customers

IFRS 15 establishes principles for reporting useful information to users of financial statements about the nature, amount, timing and uncertainty of revenue and cash flows arising from an entity's 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, services, and collaboration arrangements. The Group adopted IFRS 15 with effect from January 1, 2018 using the Modified Retrospective approach. The adoption of this standard did not have an impact to the consolidated results.

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 services and existence of acceptance clauses.

Revenue generated by collaboration and service agreements is accounted for under IFRS 15. 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. Determining the transaction price requires significant judgement, which is discussed by revenue category in further detail below.
- 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 unless the transaction price is variable and meets the criteria to be allocated entirely to a performance obligation or to a distinct good or service that forms part of a single performance obligation. The Group determines standalone selling price based on the price at which the performance obligation is sold separately. If the standalone selling price is not observable through past transactions, the Group estimates the standalone selling price taking into account available information such as market conditions and internally approved pricing guidelines related to the performance obligations.
- 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 as well as one contract that meets criteria (b) above. Therefore revenue is recognized over time using the input method based on labor hours, laboratory expenses and supplies.

For cases where the entity does not have an enforceable right to payment due to acceptance clauses, it was determined that costs incurred to fulfill the services are to be capitalized until acceptance is received for the milestone. This resulted in PureTech capitalizing service-related expenses as of December 31, 2017 and recognizing the consideration as revenue once acceptance was received during 2018.

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 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 for certain expenses after the Company has incurred the research and development expense. The Company records an unbilled receivable upon incurring such expenses. Grant income is recognized in the Consolidated Statements of Comprehensive Income/(Loss) over the periods 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 ("U.S. dollars"). The functional currency of virtually all members of the Group is the U.S. dollar. The assets and liabilities of a previously held subsidiary were translated to U.S. dollars at the exchange rate prevailing on the balance sheet date and revenues and expenses were translated at the average exchange rate for the period. Foreign exchange differences resulting from the translation of this subsidiary were reported in the Consolidated Statements of Comprehensive Income/(Loss) 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) except for differences arising on the retranslation of a financial liability designated as a hedge of the net investment in a foreign operation that is effective, or qualifying cash flow hedges, which are recognized directly in other comprehensive income. 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. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are retranslated to the functional currency at foreign exchange rates ruling at the dates the fair value was determined.

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 is comprised of share capital, share premium, merger reserve, other reserve, translation reserve, and accumulated deficit.

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, and impairment losses. Intangible assets with finite lives are amortized from the time they are available for use. Amortization is calculated using the straight-line method to allocate the costs of patents and licenses over their estimated useful lives, which is typically the remaining life of the underlying patents.

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 to be 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 investment in associate.

Impairment of Financial Assets Carried at Fair Value

The Group's financial assets are carried at fair value through Other Comprehensive Income/(Loss) or through profit and loss, depending on the election taken for each instrument. Financial assets that carried at fair value through Other Comprehensive Income/(Loss) are reviewed at each reporting period to assess whether there is

objective evidence that the assets should be impaired. An impairment loss is recognized when there is a significant or prolonged decline in fair value below the instrument's cost. If an instrument is impaired, the impairment loss is calculated and recognized in the Consolidated Statements of Comprehensive Income/(Loss).

Impairment of Financial Assets Measured at Amortized Cost

The Group assesses financial assets measured at amortized cost for impairment at each reporting period. These financial assets are impaired if one or more loss events occur after initial recognition that impact the estimated future cash flows of the asset. An impairment loss is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate and is recognized in the Consolidated Statements of Comprehensive Income/(Loss).

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 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 period that the employee is unconditionally entitled 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. The amount recognized as an expense is adjusted to reflect the actual number of awards for which the related service and non-market vesting 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 non-vesting and non-market performance 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.

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 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 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 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

On January 1, 2019, the Group adopted a new accounting standard for leases. The Group leases real estate and equipment for use in operations. These leases generally have lease terms of 1 to 10 years. We include options that are reasonably certain to be exercised as part of the determination of the lease term. We determine if an arrangement is a lease at inception of the contract in accordance with guidance detailed in the new standard and we perform the lease classification test as of the lease commencement date. ROU assets represent the Group's right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, we use the Group's estimated incremental borrowing rate based on information available at commencement date in determining the present value of future payments.

The Group's operating leases impacted by IFRS 16 principally include leases from real estate.

Existing finance leases continue to be treated as finance leases. For existing operating leases, the Group has applied a modified retrospective approach by measuring the right-of-use asset at an amount equal to the lease liability at the date of transition and therefore comparative information was not restated. Upon transition, the Group has applied the following practical expedients:

- excluding initial direct costs from the right-of-use assets;
- using hindsight when assessing the lease term;
- not reassessing whether a contract is or contains a lease; and
- not separating the lease components from the non-lease components in lease contracts.

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 lease liability was initially measured at the present value of the lease payments that were not paid at the transition date, discounted by using the rate implicit in the lease, or if that rate was not readily determinable, the Group used its incremental borrowing rate. The right-of-use asset is depreciated on a straight-line basis and the lease liability will give rise to an interest charge.

The financial impact of adopting IFRS 16 on the Group was as follows:

	January 1, 2019 $000's
Right of use asset	**10,353**
Lease liability	**10,995**
Accumulated deficit	**(999)**

The cumulative impact resulted mainly from lease term extensions under IFRS 16 offset by the exclusion of short term leases and leases of low value assets.

In January and April 2019, the Company entered into additional leases that added substantially more right of use assets and lease liabilities to the statement of financial position. This includes three different spaces for the Company and its consolidated subsidiaries, amounting to approximately $42 million of additional future lease commitments. In June and August 2019, the Company entered into two sublease agreements. Further information regarding the subleases, right of use asset and lease liability can be found in Note 20.

Finance Income and Finance Costs

Finance income is comprised of interest income on funds invested in U.S. treasuries, which is recognized as it accrues in the Consolidated Statements of Comprehensive Income/(Loss) via the effective interest method. Finance costs comprise loan interest expenses and the changes in the fair value of warrant and derivative liabilities associated with financing transactions.

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.

For the years ended December 31, 2019 and 2018, the Group filed a consolidated U.S. income tax return which included all subsidiaries in which the Company owned greater than 80.0 percent of the vote and value. For the years ended December 31, 2019 and 2018, the Group filed certain consolidated state income tax returns which included all subsidiaries in which the Company owned greater than 50.0 percent of the vote and value. The remaining subsidiaries file separate U.S. tax returns.

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 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.

Deferred taxes are recognized in Consolidated Statements of Comprehensive Income/(Loss) except to the extent that they relate to items recognized directly in equity or in other comprehensive income.

Deferred Revenue and Deferred Costs

Deferred revenue includes 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. Deferred costs represent costs to fulfill a contract and include capitalized labor and research and development expenditures. The Company classifies non-current deferred revenue and deferred costs for any transaction which is expected to be recognized beyond one year or one operating cycle.

Fair Value Measurements

The Group's accounting policies require that its financial and non-financial assets and 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, short-term investments, 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.

Prior Period Reclassification

During 2019 management identified that for the year ended December 31, 2018, Gain/(loss) on investments held at fair value of $14.3 million was incorrectly classified as Finance costs—subsidiary preferred shares. As a result, a prior year reclassification has been made in the Consolidated Statement of Comprehensive Income/(Loss) for the year ended December 31, 2018.

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, 2020 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, 2020 the definition of a "business" has been amended as an amendment to IFRS 3 Business Combinations. The amendments include an election to use a concentration test. This is a simplified assessment that results in an asset acquisition if substantially all of the fair value of the gross assets is concentrated in a single identifiable asset or a group of similar identifiable assets. If an entity chooses not to apply the concentration test, or fails the test, then the assessment focuses on the existence of an input and a substantive process applied to the input/s. These amendments are not expected to have an impact on the Company's financial statements.

As part of its amendments to IAS 1 and IAS 8, the IASB has refined its definition of 'material' and issued practical guidance on applying the concept of materiality. These amendments are effective January 1, 2020 and are not expected to have an impact on the Company's financial statements.

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,	**2019 $000s**	2018 $000s	2017 $000s
Contract revenue (IAS 18 for 2017 and IFRS 15 for 2018 and 2019)	**8,688**	16,371	650
Grant income	**1,119**	4,377	1,885
Total revenue	**9,807**	20,748	2,535

All amounts recorded in contract revenue were generated in the United States.

The Group adopted IFRS 15 effective 1 January 2018, using the modified retrospective method and has only applied this method to contracts that were not completed as of the effective date and all new contracts initiated on or after the effective date. Results for reporting periods beginning on or after January 1, 2018 are presented under IFRS 15, while prior period amounts have not been restated and continue to be recorded in accordance with the governing revenue recognition standard applicable to that period.

All of the Company's contracts as of December 31, 2019 and 2018 were determined to have a single performance obligation which consists of a combined deliverable of license to intellectual property and research and development services. Therefore revenue is recognized over time based on the inputs method which 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.

Disaggregated Revenue

The Group disaggregates contract revenue for reporting periods beginning on or after January 1, 2018 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 revenue recognition *	**2019 $000s**	2018 $000s
Transferred at a point in time	**—**	13,415
Transferred over time	**8,688**	2,956
	8,688	16,371

Customers over 10% of revenue*	**2019 $000s**	2018 $000s
Janssen Biotech, Inc.	**—**	12,000
BMEB Services LLC	**—**	1,415
Roche Holding AG	**4,973**	—
Eli Lilly and Company	**1,433**	—
Boehringer Ingelheim International GMBH	**1,091**	—
Imbrium Therapeutics L.P.	**1,013**	—
	8,510	13,415

* Required disclosure under IFRS 15 (not applicable to 2017)

An estimation uncertainty arises due to management's application of the inputs method in recognizing revenue overtime. In doing so, the total cost to satisfy the performance obligation includes a significant estimate by management in its budgets and projected cash flows. The sensitivity of this calculation for the years ended December 31, 2019 and 2018 is detailed below:

For the year ended December 31, 2019		
Budgeted costs to complete	**+10%**	**(10)%**
Revenue	**(951)**	**738**

For the year ended December 31, 2018		
Budgeted costs to complete	+10%	(10)%
Revenue	(265)	323

Contract Balances

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. When applicable, contract assets and liabilities are reported on a net basis at the contract level, depending on the contracts position at the end of each reporting period. Contract liabilities are included within deferred revenue on the Consolidated Statement of Financial Position.

Contract Balances*	**2019 $000s**	2018 $000s
Accounts receivable	**1,699**	151
Deferred revenue—long term	**1,220**	83
Deferred revenue—short term	**5,474**	6,560

* Required disclosure under IFRS 15 (not applicable to 2017)

During the year ended December 31, 2019, $5.0 million of revenue was recognized on deferred revenue outstanding at December 31, 2018.

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, 2019 was $7.6 million. The following table summarizes when the Group expects to recognize the remaining performance obligations as revenue. The Group will recognize revenue associated with these performance obligations as transfer of control occurs:

	Less than 1 Year	**Greater than 1 Year**	**Total**
Remaining Performance Obligation*	**6,344**	**1,220**	**7,564**

* Required disclosure under IFRS 15 (not applicable to 2017)

Cost to Fulfill a Contract

Contract fulfillment costs include direct labor for professional services, payments made to third parties for intellectual property licenses and direct materials. Incremental costs incurred to fulfill our contracts are capitalized if these costs (i) relate directly to the contract, (ii) are expected to generate resources that will be used to satisfy the Company's performance obligation under the contract, and (iii) are expected to be recovered through revenue generated under the contract. The revenue associated with direct labor for professional services is recognized over time; therefore the costs associated are expensed as incurred. The payments made to third parties for intellectual property licenses are capitalized when paid and recognized in line with associated revenue, whether this be over time or at a point in time. As of December 31, 2018, the Group has capitalized $0.8 million of cost to fulfill which are included within Prepaid expenses and other current assets as well as Other non-current assets on the Consolidated Statement of Financial Position. As of December 31, 2019 the remaining unamortized balance was $0.3 million.

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 at least quarterly 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 four reportable segments which are outlined below. Substantially, all of the revenue and profit generating activities of the Group are generated within the U.S. and accordingly, no geographical disclosures are provided.

During the year ended December 31, 2019, the Company deconsolidated three of its subsidiaries which resulted in a change to the composition of its reportable segments. The Company has revised the 2018 and 2017 financial information to conform to the presentation as of and for the period ending December 31, 2019. The change in segments reflects how the Company's Board of Directors reviews the Group's results, allocates resources and assesses performance. This change has been adjusted in both the current and the prior period in the tables below.

Internal

The Internal segment (the "Internal segment"), is advancing a pipeline fuelled by recent discoveries in lymphatics and immune cell trafficking to modulate disease in a tissue-specific manner. These programs leverage the transport and biodistribution of various immune system components for the targeted treatment of diseases with major unmet needs, including cancers, autoimmune diseases, and neuroimmune disorders. The Internal segment is comprised of the technologies that 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, 2019, this segment included PureTech LYT (formerly Ariya Therapeutics) and PureTech LYT 100.

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, 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, 2019, this segment included Alivio Therapeutics, Inc., Commense Inc., Entrega Inc., Follica Incorporated, Sonde Health Inc., 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 (i) no longer holds majority voting control as a shareholder and (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 its reportable segments. As of December 31, 2019, the Non-Controlled Founded Entities segment included resTORbio, Inc. ("resTORbio"), Akili Interactive Labs, Inc. ("Akili"), Vor Biopharma Inc. ("Vor"), Karuna Therapeutics, Inc. ("Karuna"), and Gelesis Inc. ("Gelesis").

The Non-Controlled Founded Entities segment incorporates the operational results of the aforementioned entities 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 following the date of deconsolidation is included in the Parent Company and Other segment (the "Parent Company and Other segment").

Parent Company and Other Segment

The Parent Company and Other segment 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. This segment 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, gain on loss of significant influence, and the share of net loss of associates accounted for using the equity method. As of December 31, 2019, this segment included PureTech Health plc, PureTech Health LLC, PureTech Management, Inc. and PureTech Securities Corp., as well as certain other dormant, inactive and shell entities.

Information About Reportable Segments:

	2019				
	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Consolidated $000s
Consolidated Statements of Comprehensive Loss					
Contract revenue	**6,064**	**2,487**	**—**	**137**	**8,688**
Grant revenue	**15**	**1,104**	**—**	**—**	**1,119**
Total revenue	**6,079**	**3,591**	**—**	**137**	**9,807**
General and administrative expenses	**(2,385)**	**(14,436)**	**(10,439)**	**(32,098)**	**(59,358)**
Research and development expenses	**(25,977)**	**(42,780)**	**(15,555)**	**(1,536)**	**(85,848)**
Total operating expense	**(28,362)**	**(57,216)**	**(25,994)**	**(33,634)**	**(145,206)**
Other income/(expense):					
Gain on deconsolidation	**—**	**—**	**—**	**264,409**	**264,409**
Gain/(loss) on investments held at fair value	**—**	**—**	**—**	**(37,863)**	**(37,863)**
Gain/(loss) on disposal of assets	**17**	**(39)**	**—**	**(60)**	**(82)**
Gain on loss of significant influence	**—**	**—**	**—**	**445,582**	**445,582**
Other income/(expense)	**—**	**166**	**—**	**(45)**	**121**
Total other income/(expense)	**17**	**127**	**—**	**672,023**	**672,167**
Net finance income/(costs)	**—**	**(16,947)**	**(30,141)**	**941**	**(46,147)**
Share of net income/(loss) of associates accounted for using the equity method	**—**	**—**	**—**	**30,791**	**30,791**
Impairment of investment in associate	**—**	**—**	**—**	**(42,938)**	**(42,938)**
Income/(loss) before taxes	**(22,266)**	**(70,445)**	**(56,135)**	**627,320**	**478,474**
Income/(loss) 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	**(21,889)**	**(48,996)**	**(21,873)**	**640,298**	**547,540**
Finance income/(costs)—subsidiary preferred shares	**—**	**107**	**(1,564)**	**(1)**	**(1,458)**
Finance income/(costs)—IFRS 9 fair value accounting	**—**	**(17,294)**	**(28,737)**	**(444)**	**(46,475)**
Share-based payment expense	**(5)**	**(1,678)**	**(3,543)**	**(9,242)**	**(14,468)**
Depreciation of tangible assets	**(376)**	**(1,531)**	**(207)**	**(1,114)**	**(3,228)**
Amortization of ROU assets	**—**	**(1,060)**	**(83)**	**(2,177)**	**(3,320)**
Amortization of intangible assets	**4**	**7**	**(128)**	**—**	**(117)**
Taxation	**—**	**(134)**	**(162)**	**(112,113)**	**(112,409)**
Income/(loss) for the year	**(22,266)**	**(70,579)**	**(56,297)**	**515,207**	**366,065**
Other comprehensive income/(loss)	**—**	**—**	**(10)**	**—**	**(10)**
Total comprehensive income/(loss) for the year	**(22,266)**	**(70,579)**	**(56,307)**	**515,207**	**366,055**
Total comprehensive income/(loss) attributable to:					
Owners of the Company	**(7,001)**	**(54,719)**	**(32,353)**	**515,207**	**421,134**
Non-controlling interests	**(15,265)**	**(15,860)**	**(23,954)**	**—**	**(55,079)**
Consolidated Statements of Financial Position:					
Total assets	**17,614**	**41,612**	**—**	**881,952**	**941,178**
Total liabilities	**12,076**	**132,935**	**—**	**145,768**	**290,779**
Net assets/(liabilities)	**5,538**	**(91,324)**	**—**	**736,184**	**650,399**

	2018				
	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Consolidated $000s
Consolidated Statements of Comprehensive Loss					
Contract revenue	2,110	14,233	—	29	16,371
Grant revenue	86	4,271	20	—	4,377
Total revenue	2,195	18,504	20	29	20,748
General and administrative expenses	(1,498)	(10,212)	(16,385)	(19,270)	(47,365)
Research and development expenses	(8,929)	(36,930)	(29,851)	(1,692)	(77,402)
Total operating expense	(10,427)	(47,142)	(46,236)	(20,962)	(124,768)
Other income/(expense):					
Gain on deconsolidation	—	—	—	41,730	41,730
Gain/(loss) on investments held at fair value	—	—	—	(34,615)	(34,615)
Gain/(loss) on disposal of assets	—	—	—	4,054	4,054
Gain on loss of significant influence	—	—	—	10,287	10,287
Other income/(expense)	—	—	104	(405)	(302)
Other income/(expense)	—	—	104	21,051	21,154
Net finance income/(costs)	—	5,341	5,945	14,631	25,918
Share of net income/(loss) of associate accounted for using the equity method	—	—	—	(11,490)	(11,490)
Income/(loss) before taxes	(8,232)	(23,297)	(40,167)	3,258	(68,438)
(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	(8,210)	(24,344)	(38,761)	(4,234)	(75,549)
Finance income/(costs)—subsidiary preferred shares	—	—	—	(106)	(106)
Finance income/(costs)—IFRS 9 fair value accounting	—	5,341	5,516	11,775	22,631
Share-based payment expense	(11)	(2,465)	(6,262)	(3,899)	(12,637)
Depreciation of tangible assets	(7)	(1,823)	(390)	(256)	(2,476)
Amortization of intangible assets	(4)	(6)	(270)	(22)	(302)
Taxation	—	(381)	(185)	(1,655)	(2,221)
Income/(loss) for the year	(8,454)	(26,206)	(41,239)	5,239	(70,659)
Other comprehensive income/(loss)	—	(214)	—	(26)	(240)
Total comprehensive income/(loss) for the year	(8,454)	(26,420)	(41,239)	5,213	(70,899)
Total comprehensive income/(loss) attributable to:					
Owners of the Company	(1,139)	(15,710)	(32,260)	5,213	(43,894)
Non-controlling interests	(7,315)	(10,710)	(8,980)	—	(27,005)
Consolidated Statements of Financial Position:					
Total assets	2,984	15,603	35,934	387,240	441,761
Total liabilities	13,366	60,992	202,161	(1,731)	274,788
Net (liabilities)/assets	(10,381)	(45,389)	(166,227)	388,970	166,973

	2017				
	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Consolidated $000s
Consolidated Statements of Comprehensive Loss					
Contract revenue	—	625	—	25	650
Grant revenue	—	1,255	630	—	1,885
Total revenue	—	1,880	630	25	2,535
General and administrative expenses	(402)	(10,671)	(17,064)	(18,146)	(46,283)
Research and development expenses	(1,515)	(25,553)	(41,395)	(3,209)	(71,672)
Total operating expense	(1,917)	(36,224)	(58,459)	(21,355)	(117,955)
Other income/(expense):					
Gain on deconsolidation	—	—	—	85,016	85,016
Gain/(loss) on investments held at fair value	—	—	—	57,334	57,334
Other income/(expense)	—	—	—	14	14
Other income/(expense)	—	—	—	142,364	142,364
Net finance income/(costs)	(22)	(10,583)	(74,495)	5,053	(80,047)
Share of net income/(loss) of associate accounted for using the equity method	—	—	—	(17,608)	(17,608)
Income/(loss) before taxes	(1,938)	(44,927)	(132,324)	108,479	(70,711)
(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	(1,938)	(34,691)	(52,275)	114,022	25,118
Finance income/(costs)—subsidiary preferred shares	—	(5,028)	(3,856)	(625)	(9,509)
Finance income/(costs)—IAS 39 fair value accounting	—	(1,652)	(70,078)	(5)	(71,735)
Share-based payment expense	—	(2,722)	(5,283)	(3,844)	(11,849)
Impairment of tangible assets	—	—	—	(637)	(637)
Depreciation of tangible assets	—	(833)	(373)	(411)	(1,617)
Amortization of intangible assets	—	(1)	(459)	(22)	(482)
Taxation	—	85	(57)	(4,411)	(4,383)
Income/(loss) for the year	(1,938)	(44,842)	(132,381)	104,067	(75,094)
Other comprehensive income/(loss)	—	408	—	1,750	2,158
Total comprehensive income/(loss) for the year	(1,938)	(44,434)	(132,381)	105,817	(72,936)
Total comprehensive income/(loss) attributable to:					
Owners of the Company	(454)	(35,098)	(41,635)	105,817	28,630
Non-controlling interests	(1,484)	(9,336)	(90,746)	—	(101,566)

The Parent commences initiatives in theme-based technologies, raises capital for investment in new companies and existing subsidiaries, provides other corporate shared services and support for all subsidiaries and manages the new program creation process.

The activity between the Parent and the reporting segments has been eliminated in consolidation. These elimination amounts are allocated to the subsidiaries.

The proportion of net assets shown above that is attributable to non-controlling interest is disclosed in Note 16. The Non-Controlled Founded Entities consist of the Company’s minority interest holdings.

5. Investments held at fair value

Investments held at fair value include both unlisted and listed securities held by PureTech. These investments, which include Akili, Vor, Karuna, Gelesis (other than the investment in common shares—please refer to Note 6), resTORbio and other insignificant investments, are initially measured at fair value and are subsequently re-measured at fair value at each reporting date. Interests in these investments are accounted for as investments held at fair value, as shown below:

Investments held at fair value	$000's
Balance at January 1, 2018	131,351
Deconsolidation of Akili	70,748
Reclassification of investment to investment in associate	2,297
Gain—comprehensive income/(loss)	(26)
Loss—fair value through profit and loss	(34,615)
Balance at December 31, 2018 and January 1, 2019	169,755
Deconsolidation of subsidiaries (Vor, Karuna and Gelesis (Note 6))	138,571
Reclassification of Karuna investment to investment in associate	(118,006)
Gain on Karuna investment at initial public offering [1]	40,633
Cash purchase of Gelesis convertible notes (please refer to Note 6)	6,480
Cash purchase of Gelesis preferred shares (please refer to Note 6)	8,020
Reclassification of Karuna investment at loss of significant influence	557,243
Sale of resTORbio shares	(9,295)
Loss—fair value through profit and loss[1]	(78,496)
As of December 31, 2019	**714,905**

(1) The net amount of these two items is a loss of $37.9 million which is reported on the line Gain/(loss) on investments held at fair value in the Consolidated Statements of Comprehensive Income/(Loss).

Vor

Vor was founded by PureTech through an initial Series A-1 Preferred Shares financing and raised funds through issuance of convertible notes. As of December 31, 2018, PureTech maintained control of Vor and the subsidiary's financial results were fully consolidated in the Group's consolidated financial statements.

On February 12, 2019, Vor completed a Series A-2 Preferred Shares financing round with PureTech and several new third party investors. The financing provided for the purchase of 62,819,866 shares of Vor Series A-2 Preferred Shares at the purchase price of $0.40 per share.

As a result of the issuance of Series A-2 preferred shares to third-party investors, PureTech's ownership percentage and corresponding voting rights dropped from 79.5 percent to 47.5 percent, and PureTech simultaneously gave up control on Vor's Board of Directors, both of which triggered a loss of control over the entity. As of February 12, 2019, Vor was deconsolidated from the Group's financial statements, resulting in only the profits and losses generated by Vor through the deconsolidation date being included in the Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). While the Company no longer controls Vor, it was concluded that PureTech still had significant influence over Vor by virtue of its large, albeit minority, ownership stake and its continued representation on Vor's Board of Directors. PureTech still has the power to participate in the financial and operating policy decisions of the entity, although it does not control these policies. During the year ended December 31, 2019, the Company recognized a $6.4 million gain on the deconsolidation of Vor, which was recorded to the Gain on the deconsolidation of subsidiary line item in the Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss).

As PureTech did not hold common shares in Vor upon deconsolidation and the preferred shares it holds do not have equity-like features, the voting percentage attributable to common shares is nil. Therefore, PureTech had no

basis to account for its investment in Vor under IAS 28. The preferred shares held by PureTech fall under the guidance of IFRS 9 and will be treated as a financial asset held at fair value through the Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). The fair value of the preferred shares at deconsolidation was $12.0 million.

During the year ended December 31, 2019, the Company recognized a gain of $0.6 million that was recorded on the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). Please refer to Note 16 for information regarding the valuation of these instruments.

Karuna

Karuna was founded by PureTech and raised funding through Preferred Share financings as well as convertible note issuances. As of December 31, 2018, PureTech maintained control of Karuna and Karuna's financial statements were fully consolidated in the Group's consolidated financial statements.

On March 15, 2019, Karuna completed the closing of a Series B Preferred Share financing with PureTech and several new third party investors. The financing provided for the purchase of 5,285,102 shares of Karuna Series B Preferred Shares at a purchase price of $15.14 per share.

As a result of the issuance of the preferred shares to third-party investors, PureTech's ownership percentage and corresponding voting rights related to Karuna dropped from 70.9 percent to 44.3 percent, and PureTech simultaneously lost control over Karuna's Board of Directors, both of which triggered a loss of control over the entity. As of March 15, 2019, Karuna was deconsolidated from the Group's financial statements, resulting in only the profits and losses generated by Karuna through the deconsolidation date being included in the Group's Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). At the date of deconsolidation, PureTech recorded a $102.0 million gain on the deconsolidation of Karuna, which was recorded to the Gain on the deconsolidation of subsidiary line item in the Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). While the Company no longer controls Karuna, it was concluded that PureTech still had significant influence over Karuna by virtue of its large, albeit minority, ownership stake and its continued representation on Karuna's Board of Directors. PureTech still had the power to participate in the financial and operating policy decisions of the entity, although it did not control these policies. As PureTech had significant influence over Karuna, the entity was accounted for as an associate under IAS 28.

Upon the date of deconsolidation, PureTech held both preferred and common shares in Karuna and a warrant issued by Karuna to PureTech. The preferred shares and warrant held by PureTech fell under the guidance of IFRS 9 and were treated as financial assets held at fair value, and all movements to the value of preferred shares held by PureTech were recorded through the Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss), in accordance with IFRS 9. The fair value of the preferred shares and warrant at deconsolidation was $72.4 million. Subsequent to deconsolidation, PureTech purchased an additional $5.0 million of Karuna Series B Preferred shares, for a total fair value immediately following deconsolidation of $77.4 million.

Due to the immaterial investment in common shares and overwhelmingly large losses by Karuna, the common share investment accounted for under the equity method was remeasured to nil immediately following both the deconsolidation and the exercise of the warrant in the first half of 2019.

On June 28, 2019, Karuna priced its IPO. PureTech's ownership percentage and corresponding voting rights related to Karuna dropped from 44.3 percent to 31.6 percent; however, PureTech retained significant influence due to its continued presence on the board and its large, albeit minority, equity stake in the company. Upon completion of the IPO, the Karuna preferred shares held by PureTech converted to common shares. In light of PureTech's common share holdings in Karuna and corresponding voting rights, PureTech had re-established a basis to account for its investment in Karuna under IAS 28. The preferred shares investment held at fair value

was therefore reclassified to investment in associate upon completion of the conversion. During the year ended December 31, 2019 and up to June 28, 2019, the Company recognized a gain of $40.6 million that was recorded on the line item Gain on investments held at fair value within the Consolidated Statement of Comprehensive Income/(Loss) related to the preferred shares that increased in value between the date of deconsolidation and the date of Karuna's IPO.

As of December 2, 2019 it was concluded that the Company no longer exerted significant influence over Karuna owing to the resignation of the PureTech designee from Karuna's board of directors, with PureTech retaining no ability to reappoint representation. Furthermore, PureTech is not involved in any manner, or has any influence, on the management of Karuna, or on any of its decision making processes and has no ability to do so. As such, PureTech lost the power to participate in the financial and operating policy decisions of Karuna. As a result, Karuna is no longer deemed an Associate and does not meet the scope of equity method accounting, resulting in the investment being accounted for as an investment held at fair value. As of December 2, 2019 the Company's interest in Karuna was 28.4 percent. For the period of June 28, 2019 through December 2, 2019, PureTech's investment in Karuna was subject to equity method accounting. In accordance with IAS 28, the Company's investment was adjusted by the share of losses generated by Karuna (weighted average of 31.4 percent based on common stock ownership interest), which resulted in a net loss of associates accounted for using the equity method of $6.3 million during the year ended December 31, 2019.

Upon PureTech's loss of significant influence, the investment in Karuna was reclassified to an investment held at fair value. This change led PureTech to recognize a gain on loss of significant influence of $445.6 million that was recorded to the Consolidated Statement of Income/(Loss) on the line item Gain on loss of significant influence during the year ended December 31, 2019. The investment in Karuna after the recording of the gain on loss of significant influence was $557.2 million, which was reclassified from Investments in associates to Investments held at fair value. Additionally, from December 2, 2019 PureTech recorded a $0.7 million loss on the line item Gain/(loss) on investments held at fair value within the Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss) for the year ended December 31, 2019.

Akili

On May 8, 2018, Akili completed the first closing of a Series C Preferred Stock financing in which PureTech Health did not invest. As a result of the issuance of the preferred shares to third-party investors, following the first close of the Series C financing, PureTech's ownership percentage and corresponding voting rights related to Akili dropped from 61.8 percent to 41.9 percent, triggering a loss of control over the entity. As of May 2018, Akili was deconsolidated from the Group's financial statements, resulting in only the profits and losses generated by Akili through May 2018 being included in the Group's Consolidated Statements of Comprehensive Income/(Loss). As a result of the deconsolidation, PureTech recognized a $41.7 million gain on the deconsolidation during the year ended December 31, 2018, which was recorded to the Consolidated Statement of Comprehensive Income/(Loss) on the line item Gain on the deconsolidation of subsidiary.

As PureTech did not hold common shares in Akili upon deconsolidation and the preferred shares it holds do not have equity-like features, the voting percentage attributable to common shares is nil. Therefore, PureTech had no basis to account for its investment in Akili under IAS 28. The preferred shares held by PureTech Health fall under the guidance of IFRS 9 and will be treated as a financial asset held at fair value and all movements to the value of PureTech's share in the preferred shares will be recorded through the Consolidated Statements of Comprehensive Income/(Loss), in accordance with IFRS 9. During the year ended December 31, 2019 and 2018, the Company recognized a gain of $11.5 million and $12.7 million, respectively, that was recorded on the line item Loss on investments held at fair value within the Consolidated Statements of Comprehensive Income/(Loss). Please refer to Note 16 for information regarding the valuation of these instruments.

resTORbio

On January 26, 2018, resTORbio, Inc., closed its initial public offering. Prior to the resTORbio IPO, PureTech Health recorded a loss of $14.3 million during the year ended December 31, 2018 to the Consolidated Statement of Income/(Loss) within Gain/(Loss) on investments held at Fair Value to adjust the fair value related to its resTORbio Series A Preferred Share investment. Upon completion of the public offering, the resTORbio Series A Preferred Shares held by PureTech Health converted to common shares. In light of PureTech's common shares holdings in resTORbio and corresponding voting rights, the preferred shares investment held at fair value was reclassified to investment in associate upon the completion of the conversion.

For the period of January 1, 2018 through November 5, 2018, PureTech's investment in resTORbio was subject to equity method accounting. In accordance with IAS 28, PureTech's investment was adjusted by the share of profits and losses generated by resTORbio (34.9 percent based on common stock ownership interest), which resulted in a net loss of associates of $11.5 million accounted for using the equity method which was recorded to the Consolidated Statement of Income/(Loss) on the line item Share of net loss of associates during the year ended December 31, 2018.

As of November 6, 2018, it was that concluded the Company no longer exerted significant influence over resTORbio, as PureTech lost the power to participate in the financial and operating policy decisions of resTORbio. As a result, resTORbio is no longer deemed an Associate and does not meet the scope of equity method accounting, resulting in the investment being accounted for as an investment held at fair value. For the period of January 1, 2018 through November 5, 2018, PureTech's investment in resTORbio was subject to equity method accounting. In accordance with IAS 28, PureTech's investment was adjusted by the share of profits and losses generated by resTORbio, that resulted a net loss of associates accounted for using the equity method of $11.5 million that was recorded to the Consolidated Statement of Income/(Loss) on the line item Share of net loss of associates accounted for using the equity method during the year ended December 31, 2018. This change led PureTech to recognize a gain on loss of significant influence of $10.3 million that was recorded to the Consolidated Statement of Income/(Loss) on the line item Gain on loss of significant influence during the year ended December 31, 2018. Additionally, PureTech recorded a loss of $33.0 million for the adjustment to fair value in connection with its investment in resTORbio to the Consolidated Statement of Income/(Loss) on the line item Loss on financial asset during the year ended December 31, 2018.

On November 15, 2019, resTORbio announced that top line data from the Protector 1 Phase 3 study evaluating the safety and efficacy of RTB101 in preventing clinically symptomatic respiratory illness in adults age 65 and older, did not meet its primary endpoint and the Company has stopped the development of RTB101 in this indication. As a result of ceasing the development of RTB101, resTORbio's share price witnessed a decline in price. In November and December 2019, PureTech Health sold 7,680,700 common shares of resTORbio for aggregate proceeds of $9.3 million. Immediately following the sale of common shares, PureTech Health held 2,119,696 common shares, or 5.8 percent, of resTORbio. Additionally, PureTech recorded a loss of $71.9 million for the adjustment to fair value in connection with its investment in resTORbio to the Consolidated Statement of Income/(Loss) on the line item Loss on financial asset during the year ended December 31, 2019.

Gain on deconsolidation

The following table summarizes the gain on deconsolidation recognized by the Company:

Year ended December 31,	**2019 $000s**	2018 $000s	2017 $000s
Gain on deconsolidation of Akili	**—**	41,730	—
Gain on deconsolidation of Vor	**6,357**	—	—
Gain on deconsolidation of Karuna	**102,038**	—	—
Gain on deconsolidation of resTORbio	**—**	—	85,016
Gain on deconsolidation of Gelesis [Note 6]	**156,014**	—	—
Total gain on deconsolidation	**264,409**	41,730	85,016

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 December 31, 2018, PureTech maintained control of Gelesis and the subsidiary's financial results were fully consolidated in the Group's consolidated financial statements.

On July 1, 2019, the Gelesis Board of Directors was restructured, resulting in two of the three PureTech representatives resigning from the Board with PureTech retaining no ability to reappoint directors to these board seats. As a result of this restructuring, PureTech lost control over Gelesis' Board of Directors, which triggered a loss of control over the entity. At the deconsolidation date, PureTech held a 25.2% voting interest in Gelesis. As of July 1, 2019, Gelesis was deconsolidated from the Group's financial statements, resulting in only the profits and losses generated by Gelesis through the deconsolidation date being included in the Group's Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). At the date of deconsolidation, PureTech recorded a $156.0 million gain on the deconsolidation of Gelesis, which was recorded to the Gain on the deconsolidation of subsidiary line item in the Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). While the Company no longer controls Gelesis, it was concluded that PureTech still has significant influence over Gelesis by virtue of its large, albeit minority, ownership stake and its continued representation on Gelesis' Board of Directors. PureTech still has the power to participate in the financial and operating policy decisions of the entity, although it does not control these policies. As PureTech is able to demonstrate that it has significant influence over Gelesis, the entity will be accounted for as an associate under IAS 28, starting at the date of deconsolidation.

Upon the date of deconsolidation, PureTech held shares of preferred shares and common shares of Gelesis and a warrant issued by Gelesis to PureTech. PureTech's investment in common shares of Gelesis is subject to equity method accounting with an initial investment of $16.4 million. In accordance with IAS 28, PureTech's investment was adjusted by the share of profits and losses generated by Gelesis subsequent to the date of deconsolidation. PureTech recognized its share in the net profit of Gelesis (weighted average of 49.8% based on common stock ownership interest) for the period from deconsolidation date until December 31, 2019 in the amount of $37.1 million.

The preferred shares and warrant held by PureTech fall under the guidance of IFRS 9 and will be treated as financial assets held at fair value and all movements to the value of PureTech's share in the preferred shares will be recorded through the Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss), in accordance with IFRS 9. The fair value of the preferred shares and warrant at deconsolidation was $49.2 million.

During the year ended December 31, 2019, the Company recognized a loss of $18.7 million related to the preferred shares and warrants that was recorded on the line item Gain/(loss) on investments held at fair value

within the Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). This loss occurred as a result of the Gelesis Series 3 Growth financing, which was executed with terms that resulted in a decrease in fair value across all other classes of preferred shares.

On August 12, 2019, Gelesis issued a convertible promissory note to the Company in the amount of $2 million. On October 7, 2019, Gelesis issued an amended and restated convertible note (the "Gelesis Note") to the Company in the principal amount of up to $6.5 million. The Gelesis Note was payable in installments, with $2.0 million of the note drawn down upon execution of the original note in August 2019 and an additional $3.3 million and $1.2 million drawn down on October 7, 2019 and November 5, 2019, respectively. The Gelesis Note was convertible upon the occurrence of Gelesis' next qualified equity financing, or at the demand of the Company at any date after December 31, 2019. The Gelesis Note falls under the guidance of IFRS 9 and will be treated as a financial asset held at fair and all movements to the value of the note will be recorded through the Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss).

On December 5, 2019, Gelesis closed its Series 3 Growth Preferred Stock financing, at which point all outstanding principal and interest under the Gelesis Note converted into shares of Series 3 Growth Preferred Stock. In addition to the shares issued upon conversion of the Gelesis Note, PureTech purchased $8 million of Series 3 Growth Preferred Stock in the December financing.

Impairment Loss

Following the issuance of the Gelesis Series 3 Preferred Shares at a higher valuation than the previous round with some favorable liquidation provisions primarily to PureTech and also to the other Series 3 preferred share investors, which resulted in adjustments to the fair values of other preferred shares, warrant classes and Gelesis common stock, the Company assessed the investment in common shares held in Gelesis for impairment. Management compared the recoverable amount of the investment to its carrying amount as of December 31, 2019, which resulted in an impairment loss to the Investment in Gelesis. The recoverable amount was estimated based on the fair value of the Gelesis common shares held by PureTech, which are considered to be within Level 3 of the fair value hierarchy. The costs of disposal are immaterial for the calculation of Gelesis investment's recoverable amount.

During the year ended December 31, 2019, the total fair value of common shares was determined utilizing a hybrid valuation approach with significant unobservable inputs within the PureTech valuation framework (refer to Note 16). The multi-scenario hybrid valuation approach utilized the recent transaction method within an option pricing framework and an IPO scenario within a probability-weighted-expected return framework to determine the value allocation for the common share class of Gelesis. The fair value of the common shares was determined as the calculated business enterprise value allocated to the outstanding common shares treated as call options within the OPM or the value of common shares within the PWERM. The PWERM maintained a 75.0 percent probability of occurrence while the OPM maintained a 25.0 percent probability of occurrence. The probability weighted term to exit was 1.57 years. The discount rate utilized was 20.0 percent while the risk-free rate and volatility utilized were 1.62 percent and 56.0 percent, respectively.

The impairment loss amounted to $42.9 million and was recorded to Impairment of investment in associate within the Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss) for the year ended December 31, 2019. As of December 31, 2019 the investment in Gelesis was $10.6 million, which is equal to the fair value of the common shares held by PureTech.

The following table summarizes the activity related to the investment in associates balance for the years ended December 31, 2019 and 2018.

Investment in Associates	$000's
At January 1, 2018	—
Investment upon initial public offering of resTORbio	115,210
Cash investment in Associate	3,500
Share of net loss of resTORbio accounted for using the equity method	(11,490)
Gain on loss of significant influence of resTORbio	10,287
Reclassification of resTORbio investment upon loss of significant influence	(117,507)
As of December 31, 2018 and January 1, 2019	—
Reclassification of Karuna investment at initial public offering	118,006
Investment in Gelesis upon deconsolidation	16,444
Share of net loss of Karuna accounted for using the equity method	(6,345)
Share of net profit of Gelesis accounted for using the equity method	37,136
Impairment of investment in Gelesis	(42,938)
Reclassification of investment upon loss of significant influence	(111,661)
As of December 31, 2019	**10,642**

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. The information for the year ended December 31, 2019 includes the results of Gelesis only for the period July 1, 2019 to December 31, 2019, as Gelesis was consolidated prior to this period.

Year ended December 31,	2019 $000s
Percentage ownership interest—common stock	**49.3%**
Non-current assets	**369,336**
Current assets	**40,079**
Non-current liabilities	**82,406**
Current liabilities	**216,852**
Net assets (100%)	**110,157**
Group's share of net assets (49.3%)	**54,340**
Share in associate's equity settled share based payments	**(760)**
Investment before impairment	**53,580**
Impairment of investment in associate	**(42,938)**
Investment in associate	**10,642**
Revenue	**—**
Income from continuing operations (100%)	**74,573**
Total comprehensive income (100%)	**74,573**
Group's share of total comprehensive income (49.8%)	**37,136**

7. Operating Expenses

Total operating expenses were as follows:

For the years ending December 31,	**2019 $000s**	2018 $000s	2017 $000s
General and administrative	**59,358**	47,365	46,283
Research and development	**85,848**	77,402	71,672
Total operating expenses	**145,206**	124,767	117,955

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

For the years ending December 31,	**2019**	2018	2017
General and administrative	**39**	55	56
Research and development	**90**	90	82
Total	**129**	145	138

The aggregate payroll costs of these persons were as follows:

For the years ending December 31,	**2019 $000s**	2018 $000s	2017 $000s
General and administrative	**24,468**	22,939	22,348
Research and development	**20,682**	20,109	18,956
Total	**45,150**	43,048	41,304

Detailed operating expenses were as follows:

For the years ending December 31,	**2019 $000s**	2018 $000s	2017 $000s
Salaries and wages	**27,703**	27,274	26,244
Healthcare benefits	**1,511**	1,465	1,699
Payroll taxes	**1,468**	1,672	1,512
Share-based payments	**14,468**	12,637	11,849
Total payroll costs	**45,150**	43,048	41,304
Other selling, general and administrative expenses	**34,890**	24,426	23,935
Other research and development expenses	**65,166**	57,293	52,716
Total other operating expenses	**100,056**	81,719	76,651
Total operating expenses	**145,206**	124,767	117,955

Auditors remuneration:

For the years ended December 31,	**2019 $000s**	2018 $000s	2017 $000s
Audit of these financial statements	**870**	652	647
Audit of the financial statements of subsidiaries	**290**	200	254
Audit-related assurance services	**163**	162	132
Non-audit related services	**778**	159	—
Taxation	**—**	—	8
Total	**2,101**	1,173	1,041

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 restricted share unit awards in which the expense is recognized based on the grant date fair value of these awards.

Share-based Payment Expense

The Group share-based payment expense for the years ended December 31, 2019, 2018 and 2017, 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):

For the years ended December 31,	**2019 $000s**	2018 $000s	2017 $000s
General and administrative	**10,677**	5,293	7,625
Research and development	**3,791**	7,344	4,224
Total	**14,468**	12,637	11,849

There was no income tax benefit recognized for share-based payment arrangements during the periods presented due to existence of operating losses for all issuing entities.

In conjunction with the acquisition of the remaining minority interests of Ariya Therapeutics Inc. ("Ariya") (Please refer to Note 18), PureTech Health exchanged Ayria stock options previously granted to the co-inventors and advisors of Ariya with stock options to purchase 2,147,295 of the Company's ordinary shares under the PureTech Health Performance Share Plan. As this was an exchange of awards within the consolidated group, whereby the Company's stock options were replacing Ariya's stock options, the exchange is accounted for as a modification of the original award and the incremental fair value on the date of the replacement is amortized over the remaining vesting period of the awards.

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 equity settled and expire 10 years from the grant date. As of the years ended December 31, 2019, 2018 and 2017, the Company had issued share-based awards to purchase an aggregate of 5,409,751, 5,657,602 and 6,448,226 shares, respectively, under this plan.

RSUs

During the twelve months ended December 31, 2019, 2018 and 2017, the Company issued 1,775, 568, 2,860,782 and 4,648,084 performance based RSUs under the PSP, respectively.

Each RSU entitles the holder to one ordinary share on vesting and the RSU awards are based on a cliff vesting schedule over a three-year requisite service period in which the Company recognizes compensation expense on a

graded basis 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 RSUs is subject to the satisfaction of performance conditions.

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 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 conditions attached to the 2019 RSU awards are based on the achievement of total shareholder return ("TSR"), with 50.0 percent of the shares under award vesting based on the achievement of absolute TSR targets, 12.5 percent of the shares under the award vesting based on TSR as compared to the FTSE 250 Index, 12.5 percent of the shares under the award vesting based on TSR as compared to the MSCI Europe Health Care Index, and 25.0 percent of the shares under the award vesting 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.

The Company incurred share-based payment expenses for performance based RSUs of $2.2 million, $2.3 million and $1.5 million for the twelve months ended December 31, 2019, 2018 and 2017, respectively.

Stock Options

During the twelve months ended December 31, 2019, 2018 and 2017, the Company granted 3,634,183, 2,796,820 and 1,800,142 stock option awards under the PSP, respectively.

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,	**2019**	2018	2017
Expected volatility	**35.68%**	44.18%	28.92%
Expected terms (in years)	**5.81**	6.08	5.84
Risk-free interest rate	**1.85%**	2.79%	1.96%
Expected dividend yield	**—**	—	—
Grant date fair value	**$ 2.23**	$ 0.96	$ 0.43
Share price at grant date	**$ 2.57**	$ 2.05	$ 1.45

The Company incurred share-based payment expense for the stock options of $9.2 million, $1.4 million and $0.6 million for the twelve months ended December 31, 2019, 2018 and 2017, respectively. The significant increase for the year ended December 31, 2019, as compared to the year ended December 31, 2018, is largely attributable to the amortization of share based payments awarded to the Ariya founders.

As of December 31, 2019, 4,229,793 incentive options are exercisable with a weighted-average exercise price of $1.42. Exercise prices ranged from $0.01 to $4.62.

PureTech LLC Incentive Stock Issuance

In May 2015 and August 2014, the directors of PureTech Health LLC approved the issuance of shares to the management team, directors and advisors of PureTech Health LLC, subject to vesting restrictions. The share-based awards granted under the 2016 PureTech LLC Incentive Stock Issuance Plan are equity settled and expire 10 years from the grant date. No additional shares will be granted under this compensation arrangement. The fair value of the shares awarded was estimated as of the date of grant.

The Company incurred an expense of nil, $0.2 million, and $1.7 million in share-based payment expense for the twelve months ended December 31, 2019, 2018 and 2017, respectively, related to PureTech Health LLC incentive compensation.

As of December 31, 2018, all shares related to the pre-IPO incentive compensation plan had fully vested.

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, 2019	**Granted During the Year**	**Exercised During the Year**	**Expired During the Year**	**Forfeited During the Year**	**Outstanding as of December 31, 2019**
Gelesis	**3,681,732**	**—**	**—**	**(110,386)**	**(3,571,346)**[1]	**—**
Alivio	**2,393,750**	**1,329,494**	**(3,125)**	**—**	**(21,875)**	**3,698,244**
PureTech LYT	**2,180,000**	**—**	**—**	**—**	**(2,180,000)**[2]	**—**
Commense	**540,416**	**—**	**—**	**—**	**(540,416)**	**—**
Entrega	**914,000**	**58,000**	**—**	**—**	**—**	**972,000**
Follica	**1,229,452**	**79,588**	**—**	**—**	**—**	**1,309,040**
Karuna	**1,949,927**	**—**	**—**	**—**	**(1,949,927)**[1]	**—**
Sonde	**22,500**	**1,806,504**	**—**	**—**	**—**	**1,829,004**
Vedanta	**1,373,750**	**154,193**	**—**	**—**	**(77,843)**	**1,450,100**

1. These shares represent the options outstanding on the date of deconsolidation of Karuna and Gelesis.
2. These shares represent the options outstanding on the date of exchange to PureTech stock options.

	Outstanding as of January 1, 2018	Granted During the Year	Exercised During the Year	Expired During the Year	Forfeited During the Year	Outstanding as of December 31, 2018
Gelesis	2,728,232	953,500	—	—	—	3,681,732
Alivio	2,393,750	—	—	—	—	2,393,750
Akili	2,385,355	—	—	—	(2,385,355)[1]	—
PureTech LYT	—	2,180,000	—	—	—	2,180,000
Commense	418,750	121,666	—	—	—	540,416
Entrega	867,750	60,000	—	(3,750)	(10,000)	914,000
Follica	1,271,302	—	—	(41,850)	—	1,229,452
Karuna	855,427	1,111,000	—	(4,125)	(12,375)	1,949,927
Knode	32,500	—	—	(32,500)	—	—
Sonde	35,000	—	—	(6,250)	(6,250)	22,500
Tal	1,663,806	—	—	(30,250)	(2,750)	1,630,806
The Sync Project	1,080,000	—	—	—	(1,080,000)	—
Vedanta	1,194,014	278,786	—	(24,800)	(74,250)	1,373,750

1. These shares represent the options outstanding on the date of Akili's deconsolidation.

	Outstanding as of January 1, 2017	Granted During the Year	Exercised During the Year	Expired During the Year	Forfeited During the Year	Outstanding as of December 31, 2017
Gelesis	2,489,031	297,500	—	—	(58,299)	2,728,232
Alivio	—	2,393,750	—	—	—	2,393,750
Akili	1,599,423	795,432	(9,500)	—	—	2,385,355
PureTech LYT	—	—	—	—	—	—
Commense	400,000	18,750	—	—	—	418,750
Entrega	821,500	52,500	—	—	(6,250)	867,750
Follica	449,505	1,119,283	—	(190,059)	(107,427)	1,271,302
Karuna	742,677	112,750	—	—	—	855,427
Knode	75,000	—	—	(45,000)	2,500	32,500
Sonde	—	57,500	—	(4,687)	(17,813)	35,000
Tal	1,763,806	—	—	(75,000)	(25,000)	1,663,806
The Sync Project	850,000	230,000	—	—	—	1,080,000
Vedanta	882,250	359,764	—	(11,438)	(36,562)	1,194,014

The weighted average exercise prices for the options outstanding as of January 1, 2019 were as follows:

Outstanding at January 1, 2019	Number of options	Weighted-average exercise price $
Alivio	**2,393,750**	**0.03**
Entrega	**914,000**	**0.71**
Follica	**1,229,452**	**0.92**
Sonde	**22,500**	**0.12**
Vedanta	**1,373,750**	**9.30**

The weighted average exercise prices for the options granted for the years ended December 31, 2019, 2018 and 2017 were as follows:

For the years ended December 31,	2019 $	2018 $	2017 $
Akili	**—**	—	2.55
Alivio	**0.49**	—	0.03
PureTech LYT	**—**	0.03	—
Commense	**—**	1.34	0.92
Entrega	**—**	1.95	2.36
Follica	**0.03**	—	0.93
Karuna	**—**	9.42	7.08
Sonde	**0.20**	—	0.13
Sync	**—**	—	0.07
Vedanta	**19.13**	14.66	12.88

The weighted average exercise prices for options forfeited during the year ended December 31, 2019 were as follows:

Forfeited during the year ended December 31, 2019	Number of options	Weighted-average exercise price $
Gelesis	**3,571,346**	**7.48**
Alivio	**21,875**	**0.49**
PureTech LYT	**2,180,000**	**0.01**
Commense	**540,416**	**0.13**
Karuna	**1,949,927**	**5.10**
Vedanta	**77,843**	**1.31**

The weighted average exercise prices for options exercisable as of December 31, 2019 were as follows:

Exercisable at December 31, 2019	Number of Options	Weighted-average exercise price $	Exercise Price Range
Alivio	**1,419,750**	**$ 0.04**	**$ 0.03 - $0.49**
Entrega	**882,062**	**$ 0.60**	**$ 0.03 - $2.36**
Follica	**1,118,635**	**$ 0.89**	**$ 0.03 - $1.40**
Sonde	**191,405**	**$ 0.18**	**$ 0.13 - $0.20**
Vedanta	**1,081,005**	**$ 7.05**	**$ 0.02 - $19.94**

Significant Subsidiary Plans

Vedanta 2010 Stock Incentive Plan

In 2010, the Board of Directors for Vedanta approved the 2010 Stock Incentive Plan (the “Vedanta Plan”). Through subsequent amendments, as of December 31, 2019, it allowed for the issuance of 2,145,867 share-based compensation awards through incentive share options, nonqualified share options, and restricted shares to employees, directors, and nonemployees providing services to Vedanta. At December 31, 2019, 595,642 shares remained available for issuance under the Vedanta Plan.

The options granted under Vedanta 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 Vedanta 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	**2019**	2018	2017
Expected award life (in years)	**5.86-6.07**	6.03-6.16	5.66-10.00
Expected award price volatility	**89.24% - 95.46%**	91.60% - 92.56%	66.0% - 76.0%
Risk free interest rate	**1.73% - 1.88%**	2.65% - 2.78%	1.13% - 2.37%
Expected dividend yield	**—**	—	—
Grant date fair value	**$14.12 - $15.61**	$11.21 - $11.26	$6.76 - $9.01
Share price at grant date	**$18.71 - $19.94**	$14.66	$12.88

Vedanta incurred share-based compensation expense of $1.7 million, $2.1 million and $2.4 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Gelesis 2016 Stock Incentive Plan

In September 2016, the Directors of Gelesis approved the 2016 Stock Incentive Plan (the "2016 Gelesis Plan") which provides for the grant of incentive stock options, nonqualified stock options, and restricted stock to employees, directors, and nonemployees providing services to Gelesis. At June 30, 2019, 329,559 shares remained available for issuance under the Gelesis Plan.

The options granted under the 2016 Gelesis 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 Gelesis Board of Directors.

Options granted under the 2016 Gelesis 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 weighted average assumptions:

Assumption/Input	**2019**	2018	2017
Expected award life (in years)	**—**	6.22	5.68
Expected award price volatility	**— %**	64.58%	67.99%
Risk free interest rate	**— %**	2.79%	1.80%
Expected dividend yield	**—**	—	—
Grant date fair value	**$—**	$ 7.84	$ 7.72
Share price at grant date	**$—**	$12.82	$11.56

Gelesis used an average historical share price volatility based on an analysis of reported data for a peer group of comparable companies which were selected based upon industry similarities. As there is not sufficient historical share exercise data to calculate the expected term of the options, Gelesis elected to use the "simplified" method for all options granted at the money to value share option grants. Under this approach, the weighted average expected life is presumed to be the average of the vesting term and the contractual term of the option.

Gelesis incurred share-based compensation expense of $2.4 million for the six month period prior to deconsolidation ended June 30, 2019 and $3.9 million and $4.2 million for the years ended December 31, 2018 and 2017.

Karuna Pharmaceuticals, Inc. 2009 Stock Incentive Plan

In 2009, the Board of Directors for Karuna Pharmaceuticals, Inc. approved the 2009 Stock Incentive Plan (the "Karuna 2009 Plan"). It allowed for the issuance of 1,000,000 share-based compensation awards through stock options, restricted stock units and other stock-based awards under the Karuna 2009 Plan to employees, officers, directors, consultants and advisors of Karuna. At March 15, 2019, 106,865 shares remained available for issuance under the Karuna 2009 Plan.

The options granted under the Karuna 2009 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 Karuna's Board of Directors.

Options granted under the Karuna 2009 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 weighted average assumptions:

Assumption/Input	**2019**	2018	2017
Expected award life (in years)	**—**	5.67	6.07
Expected award price volatility	**— %**	49.66%	50.28%
Risk free interest rate	**— %**	2.86%	1.95%
Expected dividend yield	**—**	—	—
Grant date fair value	**$—**	$ 1.69	$ 3.51
Share price at grant date	**$—**	$ 9.40	$ 7.08

Karuna incurred share-based compensation expense of $1.2 million for the period prior to deconsolidation ended March 15, 2019 and $1.9 million and $0.4 million for the years ended December 31, 2018 and 2017.

Other Plans

The stock compensation expense under plans at other subsidiaries of the Group not including Gelesis, Vedanta and Karuna was $0.01 million, $0.8 million and $1.0 million for the years ended December 31, 2019, 2018 and 2017, respectively. The negative expense incurred during the year ended December 31, 2019 was largely attributable to Commense forfeitures.

9. Finance Cost, net

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

For the year ended December 31,	**2019 $000s**	2018 $000s	2017 $000s
Finance income			
Interest from financial assets not at fair value through profit or loss	**4,362**	3,358	1,750
Total finance income	**4,362**	3,358	1,750
Finance costs			
Contractual interest expense on convertible notes	**(149)**	(388)	(400)
Interest expense on other borrowings	**—**	(4)	(4)
Non cash interest expense on convertible notes	**—**	—	(300)
Interest Expense	**(2,495)**	—	—
Gain on forgiveness of debt	**—**	289	—
Loss on extinguishment of derivatives	**—**	—	(18)
Gain/(loss) on foreign currency exchange	**68**	137	169
Total finance income/(costs)—contractual	**(2,576)**	34	(553)
Gain/(loss) from change in fair value of warrant liability	**(11,890)**	82	1,847
Gain/(loss) from change in fair value of preferred shares and convertible debt	**(34,585)**	22,549	(73,582)
Total finance income/(costs)—fair value accounting	**(46,475)**	22,631	(71,735)
Total finance income/(costs)—subsidiary preferred shares	**(1,458)**	(106)	(9,509)
Total finance income/(costs)	**(47,933)**	22,525	(81,797)
Finance income/(costs), net	**(46,147)**	25,917	(80,047)

10. Earnings/(Loss) per Share

The basic and diluted loss per share has been calculated by dividing the income/(loss) for the period attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the years ended December 31, 2019, 2018 and 2017, respectively.

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

	2019		2018		2017	
	Basic $000s	**Diluted $000s**	Basic $000s	Diluted $000s	Basic $000s	Diluted $000s
Income/(loss) for the year, attributable to the owners of the Company	**421,144**	**421,144**	(43,654)	(43,654)	26,472	26,472
Income/(loss) attributable to ordinary shareholders	**421,144**	**421,144**	(43,654)	(43,654)	26,472	26,472

Weighted-Average Number of Ordinary Shares:

	2019		2018		2017	
	Basic	**Diluted**	Basic	Diluted	Basic	Diluted
Issued ordinary shares at January 1,	**282,493,867**	**282,493,867**	236,897,579	236,897,579	232,712,542	232,712,542
Effect of shares issued	**932,600**	**932,600**	36,950,688	36,950,688	2,819,846	2,819,846
Effect of dilutive shares	**—**	**8,355,866**	—	—	—	3,388,920
Weighted average number of ordinary shareholders at December 31,	**283,426,467**	**291,782,333**	273,848,267	273,848,267	235,532,388	238,921,308

Earnings/(Loss) per Share:

	2019		2018		2017	
	Basic $	**Diluted $**	Basic $	Diluted $	Basic $	Diluted $
Basic and diluted earnings/(loss) per share	**1.49**	**1.44**	(0.16)	(0.16)	0.11	0.11

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, 2018	6,082	469	1,214	2,899	74	10,738
Additions, net of transfers	1,586	27	477	2,070	171	4,331
Disposals	(261)	(8)	(260)	(27)	—	(556)
Exchange differences	(101)	—	—	(18)	(6)	(125)
Balance as of December 31, 2018	7,306	488	1,431	4,924	239	14,388
Additions, net of transfers	3,374	1,126	175	13,494	4,649	22,818
Disposals	(183)	(168)	(9)	(45)	—	(405)
Deconsolidation of subsidiaries	(3,076)	—	(137)	(754)	(4,190)	(8,157)
Reclassifications	(25)	6	48	36	(76)	(11)
Exchange differences	(11)	—	—	1	24	14
Balance as of December 31, 2019	**7,385**	**1,452**	**1,508**	**17,656**	**646**	**28,647**

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, 2018	(2,360)	(175)	(534)	(807)	—	(3,876)
Depreciation	(1,032)	(60)	(296)	(1,088)	—	(2,476)
Disposals	114	2	74	20	—	210
Exchange differences	56	—	—	21	—	77
Balance as of December 31, 2018	(3,222)	(233)	(756)	(1,854)	—	(6,065)
Depreciation	(1,328)	(144)	(312)	(1,448)	—	(3,232)
Disposals	102	138	5	20	—	265
Deconsolidation of subsidiaries	1,457	—	53	319	—	1,829
Reclassifications	15	—	(20)	6	—	1
Exchange differences	8	—	—	2	—	10
Balance as of December 31, 2019	**(2,968)**	**(239)**	**(1,030)**	**(2,955)**	**—**	**(7,192)**

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, 2018	4,084	255	675	3,070	239	8,323
Balance as of December 31, 2019	**4,417**	**1,213**	**478**	**14,701**	**646**	**21,455**

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 $3.2 million, $2.5 million and $2.2 million for the years ended December 31, 2019, 2018 and 2017, 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 cash and non-cash consideration transferred. Information regarding the cost and accumulated amortization of intangible assets is as follows:

Cost	Licenses $000s
Balance as of January 1, 2018	5,018
Additions	125
Deconsolidation of subsidiary	(76)
Balance as of December 31, 2018	5,067
Additions	400
Deconsolidation of subsidiaries	(4,842)
Balance as of December 31, 2019	**625**

Accumulated amortization	Licenses $000s
Balance as of January 1, 2018	(1,709)
Amortization	(302)
Deconsolidation of subsidiary	24
Balance as of December 31, 2018	(1,987)
Amortization	(117)
Deconsolidation of subsidiary	2,104
Balance as of December 31, 2019	—

Intangible assets, net	Licenses $000s
Balance as of December 31, 2018	3,080
Balance as of December 31, 2019	**625**

These 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. The Company tested such assets for impairment as of balance sheet date and concluded that none were impaired. During the year ended December 31, 2019, Vor, Karuna and Gelesis were deconsolidated and as such $2.7 million in net assets were derecognized.

Amortization expense is included in the Research and development expenses line item in the accompanying Consolidated Statements of Comprehensive Income/(Loss). Amortization expense, recorded using the straight-line method, was approximately $0.1 million, $0.3 million and $0.5 million for the years ended December 31, 2019, 2018 and 2017 respectively.

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,	**2019 $000s**	2018 $000s
Restricted cash	**2,124**	2,199
Total other financial assets	**2,124**	2,199

14. Equity

Total equity for PureTech as of December 31, 2019 and 2018 was as follows:

Equity	**December 31, 2019 $000s**	December 31, 2018 **$000s**
Share capital, £0.01 par value, issued and paid 285,370,619 and 282,493,867 as of December 31, 2019 and 2018, respectively	**5,408**	5,375
Merger Reserve	**138,506**	138,506
Share premium	**287,962**	278,385
Translation reserve	**—**	10
Other reserves	**(18,282)**	20,923
Retained earnings/(accumulated deficit)	**254,444**	(167,692)
Equity attributable to owners of the Group	**668,037**	275,507
Non-controlling interests	**(17,640)**	(108,535)
Total equity	**650,397**	166,972

Changes in share capital and share premium relate primarily to acquisition of Ariya non-controlling interest and 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).

15. Subsidiary Preferred Shares

IFRS 9 addresses the classification, measurement, and recognition of financial liabilities. Preferred shares issued by subsidiaries and affiliates often contain redemption and conversion features that are assessed under IFRS 9 in conjunction with the host preferred share instrument.

The subsidiary 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, a variable number of shares will be issued. Because the possible conversion of the preferred shares is outside of the control of the Group, these have been classified as liabilities on the balance sheet and subsequently remeasured at fair value through the profit and loss.

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

The Group recognizes 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 and derivatives converted into preferred shares. Preferred shares are not allocated a proportion of the subsidiary losses.

The balance as of December 31, 2019 and 2018 represents the fair value of the instruments for all subsidiary preferred shares except for Tal, which represents the host instrument at amortized cost. The following summarizes the subsidiary preferred share balance:

As of December 31,	**2019 $000s**	2018 $000s
Entrega	**3,222**	2,780
Follica	**11,663**	60
Gelesis	**—**	140,192
Karuna	**—**	32,342
Sonde	**7,212**	—
The Sync Project	**—**	109
Tal	**—**	113
Vedanta Biosciences	**78,892**	41,923
Total subsidiary preferred share balance	**100,989**	217,519

As of December 31, 2019, the total subsidiary preferred share balance decreased owing to the deconsolidation of Karuna and Gelesis.

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 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, 2019 and 2018, 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,	**2019 $000s**	2018 $000s
Entrega	**2,216**	2,216
Follica	**6,405**	1,895
Gelesis	**—**	77,301
Karuna	**—**	24,343
Sonde	**7,250**	—
Sync	**—**	109
Tal	**—**	113
Vedanta Biosciences	**77,161**	41,923
Total minimum liquidation preference	**93,032**	147,900

As of December 31, 2018, Tal ceased operations and was in the process of liquidated. Therefore, the liquidation preference shown above equals the cash on hand, as this will be paid out to existing investors.

As of December 31, 2019, the minimum liquidation preference decreased owing to the deconsolidation of Karuna and Gelesis.

For the years ended December 31, 2019, 2018 and 2017, the Group recognized the following changes in the value of subsidiary preferred shares:

	$000s
Balance as of January 1, 2018	215,635
Issuance of new preferred shares	54,537
Conversion of convertible notes	7,930
Decrease in value of preferred shares measured at fair value	(23,110)
Sale of The Sync Group	(1,062)
Deconsolidation of subsidiary	(36,517)
Accretion	106
Balance as of December 31, 2018 and January 1, 2019	**217,519**
Issuance of new preferred shares	51,048
Conversion of convertible notes	4,894
Increase in value of preferred shares measured at fair value	33,636
Finance costs	1,458
Deconsolidation of subsidiary	(207,346)
Other	(108)
Cash Distribution	(112)
Balance as of December 31, 2019	**100,989**

2019

On March 15, 2019, Karuna was deconsolidated. As of deconsolidation, the fair value of Karuna's preferred share liability was $31.7 million.

On April 4, 2019, Sonde Health issued and sold shares of Series A-2 preferred shares for aggregate proceeds of $11.1 million, of which $5.3 million was contributed by outside investors. Approximately $5.8 million of outstanding principal and interest on convertible promissory notes issued by Sonde to PureTech converted into Series A-2 preferred shares in this financing in accordance with their terms. On August 29, 2019, Sonde sold an additional 1,052,632 shares of its Series A-2 preferred shares for aggregate proceeds of $2.0 million. It has been determined that these shares are liability classified and contain a liability classified embedded derivative. This embedded derivative is a conversion feature which can result in settlement in a variable number of shares. The instrument is not bifurcated and is measured in whole at fair value through the profit and loss.

In April 2019, Gelesis completed further closings of its Series 2 Growth financing issuing 799,894 shares for proceeds of $10.2 million, of which $8.6 million was contributed by outside investors and $1.6 million was contributed by PureTech.

In March and May 2019, Vedanta completed a second and third closing of its Series C preferred shares financing for aggregate proceeds of $18.7 million. PureTech Health did not participate in either closing. It has been determined that these shares are liability classified and contain a liability classified embedded derivative. This embedded derivative is a conversion feature which can result in settlement in a variable number of shares. The instrument is not bifurcated and is measured in whole at fair value through the profit and loss.

On July 1, 2019, Gelesis was deconsolidated. As of deconsolidation, the fair value of Gelesis' preferred share liability was $175.6 million.

On July 19, 2019, all of the outstanding notes, plus accrued interest, issued by Follica converted into 17,639,204 shares of Series A-3 Preferred Shares and 14,200,044 shares of common share pursuant to a Series A-3 Note Conversion Agreement between Follica and the noteholders. Third parties held 2,422,990 A-3 preferred shares following the conversion. It has been determined that these shares are liability classified and contain a liability classified embedded derivative. This embedded derivative is a conversion feature which can result in settlement in a variable number of shares. The instrument is not bifurcated and is measured in whole at fair value through the profit and loss.

In September 2019, Vedanta received $16.7 million from outside investors through the issuance of its Series C-2 preferred shares in two separate closings. The issuances provided for the purchase of 711,772 Series C-2 shares at a purchase price of $23.28. PureTech Health did not participate in either closing. It has been determined that these shares are liability classified and contain a liability classified embedded derivative. This embedded derivative is a conversion feature which can result in settlement in a variable number of shares. The instrument is not bifurcated and is measured in whole at fair value through the profit and loss.

2018

In 2018, Gelesis received $16.8 million from outside investors through the issuance of its Series 2 Growth preferred shares as part of a $30.0 million financing with multiple closings. It has been determined that these shares are liability classified and contain a liability classified embedded derivative. This embedded derivative is a conversion feature which can result in settlement in a variable number of shares. The instrument is not bifurcated and is measured in whole at fair value through the profit and loss.

In May 2018, Akili issued Series C preferred shares for aggregate proceeds of $55.0 million; PureTech Health did not participate in this financing. Upon closing of Akili's Series C financing, the subsidiary was deconsolidated by PureTech Health (please refer to Note 3).

In August 2018, Karuna issued Series A preferred shares for aggregate proceeds of $42.1 million, of which $23.9 million came from outside investors. In conjunction with the August 2018 issuance of Series A preferred shares, $26.1 million of outstanding principal and accrued interest on notes payable converted, of which $7.9 million related to outside investors. It has been determined that these shares are liability classified and contain a liability classified embedded derivative. The instrument is not bifurcated and is measured in whole at fair value through the profit and loss.

On December 21, 2018, Vedanta issued Series C preferred shares for aggregate proceeds of $26.7 million, of which $21.7 million came from outside investors. It has been determined that these shares are liability classified and contain a liability classified embedded derivative. The instrument is not bifurcated and is measured in whole at fair value through the profit and loss.

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 classified as assets held at fair value.

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 using significant unobservable inputs (Level 3):

	Subsidiary Preferred Shares $000s	Subsidiary Convertible Notes $000s
Balance at January 1, 2018	215,635	11,343
Value at issuance	54,537	5,824
Conversion	7,930	(7,581)
Deconsolidation of preferred shares	(36,517)	—
Change in fair value	(24,066)	(128)
Balance at December 31, 2018 and January 1, 2019	**217,519**	**9,458**
Value at issuance	51,048	1,607
Conversion to preferred	4,894	(4,894)
Conversion to common	—	(2,418)
Deconsolidation	(207,346)	(5,017)
Change in fair value	33,636	1,389
Finance Costs	1,458	—
Other	(112)	—
Cash distribution	(108)	—
Balance at December 31, 2019	**100,989**	**125**

For financial instruments measured at fair value under IFRS 9 the change in the fair value of the entire instrument is reflected through profit and loss. The techniques used to determine fair value of the preferred shares and convertible notes included the market approach, the market backsolve approach and the discounted cash flow income approach. A market approach uses prices and other relevant information generated by recent market transactions involving identical or comparable assets or liabilities. The discounted cash flow income approach, which represents a Level 3 approach, relies upon unobservable inputs that are supported by little or no market activity and that are significant to determining the fair value of certain assets or liabilities. The market backsolve method is derived from the total equity that is implied by the most recent financing round in which the only truly observable value indicator is the financing round and the economic rights and the allocation inputs are implied by the terms of the financing, while volatility and term are Management inputs within the option pricing-method.

During the years ended December 31, 2019 and 2018, at each measurement date, the total fair value of preferred share, warrants and convertible note instruments, including embedded conversion rights that are not bifurcated,

was determined using an OPM, PWERM or with or without framework which consisted of a three-step process detailed below.

First, the total business enterprise value of each business within the Group was determined using a discounted cash flow income approach or market approach, or market backsolve approach through a recent arm's length financing round.

Second, the principal methods that the Group applies for the allocation of value are the Option Pricing Method ("OPM") and the Probability-Weighted Expected Return Method ("PWERM").

- The OPM treats outstanding securities as call options on the enterprise's value or overall equity value. The value of a security is based on the optionality over and above the value of securities that are senior in the capital structure (e.g. preferred shares), which takes into consideration the dilutive effects of subordinate securities. In the OPM, the exercise price is based on a comparison with the overall equity value rather than per-share value.
- The PWERM estimates the value of equity securities based on an analysis of various discrete future outcomes, such as an IPO, merger or sale, dissolution, or continued operation as a private or public enterprise until a later exit date. The equity value today is based on the probability-weighted present values of expected future investment returns, considering each of the possible outcomes available to the enterprise, as well as the rights of each security class.

Third, the fair value of the preferred shares was determined as the calculated business enterprise value allocated to the outstanding preferred share classes treated as call options within the OPM or the value of preferred shares on a converted common share basis within the PWERM. For convertible notes, the fair value of the instrument, including the embedded conversion right which was not bifurcated, was also calculated using a with or without method.

Quantitative information about the significant unobservable inputs used in the fair value measurement of the Group's embedded derivative liability related to the subsidiary preferred shares designated as Level 3 is as follows:

Option Pricing Model Inputs for Preferred Shares and Convertible Notes Liabilities under IFRS 9 at December 31, 2019:

	Range of Values			
Measurement Date	Expiration Date	Volatility	Risk Free Rate	Probability of IPO/M&A
12/31/2017	1.0 – 3.5 years	50.00% – 80.00%	1.70% – 2.04%	— %
12/31/2018	0.3 – 2.5 years	45.00% – 85.00%	2.47% – 2.60%	— %
12/31/2019	0.7 – 2.0 years	30.00% – 85.00%	1.58% – 1.60%	65%/35%

Probability Weighted Expected Return Method Inputs for Preferred Shares and Convertible Notes Liabilities under IFRS 9 at December 31, 2019:

	Range of Values	
Measurement Date	Time to Anticipated Exit Event	Probability of IPO/M&A/Dissolution Sale
12/31/2017	0.37 – 1.83 years	50.0%/50.0%/0.0%
12/31/2018	0.75 – 1.00 years	50.0%/50.0%/0.0%
12/31/2019	—	— %

Quantitative information about the significant unobservable inputs used in the fair value measurement of the Group's convertible note liabilities designated as Level 3 for the year ended December 31, 2018 is as follows:

	Range of Values	
Significant Unobservable Inputs	At Issuance	2018
Time to next qualified equity financing	1.00 – 2.03 years	0.33 – 1.50 years
Implied discount rate	11.3% – 2,459.0%	10.8% – 44.9%
Probability of a qualified financing or change of control	0.0% – 100.0%	95.0% – 100.0%

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 and any third-party valuations are reviewed for reasonableness and compliance with the fair value measurements guidance under IFRS.

Subsidiary Preferred Shares Sensitivity

The following summarizes the sensitivity from the assumptions made by the Company in respect to the unobservable inputs used in the fair value measurement of the Group's preferred share liabilities, which do not qualify for bifurcation and are recorded at fair value (Please refer to Note 15).

Input	Subsidiary Preferred Share Liability	
As of December 31,	**Sensitivity Range**	**Financial Liability Increase/ (Decrease) $000s**
Enterprise Value	-2%	**(1,785)**
	2%	**1,784**
Volatility	-10%	**410**
	10%	**(459)**
Time to Liquidity	-6 Months	**565**
	+6 Months	**(501)**
Risk-free Rate[1]	-0.08%/-0.03%	**565**
	+0.02%/+0.05%	**(501)**
IPO/M&A Event Probability	-10%	**1,167**
	+10%	**(1,162)**

1. Risk-free rate is a function of the time to liquidity input assumption.

The change in fair value of preferred shares are recorded in Finance cost, net in the Consolidated Statements of Comprehensive Income/(Loss).

Financial Assets Held at Fair Value

resTORbio Valuation

ResTORbio (NASDAQ: TORC) is a listed entity on an active exchange and as such the fair value as of December 31, 2019 was calculated utilizing the quoted common share price. Please refer to Note 5 for further details.

Karuna Valuation

Karuna (NASDAQ: KRTX) is a listed entity on an active exchange and as such the fair value as of December 31, 2019 was calculated utilizing the quoted common share price. Please refer to Note 5 for further details.

Akili, Gelesis and Vor Valuation

In accordance with IFRS 9, the Company accounts for its preferred share investments in Akili, Gelesis and Vor as financial assets held at fair value through the profit and loss. During the year ended December 31, 2019, the Company recorded its investment at fair value and recognized a gain of $48.8 million that was recorded to the Consolidated Statements of Comprehensive Income/(Loss) on the line item Gain/(loss) on investments held at fair value.

The following table summarizes the changes in the Group's investments held at fair value using significant unobservable inputs (Level 3):

	$'000s
Balance at January 1, 2018	1,449
Deconsolidation of Akili	70,748
Gain/ (Loss) on changes in fair value	12,966
Issuance of note receivable	—
Balance at December 31, 2018 and January 1, 2019	**85,163**
Deconsolidation of Vor	12,028
Deconsolidation of Karuna	77,373
Deconsolidation of Gelesis	49,170
Reclass of Karuna to Associate	(118,006)
Gain/(Loss) on changes in fair value	48,867
Issuance of note receivable	6,480
Conversion of note receivable	(6,630)
Balance at December 31, 2019	**154,445**

Option Pricing Model and Probability Weighted Expected Return Method Inputs for Investments Held at Fair Value at December 31, 2019 and 2018:

	Range of Values	
PWERM (IPO Scenario) Measurement Date	Time to Anticipated Exit Event	Probability of IPO
12/31/2018	0.50 years	50.0%
12/31/2019	1.1 — 3.0 years	55.0% — 75.0%

	Range of Values		
OPM (Long-term Exit Scenario) Measurement Date	Expiration Date	Volatility	Risk Free Rate
12/31/2018	1.25 years	75.0%	2.56%
12/31/2019	1.13 — 3 years	56.0% — 80.0%	1.59% — 1.62%

The following summarizes the sensitivity from the assumptions made by the Company in respect to the unobservable inputs used in the fair value measurement of the Group's investments held at fair value (please refer to Note 5):

Input	Investments Held at Fair Value	
As of December 31,	**Sensitivity Range**	**Financial Asset Increase/ (Decrease) $000s**
Enterprise Value	-2%	**(2,947)**
	2%	**2,947**
Volatility	-10%	**131**
	10%	**(143)**
Time to Liquidity	-6 Months	**20,699**
	+6 Months	**(17,711)**
Risk-free Rate[1]	-0.08%/-0.02%	**20,699**
	+0.10%/+0.16%	**(17,711)**

1. Risk-free rate is a function of the time to liquidity input assumption.

Warrants

Warrants issued by the Group are classified as liabilities, as they will be settled in a variable number of shares and are not fixed-for-fixed. The following table summarizes the changes in the Group's subsidiary warrant liabilities measured at fair value using significant unobservable inputs (Level 3):

	Subsidiary Warrant Liability $000s
Balance at January 1, 2018	13,095
Change in fair value	(83)
Balance at December 31, 2018	13,012
Warrant Issuance	4,706
Gelesis Deconsolidation	(21,611)
Change in fair value	11,890
Balance at December 31, 2019	**7,997**

In June 2019, Gelesis amended their existing license and patent agreement with One S.r.l. As a result of the amendment Gelesis issued One S.r.l. a warrant equal to 2.7 percent of as converted shares following the next financing round. The fair value of the warrant was $4.7 million at issuance. On July 1, 2019, Gelesis deconsolidated and warrant liability of $21.6 million relating to Series A-1, A-3, A-4 and One S.r.l. warrants was derecognized.

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. Each of the warrants has an exercise price of $0.1425 and a contractual term of 10 years from the date of issuance. In 2017, in conjunction with the issuance of convertible notes, the exercise price of the warrants was adjusted to $0.07 per share. The change in the fair value of the subsidiary warrants was recorded in finance costs, net in the Consolidated Statements of Comprehensive Income/(Loss). The $8.0 million warrant liability at December 31, 2019 is attributable to the outstanding Follica preferred share warrants.

The following weighted average assumptions were utilized by the Company with respect to determining the fair value of the Follica warrants at December 31, 2019:

Assumption/Input	Series A-1 Warrants
Expected term	3.66
Expected volatility	40.6%
Risk free interest rate	1.6%
Expected dividend yield	— %
Estimated fair value of the convertible preferred shares	$ 2.93
Exercise price of the warrants	$ 0.07

The following summarizes the sensitivity from the assumptions made by the Company in respect to the unobservable inputs used in the fair value measurement of the Group's warrant liabilities as of December 31, 2019:

Input	Warrant Liability	
As of December 31,	Sensitivity Range	Financial Liability Increase/ (Decrease) $000s
Enterprise Value	-2%	(128)
	2%	127

Fair Value Measurement and Classification

The fair value of financial instruments by category at December 31, 2019 and 2018:

	2019					
	Carrying Amount		Fair Value			
	Financial Assets $000s	Financial Liabilities $000s	Level 1 $000s	Level 2 $000s	Level 3 $000s	Total $000s
Financial assets:						
U.S. treasuries[1]	30,088	—	30,088	—	—	30,088
Money Markets[2]	106,586	—	106,586	—	—	106,586
Investments held at fair value	714,905	—	560,460	—	154,445	714,905
Trade and other receivables[3]	1,977	—	—	1,977	—	1,977
Total financial assets	**853,556**	**—**	**697,134**	**1,977**	**154,445**	**853,556**
Financial liabilities:						
Subsidiary warrant liability	—	7,997	—	—	7,997	7,997
Subsidiary preferred shares	—	100,989	—	—	100,989	100,989
Subsidiary notes payable	—	1,455	—	1,455	—	1,455
Total financial liabilities	**—**	**110,441**	**—**	**1,455**	**108,986**	**110,441**

(1) Issued by governments and government agencies, as applicable, all of which are investment grade.
(2) Issued by a diverse group of corporations, largely consisting of financial institutions, virtually all of which are investment grade.
(3) Outstanding receivables are owed primarily by corporations and government agencies, virtually all of which are investment grade.

	2018					
	Carrying Amount		Fair Value			
	Financial Assets $000s	Financial Liabilities $000s	Level 1 $000s	Level 2 $000s	Level 3 $000s	Total $000s
Financial assets:						
U.S. treasuries[1]	133,828	—	133,828	—	—	133,828
Certificates of deposit[2]	2,199	—	—	2,199	—	2,199
Other deposits[2]	100	—	—	100	—	100
Investments held at fair value	169,755	—	84,592	—	85,163	169,755
Loans and receivables:						
Trade and other receivables[3]	1,328	—	—	1,328	—	1,328
Total financial assets	**307,210**	**—**	**218,420**	**3,627**	**85,163**	**307,210**
Financial liabilities:						
Subsidiary warrant liability	—	13,012	—	—	13,012	13,012
Subsidiary preferred shares	—	217,519	—	—	217,519	217,519
Subsidiary notes payable	—	12,010	—	12,010	—	12,010
Total financial liabilities	**—**	**242,541**	**—**	**12,010**	**230,531**	**242,541**

(1) Issued by governments and government agencies, as applicable, all of which are investment grade.
(2) Issued by a diverse group of corporations, largely consisting of financial institutions, virtually all of which are investment grade.
(3) Outstanding receivables are owed primarily by corporations and government agencies, virtually all of which are investment grade.

17. Subsidiary Notes Payable

The subsidiary notes payable are comprised of loans and convertible notes. During the years ended December 31, 2019 and 2018, the financial instruments for Knode and Appeering did not contain embedded derivatives and therefore these instruments continue to be held at amortised cost. The notes payable consist of the following:

As of December 31,	2019 $000s	2018 $000s
Loans	**1,330**	2,552
Convertible notes	**125**	9,458
Total subsidiary notes payable	**1,455**	12,010

Loans

In October 2010, Follica entered into a loan and security agreement with Lighthouse Capital Partners VI, L.P. The loans are secured by Follica's assets, including Follica's intellectual property. The outstanding loan balance totaled approximately $1.3 million as of each of December 31, 2019 and 2018.

In May 2014, Gelesis entered into a grant and loan agreement with an Italian economic development agency. Borrowings under the loan totaled €1.1 million as of December 31, 2018 (approximately $1.3 million). Gelesis was required to make interest payments only in fiscal years 2014 and 2015, with principal and interest payments from January 2017 through January 2024. As of Gelesis' deconsolidation, $0.9 million in outstanding principal and interest remained and the outstanding balance was derecognized.

Convertible Notes

Convertible Notes outstanding were as follows:

	Karuna $000s	Follica $000s	Knode $000s	Appeering $000s	Total $000s
January 1, 2018	5,812	5,406	50	75	11,343
Gross principal	4,700	1,124	—	—	5,824
Change in fair value	(93)	(35)	—	—	(128)
Conversion	(7,581)	—	—	—	(7,581)
December 31, 2018 and January 1, 2019	**2,838**	**6,495**	**50**	**75**	**9,458**
Gross principal	1,607	—	—	—	1,607
Change in fair value	572	817	—	—	1,389
Conversion to preferred	—	(4,894)	—	—	(4,894)
Conversion to common	—	(2,418)	—	—	(2,418)
Deconsolidation	(5,017)	—	—	—	(5,017)
December 31, 2019	**—**	**—**	**50**	**75**	**125**

Certain of the Group's subsidiaries have issued convertible promissory notes ("Notes") to fund their operations with an expectation of an eventual share-based award settlement of the Notes.

Substantially all Notes become due and payable on or after either December 31 of the year of issuance or on the thirtieth day following a demand by the majority of Note holders and bear interest at a rate of either 8.0 percent (or 12.0 percent upon an Event of Default) or 10.0 percent (or 15.0 percent upon an Event of Default). Interest is calculated based on actual days elapsed for a 360-day calendar year. Generally, the Notes cannot be prepaid without approval from the holders of a majority of the outstanding principle of a series of Notes. During the years ended December 31, 2019 and 2018, the Notes were assessed under IFRS 9 and the entire financial instruments are elected to be accounted for as FVTPL.

The Notes constitute complex hybrid instruments, which contain equity conversion features where holders may convert, generally at a discount, the outstanding principal and accrued interest into shares of the subsidiary before maturity and redemption options upon a change of control of the respective subsidiary.

The three key features are described below:

- Automatic conversion feature—upon a Qualified Financing, as such term is defined in the applicable Note, the unpaid principal and interest amounts are automatically converted into shares of the subsidiary issued in the Qualifying Financing at a conversion price equal to the price at which shares are sold in such Qualified Financing, less a discount. The discounts range from 5.0 percent to 25.0 percent and some require the issuance of an equal number of ordinary shares.
- Optional conversion feature—upon a Non-Qualified Financing, holders may convert the outstanding principal balance and unpaid interest to shares issued in the Non-Qualifying Financing at a conversion price equal to the price shares are sold in such Non-Qualified Financing, less a discount. The discounts range from 5.0 percent to 25.0 percent and some require the issuance of an equal number of ordinary shares.
- Change of control features—The Notes also generally contain a put option such that, in the event of a Change of Control transaction of the respective subsidiary prior to conversion or repayment of the Notes, the holders will be paid an amount equal to two or three times the outstanding principal balance plus any accrued and unpaid interest, in cash, on the date of the Change of Control.

On March 15, 2019, Karuna was deconsolidated in conjunction with the closing of a Series B Preferred Stock financing and the outstanding convertible note liability of $5.0 million was derecognized.

In May 2017 and September 2017, Follica received $0.5 million and $0.6 million, respectively, from an existing third-party investor through the issuance of convertible notes. The notes bear interest at an annual rate of 10.0 percent, mature 30 days after demand by the holder, are convertible into equity upon a qualifying financing event, and require payment of at least five times the outstanding principal and accrued interest upon a change of control transaction.

On July 19, 2019, all of the outstanding notes, plus accrued interest, issued by Follica converted into 17,639,204 shares of Series A-3 Preferred Stock and 14,200,044 shares of common shares pursuant to a Series A-3 Note Conversion Agreement between Follica and the noteholders. Third parties held 2,422,990 A-3 preferred shares and 1,981,944 common shares following the conversion. The preferred shares are classified as financial liabilities at fair value through the profit and loss. The common shares are accounted for as Non-controlling interests.

18. Non-Controlling Interest

During 2019, the Company deconsolidated three of its subsidiaries which resulted in a change to the composition of its reportable segments. As such, the Company has updated the following disclosures. 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, 2018*	(1,484)	(18,869)	(125,758)	525	(145,586)
Share of comprehensive loss*	(7,315)	(10,710)	(8,980)	—	(27,005)
Deconsolidation of subsidiary*	—	—	55,168	—	55,168
Equity settled share-based payments*	—	2,476	6,345	67	8,888
Balance as of December 31, 2018 and January 1, 2019*	(8,799)	(27,103)	(73,225)	592	(108,535)
Share of comprehensive loss	(15,264)	(15,862)	(23,953)	—	(55,079)
Deconsolidation of subsidiaries	—	—	97,178	—	97,178
Subsidiary note conversion and changes in NCI ownership interest	—	23,049	—	—	23,049
Equity settled share-based payments		1,683	—	—	1,683
Purchase of minority interest	24,039	—	—	—	24,039
Other	24	—	—	1	25
Balance as of December 31, 2019	**—**	**(18,233)**	**—**	**593**	**(17,640)**

* During the year ended December 31, 2019, the Company deconsolidated three of its subsidiaries which resulted in a change to the composition of its reportable segments. Consequently, the Company has revised the 2018 financial information to conform to the presentation as of and for the period ending December 31, 2019.

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 intra group eliminations.

	2019		
For the year ended December 31,	**Internal $000s**	**Controlled Founded Entities $000s**	**Non-Controlled Founded Entities $000s**
Statement of Comprehensive Loss			
Total revenue	**6,078**	**1,968**	**—**
Income/(loss) for the year	**(24,289)**	**(26,250)**	**(47,905)**
Other comprehensive income/(loss)	**—**	**—**	**(10)**
Total comprehensive income/(loss) for the year	**(24,289)**	**(26,250)**	**(47,915)**
Statement of Financial Position			
Total assets	**17,614**	**5,290**	**—**
Total liabilities	**11,510**	**50,554**	**—**
Net assets/(liabilities)	**6,104**	**(45,264)**	**—**

	2018		
For the year ended December 31,	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s[1]
Statement of Comprehensive Loss			
Total revenue	2,195	18,504	20
Income/(loss) for the year	(8,454)	(26,206)	(41,239)
Other comprehensive income/(loss)	—	(214)	(214)
Total comprehensive income/(loss) for the year	(8,454)	(26,420)	(41,453)
Statement of Financial Position			
Total assets	2,984	15,603	35,934
Total liabilities	13,366	60,992	202,161
Net Liabilities	(10,382)	(45,389)	(166,227)

1. Non-Controlled Founded Entities non-controlling interest calculation does not include equity method accounting, fair value method accounting or the gain on the deconsolidation of subsidiary related to Vor, Karuna, Gelesis, resTORbio or Akili, which is recorded within PureTech Health LLC. Please refer to Note 5.

	2017		
For the year ended December 31,	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s[1]
Statement of Comprehensive Loss			
Total revenue	—	1,880	630
Income/(loss) for the year	(1,939)	(44,843)	(132,382)
Other comprehensive income/(loss)	—	—	408
Total comprehensive income/(loss) for the year	(1,939)	(44,843)	(131,974)

1. Non-Controlled Founded Entities non-controlling interest calculation does not include equity method accounting, fair value method accounting or the gain on the deconsolidation of subsidiary related to resTORbio or Akili, which is recorded within PureTech Health LLC. Please refer to Note 5.

On July 19, 2019 PureTech and a third party investor converted their convertible debt in Follica to Follica Preferred shares (presented as liabilities) and Follica common shares. The amount of convertible debt converted

by the third party investor into Follica common shares amounted to $2.4 million (see also Note 16). As a result of the conversion Follica NCI share (in Follica common stock) was reduced from 68% to 19.9%, which resulted in a reduction in the NCI share in Follica's shareholders' deficit of $20.1 million. The excess of the change in the book value of NCI ($20.1 million noted above) over the contribution made by NCI ($2.4 million) amounted to $17.8 million and was recorded as a loss directly in shareholders' equity.

During 2019 a subsidiary of the Company fully funded by the Company ceased its operations and became inactive. This resulted in a change in the NCI share in the subsidiary deficit. As a result the Company recorded a loss directly in equity of $3.1 million.

On October 1, 2019, PureTech acquired the remaining 10.0 percent of minority non-controlling interests of PureTech LYT, Inc. (previously named Ariya Therapeutics, Inc.), increasing its ownership from 90 percent to 100 percent. In consideration for the acquisition of minority interests, PureTech issued 2,126,338 shares of common shares. The fair value of the shares issued in consideration for the minority non-controlling interest amounted to $9.1 million. The carrying amount of the non-controlling interest at the acquisition was a $24 million deficit and the excess of the consideration paid over the book value of the non-controlling interest of approximately $33.1 million was recorded directly in shareholders' equity.

19. Trade and Other Payables

Information regarding Trade and other payables was as follows:

As of December 31,	**2019 $000s**	2018 $000s
Trade payables	**11,098**	4,644
Accrued expenses	**8,744**	11,231
Total trade and other payables	**19,842**	15,875

20. Other Long-Term Liabilities

Information regarding Other long-term liabilities was as follows:

As of December 31,	**2019 $000s**	2018 $000s
Deferred rent	—	1,283
Lease incentive obligation	—	357
Accrued professional fees	—	738
Other	—	138
Other long-term liabilities	—	2,516

Please refer to Note 3 for a discussion of deferred revenue balances as of December 31, 2019 and 2018.

21. Leases

On January 1, 2019 the Company adopted IFRS 16, which replaced IAS 17 for the annual period beginning on January 1, 2019. Further discussion around the adoption of IFRS 16 is included in Note 1.

The activity related to the Group's right of use asset and lease liability for the year ended December 31, 2019 is as follows:

	Right of use asset, net $000s
Balance at December 31, 2018	—
Adoption of IFRS 16	10,353
Balance at January 1, 2019	10,353
Additions	19,434
Subleases	(2,580)
Depreciation	(3,237)
Deconsolidated	(1,587)
Balance at December 31, 2019	**22,383**

	Total lease liability $000s
Balance at December 31, 2018	—
Adoption of IFRS 16	10,995
Balance at January 1, 2019	10,995
Additions	30,305
Cash paid for rent	(4,173)
Interest expense	2,495
Deconsolidated	(1,779)
Balance at December 31, 2019	**37,843**

The following reconciles operating lease commitments disclosed as at December 31, 2018 to the lease liability recognized at January 1, 2019:

	2019 $000s
Operating lease commitments disclosed as at December 31, 2018	**11,443**
Discounted using the lessee's incremental borrowing rate at the date of initial application	**(448)**
Lease liability recognized at January 1, 2019	**10,995**

The following details the short term and long-term portion of the lease liability as at December 31, 2019:

	Total lease liability $000s
Short-term Portion of Lease Liability	2,929
Long-term Portion of Lease Liability	34,914
Total Lease Liability	**37,843**

The following table details the future maturities of the lease liability, showing the undiscounted lease payments to be received after the reporting date:

	2019 $000s
Less than one year	**5,257**
One to two years	**5,409**
Two to three years	**5,603**
Three to four years	**6,071**
Four to five years	**6,247**
More than five years	**21,494**
Total undiscounted lease maturities	**50,080**
Interest	**12,237**
Total lease liability	**37,843**

Additions in the period relate to three leases that were entered into by PureTech and its consolidated subsidiaries during the year ended December 31, 2019. Amounts were arrived at using the contractual minimal lease payments, present valued using the applicable incremental borrowing rate, which ranged from 5.49 percent to 6.58 percent. Rent expense related to short-term leases which are not accounted for under IFRS 16 was $1.3 million for the year ended December 31, 2019.

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. As of December 31, 2019, the Company has not determined whether it will exercise these extension options.

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 begins June 1, 2019 and expires on August 31, 2025. The sublease was determined to be a finance lease and was reclassified from the right of use asset to a lease receivable at inception of the sublease. As of December 31, 2019 the balances related to the sublease were as follows:

	Total lease receivable $000s
Short-term Portion of Lease Receivable	350
Long-term Portion of Lease Receivable	2,082
Total Lease Liability	**2,432**

The following table details the future maturities of the lease receivable, showing the undiscounted lease payments to be received after the reporting date:

	2019 $000s
Less than one year	**485**
One to two years	**494**
Two to three years	**504**
Three to four years	**513**
Four to five years	**523**
More than five years	**353**
Total undiscounted lease receivable	**2,872**
Unearned Finance income	**440**
Net investment in the lease	**2,432**

On August 6, 2019, PureTech executed a sublease agreement with Dewpoint Therapeutics, Inc. ("Dewpoint"). The sublease is 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 begins on September 1, 2019 and expires on August 31, 2021. The sublease was determined to be an operating lease.

Rental income recognized by the Company during the year ended December 31, 2019 was $0.36 million. The following table details the future payments under the sublease, showing the undiscounted lease payments to be received after the reporting date:

	2019 $000s
Less than one year	**1,083**
One to two years	**722**
Total	**1,805**

Prior to the adoption of IFRS 16, minimum rental commitments under non-cancellable leases were payable as follows:

As of December 31,	2018 $000s
Within one year	1,742
Between one and five years	9,349
More than five years	352
Total minimum lease payments	**11,443**

Some property leases contain extension options exercisable by the Company before the end of the non-cancellable contract period. The extension options held are exercisable only by the Company and not by the lessors. The Company assesses at lease commencement date whether it is reasonably certain to exercise the extension options. The Company reassesses whether it is reasonably certain to exercise the options if there is a significant event or significant changes in circumstances within its control. The Company has estimated that the potential future lease payments, should it exercise the extension option, would result in an increase in lease liability of $18.7 million.

During the year ended December 31, 2019, the Group reassessed the anticipated term of its Tide Street lease due to uncertainty as to whether the two extension options provided for in the lease agreement will be exercised. It

was determined that there was sufficient uncertainty as to whether these options would be utilized, resulting in the useful life of the lease being adjusted from 20 years to 10 years. This resulted in a decrease to the lease liability and right of use asset, as well as an increase to the minimum lease payments due within one year and between one and five years.

During the year ended December 31, 2018, the Group determined that there were certain tenant improvement allowances that were originally classified as a reduction to leasehold improvements rather than as a liability. The Company concluded that the impact of the change of a reclassification from property and equipment to other current and long-term liabilities was not material to the Consolidated Financial Statements presented in the Annual Report of December 31, 2018.

Total rent expense under these leases was approximately $2.5 million and $1.3 million during the years ended December 31, 2018 and 2017, respectively. Rent expense is included in the General and administrative expenses line item in the Consolidated Statements of Comprehensive Income/(Loss).

22. Capital and Financial Risk Management

The Company's financial strategy policy is to support its strategic priorities, maintain investor and creditor confidence and sustain future development of the business through an appropriate mix of debt and equity. Management monitors the level of capital deployed and available for deployment in subsidiary companies. 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 its 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.

Credit Risk

The Group has exposure to the following risks arising from financial instruments:

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 and trade and other receivables. The Group held the following balances:

As of December 31,	**2019 $000s**	2018 $000s
Cash and cash equivalents	**132,360**	117,051
Short-term investments	**30,088**	133,828
Investments held at fair value	**714,905**	169,755
Trade and other receivables	**1,977**	1,328
Total	**879,330**	421,962

The Group invests its excess cash in U.S. Treasury Bills, U.S. debt obligations and money market accounts, which the Group believes are of high credit quality.

The Group assesses the credit quality of customers on an ongoing basis, taking into account its financial position, past experience and other factors. The credit quality of financial assets that are neither past due nor impaired can be assessed by reference to credit ratings (if available) or to historical information about counterparty default rates.

The aging of trade and other receivables that were not impaired at December 31 is as follows:

As of December 31,	**2019 $000s**	2018 $000s
Neither past due or impaired	**1,977**	1,328
Total	**1,977**	1,328

The Company is also potentially subject to concentrations of credit risk in its accounts receivable. Concentrations of credit risk with respect to receivables is owed to the limited number of companies comprising the Company's customer base. The Group's exposure to credit losses is low, however, owing largely to the credit quality of its larger collaborative partners such as Roche, Boehringer Ingelheim and Eli Lilly.

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, 2019 and 2018 based on contractual undiscounted payments:

	2019				
As of December 31,	**Carrying Amount $000s**	**Within Three Months $000s**	**Three to Twelve Months $000s**	**One to Five Years $000s**	**Total $000s**
Subsidiary notes payable	**1,455**	**1,455**	**—**	**—**	**1,455**
Trade and other payables	**19,842**	**19,842**	**—**	**—**	**19,842**
Warrants	**7,997**	**7,997**	**—**	**—**	**7,997**
Subsidiary preferred shares (Note 15)	**100,989**	**100,989**	**—**	**—**	**100,989**
Total	**130,283**	**130,283**	**—**	**—**	**130,283**

	2018				
As of December 31,	Carrying Amount $000s	Within Three Months $000s	Three to Twelve Months $000s	One to Five Years $000s	Total $000s
Subsidiary notes payable	12,010	12,010	—	—	12,010
Trade and other payables	15,875	15,875	—	—	15,875
Warrants	13,012	13,012	—	—	13,012
Subsidiary preferred shares (Note 15)	217,519	217,519	—	—	217,519
Total	258,416	258,416	—	—	258,416

In addition to the above financial liabilities, the Group is required to spend the following minimum amounts under intellectual property license agreements:

	2019 $000s	2020 $000s	2021 $000s	2022 $000s
Licenses	1,366	1,374	1,373	773
Total	**1,366**	**1,374**	**1,373**	**773**

Market Risk

Market risk is due to changes in market prices, such as foreign exchange rates, interest rates and equity prices that affect the Group's income or the value of its financial instrument holdings. The objective of the Group's market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing its return. The Group maintains the exposure to market risk from such financial instruments to insignificant levels. The Group's exposure to changes in interest rates has been determined to be insignificant.

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. 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 credit losses and ultimately 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 associates and accounted for under the equity method (please refer to Note 1). The Group's exposure to investments in associates in limited to the initial carrying amount upon recognition as an Associate. The Group is not exposed to further contractual obligations or contingent liabilities beyond the value of initial investment. As of December 31, 2019, Gelesis was the only associate. The initial carrying amount of the investment in Gelesis as an associate was $16.4 million. Accordingly, the Group views the risk as high.

Equity Price Risk

We have an investment in common shares of Karuna and resTORbio, as described further in Note 5. As of December 31, 2019 the fair value of our investments in resTORbio and Karuna common shares was $3.2 million and $557.2 million, respectively. These investments 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 resTORbio and Karuna common shares as of December 31, 2019 would have been a loss of approximately $0.3 million and $55.7 million, respectively, recognized as a component of Other income (expense) in our Consolidated Statements of Comprehensive Income/(Loss).

Foreign Exchange Risk

With respect to Gelesis, prior to deconsolidation, certain grant revenues and the research and development costs associated with those grants are generated and incurred in Euros. As such, the Group's certain results of

operations and cash flows will be subject to fluctuations due to change in foreign currency exchange rates. Foreign currency transaction exposure arising from external trade flows is generally not hedged.

Capital Risk Management

The Group is funded by equity and debt financing as well as grant and research collaboration income. Total capital is calculated as Total Equity as shown in the Consolidated Statements of Financial Position.

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 15.

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, 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.

23. Commitments and Contingencies

Gelesis is a party to a patent license and assignment agreement whereby it will be required to pay approximately $8.0 million upon the achievement of certain milestones, pay royalties on future sales and/or a percentage of sublicense income. Gelesis accrued $6.6 million as potential expenses under the patent license and assignment agreement for the years ended December 31, 2018 and 2017. During the year ended December 31, 2019 Gelesis was deconsolidated. Therefore, there are no additional contingencies recorded related to Gelesis at December 31, 2019.

Other members of the Group are also parties to certain licensing agreements that require milestone payments and/or royalties on future sales. None of these payments have become due and the amounts of any future milestone or royalty payments cannot be reliably measured as of the date of the financial information.

24. Related Parties Transactions

Related Party Subleases

During 2019, PureTech executed sublease agreements with related parties Gelesis and Dewpoint Therapeutics. Please refer to Note 20 for further details regarding the sublease.

Key Management Personnel Compensation

Key management includes executive directors and members of the executive management team of the Group. The key management personnel compensation of the Group was as follows for the years ended December 31:

As of December 31,	**2019 $000s**	2018 $000s	2017 $000s
Short-term employee benefits	**5,543**	3,998	3,514
Share-based payments	**2,774**	3,062	2,402
Total	**8,317**	7,060	5,916

Wages and employee benefits include salaries, health care and other non-cash benefits. Share-based payments are generally subject to vesting terms over future periods.

Convertible Notes Issued to Directors

Certain members of the Group have invested in convertible notes issued by the Group's subsidiaries. As of December 31, 2019, 2018 and 2017, the outstanding related party notes payable totaled $84 thousand, $79 thousand and $74 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, 2019:

Directors	Business Name (Share Class)	Number of shares held as of December 31, 2019	Number of options held as of December 31, 2019	Ownership Interest[1]
Ms Daphne Zohar[2]	Gelesis (Common)	**59,443**	**939,086**	**4.30%**
Dame Marjorie Scardino	—		**—**	**— %**
Dr Bennett Shapiro	Akili (Series A-2 Preferred)[3]	**—**	**33,088**	**0.20%**
	Gelesis (Common)	**24,009**	**10,840**	**0.01%**
	Gelesis (Series A-1 Preferred)	**23,418**	**—**	**0.20%**
	Vedanta Biosciences (Common)		**25,000**	**0.22%**
	Vedanta Biosciences (Series B Preferred)	**11,202**	**—**	**0.10%**
Dr Robert Langer	Entrega (Common)		**332,500**	**4.09%**
	Alivio (Common)		**1,575,000**	**6.06%**
Dr Raju Kucherlapati	Enlight (Class B Common)		**30,000**	**3.00%**
	Gelesis (Common)	**—**	**20,000**	**0.10%**
Dr John LaMattina[4]	Akili (Series A-2 Preferred)		**37,372**	**0.20%**
	Gelesis (Common)[4]		**117,169**	**0.50%**
	Gelesis (Common)[5]		**20,000**	**0.10%**
	Gelesis (Series A-1 Preferred)[4]		**49,524**	**0.20%**
	Vedanta Biosciences (Common)		**25,000**	**0.22%**
Mr Christopher Viehbacher	—		**—**	**— %**
Mr Stephen Muniz	Gelesis (Common)[5]		**20,000**	**0.10%**
Senior Managers:				
Dr Eric Elenko	—	**—**	**—**	**— %**
Dr Joep Muijrers	—	**—**	**—**	**— %**
Dr Bharatt Chowrira	Karuna (Common)[5]	**10,000**	**—**	**0.04%**
Dr Joseph Bolen	Vor (Common)	**—**	**125,000**	**0.12%**

1. Ownership interests as of December 31, 2019 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 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. Shares held through Dr Bennett Shapiro and Ms Fredericka F. Shapiro, Joint Tenants with Right of Survivorship.

4. Dr John and Ms Mary LaMattina hold 49,523 shares of common shares and 49,524 shares of Series A-1 preferred shares in Gelesis. Individually, Dr LaMattina holds 12,642 shares of Gelesis and convertible notes issued by Appeering in the aggregate principal amount of $50,000.
5. Options to purchase the listed shares were granted in connection with the service on such founded entity's Board of Directors and any value realized therefrom shall be assigned to PureTech Health LLC.

Directors and senior managers hold 29,939,913 ordinary shares and 10.5 percent voting rights of the Company as of December 31, 2019. This amount excludes options to purchase 2,909,344 ordinary shares. This amount also excludes 8,374,351 shares, which are issuable contingent to the terms of performance based RSU awards granted to certain senior managers covering the financial years 2019, 2018 and 2017. Such shares will be issued to such senior managers in future periods provided that performance conditions are met and certain of the shares will be withheld for payment of customary withholding taxes.

25. Taxation

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

For the years ended December 31, 2019, 2018 and 2017, the Group filed a consolidated U.S. federal income tax return which included all subsidiaries in which the Company owned greater than 80% of the vote and value. For the years ended December 31, 2019, 2018 and 2017, the Group filed certain consolidated state income tax returns which included all subsidiaries in which the Company owned greater than 50% of the vote and value. The remaining subsidiaries file separate U.S. tax returns.

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 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.

Deferred taxes are recognized in Consolidated Statements of Comprehensive Income/(Loss) except to the extent that they relate to items recognized directly in equity or in other comprehensive income.

Amounts recognized in Consolidated Statements of Comprehensive Income/(Loss):

As of December 31,	**2019 $000s**	2018 $000s	2017 $000s
Income/(loss) for the year	**366,065**	(70,659)	(75,094)
Income tax expense/(benefit)	**112,409**	2,221	4,383
Income/(loss) before taxes	**478,474**	(68,438)	(70,711)

Recognized income tax expense/(benefit):

As of December 31,	**2019 $000s**	2018 $000s	2017 $000s
Federal	**—**	2	(123)
Foreign	**—**	—	358
State	**—**	496	(109)
Total current income tax expense/(benefit)	**—**	498	126
Federal	**83,776**	2,034	4,255
Foreign	**—**	(311)	2
State	**28,633**	—	—
Total deferred income tax expense/(benefit)	**112,409**	1,723	4,257
Total income tax expense/(benefit), recognized	**112,409**	2,221	4,383

The tax expense of $112.4 million, $2.2 million and $4.4 million in 2019, 2018 and 2017, respectively, is primarily the result of the establishment of a deferred tax liability for unrealized gains pertaining to our investments in Karuna, Vor, AZ Therapies, and Gelesis, and the remeasurement of existing deferred tax liabilities for unrealized gains pertaining to our investments in resTORbio and Akili.

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:

	2019		2018		2017	
As of December 31,	**$000s**	**%**	$000s	%	$000s	%
Weighted-average statutory rate	**97,183**	**21.00**	(14,372)	21.00	(24,042)	34.00
Effects of state tax rate in U.S.	**22,111**	**4.78**	(3,267)	4.77	376	(0.53)
R&D and orphan drug tax credits	**(6,321)**	**(1.37)**	(3,268)	4.78	(2,411)	3.41
Share-based payment measurement	**433**	**0.09**	3,429	(5.01)	2,531	(3.58)
Mark-to-market adjustments	**3,725**	**0.80**	(3,745)	5.47	13,626	(19.27)
Accretion on preferred shares	**—**	**0.00**	22	(0.03)	3,231	(4.57)
Deconsolidation adjustments	**(13,658)**	**(2.95)**	9,688	(14.16)	(14,397)	20.36
Mark-to-market investment in subsidiary	**—**	**0.00**	(55)	0.08	24,070	(34.04)
Federal tax change	**—**	**0.00**	—	0.00	14,741	(20.85)
Tax reform—foreign earnings repatriation	**—**	**0.00**	—	0.00	898	(1.27)
Income of partnerships not subject to tax	**—**	**0.00**	(78)	0.11	(21)	0.03
Recognition of deferred tax assets not previously recognized	**(6,251)**	**(1.35)**	—	0.00	—	0.00
Current year losses for which no deferred tax asset is recognized	**14,514**	**3.14**	13,012	(19.01)	13,762	19.46
Other	**674**	**0.15**	854	(1.25)	(460)	0.65
	112,410	**24.29**	2,220	(3.25)	4,382	(6.20)

The Group is also subject to taxation in the UK and exposed to state taxation in certain jurisdictions within the U.S. 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 taxes have been recognized in the U.S. jurisdiction in respect of the following items:

As of December 31,	**2019 $000s**	2018 $000s
Operating tax losses	**68,690**	69,170
Capital loss carryovers	**2,292**	—
Research credits	**9,931**	8,056
Investment in subsidiaries	**—**	589
Share-based payments	**9,711**	13,003
Deferred revenue	**1,125**	—
Lease Liability	**10,339**	—
Other	**2,117**	2,184
Deferred tax assets	**104,205**	93,002
Investment in subsidiaries	**(173,069)**	—
ROU asset	**(6,115)**	—
Other temporary differences	**(3,225)**	(33,412)
Deferred tax liabilities	**(182,409)**	(33,412)
Deferred tax liabilities, net, recognized	**115,445**	6,428
Deferred tax assets, net, recognized	**(142)**	(449)
Deferred tax assets, net, not recognized	**37,099**	65,569

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 remaining deferred tax assets have not been recognized because it is not probable that future taxable profits will be available to support their realizability.

There was movement in deferred tax recognized which impacted income tax expense of approximately $112.4 million, primarily related to the unrealized gains pertaining to our investments in resTORbio, Akili, Karuna, Vor, AZ Therapies, and Gelesis. The deferred tax liability related to the unrealized gains on these investments exceeds our available U.S. federal and state deferred tax assets.

The Company had U.S. federal net operating losses carry forwards (“NOLs”) of approximately $243.0 million, $238.1 million and $203.1 million as of December 31, 2019, 2018 and 2017, respectively, which are available to offset future taxable income. These NOLs expire through 2037 with the exception of $126.6 million which is not subject to expiration. The Company had U.S. Federal research and development tax credits of approximately $7.4 million, $6.7 million and $4.4 million as of December 31, 2019, 2018 and 2017, respectively, which are available to offset future taxes that expire at various dates through 2039. The Company also had Federal Orphan Drug credits of approximately $3.7 million as of December 31, 2019, which are available to offset future taxes that expire at various dates through 2039. These NOLs and credits are subject to review and possible adjustment by the Internal Revenue Service.

The Company had Massachusetts net operating losses carry forwards (“NOLs”) of approximately $273.0 million, $179.5 million and $116.1 million as of December 31, 2019, 2018 and 2017, respectively, which are available to offset future taxable income. These NOLs expire at various dates beginning in 2024. The Company had Massachusetts research and development tax credits of approximately $1.6 million, $1.3 million and $0.4 million as of December 31, 2019 2018 and 2017, respectively, which are available to offset future taxes and expire at various dates through 2034. 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, 2019. 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.

Uncertain Tax Positions

The changes to uncertain tax positions from January 1, 2018 through December 31, 2019 are as follows:

	U.S. $000s	Foreign $000s	Total $000s
Gross tax liabilities as of January 1, 2018	—	15	15
Additions based on tax provisions related to the current year	—	—	—
Additions to tax positions of prior years	—	—	—
Reductions due to settlements with tax authorities	—	—	—
Reductions for positions of prior years	—	(12)	(12)
Gross tax liabilities as of December 31, 2018	—	3	3
Additions based on tax provisions related to the current year	—	—	—
Additions to tax positions of prior years	—	—	—
Reductions due to settlements with tax authorities	—	—	—
Reductions for positions of prior years	—	(3)	(3)
Gross tax liabilities as of December 31, 2019	**—**	**—**	**—**

U.S. corporations are routinely subject to audit by federal and state tax authorities in the normal course of business. During 2019, the IRS completed an audit of Vedanta for the financial year ended December 31, 2016 with no impact to the Group's financial condition, results of operations, or cash flows.

26. Sale of Assets

In February 2018, The Sync Project, Inc. ("Sync") entered into an asset purchase agreement with Bose Corporation for the sale of certain assets and liabilities. The total aggregate purchase price was $4.5 million, consisting of approximately $4.0 million paid at closing and $0.5 million in cash deposited into escrow to be held for 12 months in order to secure the indemnification obligations of Sync after the closing date.

PureTech Health derecognized certain assets and liabilities based on their historical costs. The excess of the consideration transferred over the historical costs of the assets and liabilities resulted in a gain of approximately $4.0 million , which was recorded to the line item "Gain on sale of assets" on the accompanying Consolidated Statements Comprehensive Income/ (Loss) for the year ended December 31, 2018.

Additionally, as part of the derecognition, the Company and certain preferred shareholders received a cash distribution of approximately $3.3 million during the year ended December 31, 2018. During the year ended December 31, 2019, certain preferred shareholders received further cash distributions of $0.1 million. As of December 31, 2019, no remaining third party obligations remained.

27. Tal Merger Agreement

During the year ended December 31, 2018, Tal Medical, Inc. ("Tal") a subsidiary of the Group entered into an option agreement with a third party, through which the third party was given the option to acquire substantially all of Tal's assets. The option was contingent on the third party raising gross proceeds of $15 million prior to January 1, 2019 (the option expiration date). Upon the expiration of the option all external investors, not

including PureTech, would be entitled to a distribution equal to the cash on hand on the date of expiration, and Tal's operations would wind down. As of December 31, 2018, the minimum gross proceeds were not raised, resulting in the option expiring. As a result, the preferred shares were adjusted to the cash distribution the external investors were entitled to, which totaled $0.1 million, resulting in gain of $11 million being recognized in Finance income/(costs)—fair value accounting line of the Consolidated Statements of Comprehensive Income/(Loss) for the year ended December 31, 2018. In 2019 a merger was executed between PureTech and Tal wherein PureTech became the sole shareholder of Tal following the liquidation of all assets. In 2019, certain preferred shareholders received distributions of $0.1 million in connection with the merger. As of December 31, 2019 Tal was an inactive entity in the Group's Parent segment.

28. Subsequent Events

The Company has evaluated subsequent events after December 31, 2019, 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 January 6, 2020, Sonde effected the second tranche closing of its Series A-2 preferred share financing which initially closed on April 4, 2019. The Company received an aggregate of $4.8 million in gross proceeds in the second tranche closing.

On January 22, 2020, PureTech Health sold 2,100,000 common shares of Karuna for aggregate proceeds of $200.9 million. As of March 13, 2020, PureTech Health held 5,295,397 common shares, or 20.3 percent, of Karuna.

On February 5, 2020, PureTech Health participated in the second closing of Vor's Series A-2 preferred share financing which initially closed on February 12, 2019. PureTech's participation totaled $0.7 million. Proceeds for the second closing totaled $17.8 million.

In March 2020, the World Health Organization declared the outbreak of a new Coronavirus, now known as COVID-19, a pandemic. The outbreak of the virus has caused material disruptions to the global economy, including its health care system. Since the future course and duration of the COVID-19 outbreak are unknown, the Company is currently unable to determine whether the outbreak will have a negative effect on the Company's results in 2020. To date, the Company has seen limited impact on its research and development activities and the operation of the Company more generally. If the pandemic continues to extended for a period of time such as six months, the Company would potentially have milestones delayed; however the Company has sufficient capital to absorb any potential delays and continue operations in line with its going concern statement set forth in Note 1.

On April 1, 2020, PureTech Health participated in the second closing of Gelesis' Series 3 Growth preferred share financing which initially closed on December 5, 2019. PureTech's participation totaled $10.0 million. Proceeds for the second closing totaled $14.1 million.

In April 2020, PureTech sold its remaining 2,119,696 resTORbio common shares, for aggregate proceeds of $3.0 million.

In April 2020, Vedanta issued and sold shares of Series C-2 preferred shares for aggregate proceeds of $6.5 million, of which none was contributed by PureTech.

On May 26, 2020, PureTech sold 555,500 Karuna common shares for aggregate proceeds of $45.0 million.

On June 30, 2020, PureTech participated in the 1st closing of Vor's Series B Preferred Share financing. For consideration of $0.5 million, PureTech received 961,538 shares.

On July 10, 2020, pursuant to its collaboration agreement with JSR Corporation, Vedanta issued 107,389 Series C-2 Preferred shares for $2.5 million in aggregate proceeds.

On August 26, 2020, PureTech sold 1,333,333 common shares of Karuna for aggregate proceeds of $101.6 million. Immediately subsequent to the disposal, PureTech continued to hold 3,406,564 common shares or 12.8 percent of total outstanding shares of Karuna.

On September 2, 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 7.73% plus the greater of (i) 30 day U.S. Dollar LIBOR reported in the Wall Street Journal or (ii) 0.17%. The loan matures September 2025 and requires interest only payments for the initial 24 months. For loan consideration, 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.

Unaudited Condensed Consolidated Statements of Comprehensive Income/(Loss)
For the Six Months Ended June 30

	Note	2020 $000s	2019 $000s Restated *
Contract revenue	3	**5,465**	3,955
Grant revenue	3	**1,379**	432
Total revenue		**6,844**	4,387
Operating expenses:			
General and administrative expenses		**(21,376)**	(29,196)
Research and development expenses		**(38,250)**	(45,507)
Operating income/(loss)		**(52,782)**	(70,317)
Other income/(expense):			
Gain/(loss) on deconsolidation	5	**—**	108,395
Gain/(loss) on investments held at fair value	5	**276,910**	52,375
Loss realized on sale of investments	5	**(44,539)**	—
Other income/(expense)		**482**	(41)
Other income/(expense)		**232,852**	160,729
Finance income/(costs):			
Finance income	7	**1,032**	2,383
Finance income/(costs)—contractual	7	**(1,213)**	(2,106)
Finance income/(costs)—fair value accounting	7	**1,866**	(32,978)
Finance income/(costs)—subsidiary preferred shares	7	**—**	(1,425)
Net finance income/(costs)		**1,685**	(34,126)
Share of net gain/(loss) of associates accounted for using the equity method		**(7,271)**	—
Income/(loss) before taxes		**174,483**	56,287
Taxation	18	**(50,775)**	(25,142)
Income/(loss)		**123,708**	31,145
Other comprehensive income/(loss):			
Items that are or may be reclassified as profit or loss			
Foreign currency translation differences		**—**	(82)
Total other comprehensive income/(loss)		**—**	(82)
Total comprehensive income/(loss)		**123,708**	31,063
Income/(loss) attributable to:			
Owners of the Company		**123,957**	73,506
Non-controlling interests	15	**(249)**	(42,361)
		123,708	31,145
Comprehensive income/(loss) attributable to:			
Owners of the Company		**123,957**	73,424
Non-controlling interests	15	**(249)**	(42,361)
		123,708	31,063
Earnings/(loss) per share:		**$**	$
Basic earnings per share	8	**0.43**	0.26
Diluted earnings per share	8	**0.42**	0.26

See accompanying notes to the unaudited condensed consolidated interim financial statements.

* Restated as described in Note 2, primarily as a result of a re-assessment of the Company's accounting for the deconsolidation of Karuna and for the asset acquisition by Gelesis.

Condensed Consolidated Statements of Financial Position as of the Period Ended

	Note	**June 30, 2020 $000s Unaudited**	December 31, 2019 $000s
Assets			
Non-current assets			
Property and equipment, net	9	**21,583**	21,455
Right of use asset, net	16	**21,570**	22,383
Intangible assets, net	10	**625**	625
Investments held at fair value	5	**709,456**	714,905
Investments in associates		**3,371**	10,642
Lease receivable—long-term	16	**1,895**	2,082
Deferred tax assets		**—**	142
Other non-current assets		**152**	99
Total non-current assets		**758,651**	772,333
Current assets			
Trade and other receivables		**2,200**	1,977
Prepaid expenses and other current assets		**2,062**	1,946
Lease receivable—short-term	16	**365**	350
Other financial assets		**2,124**	2,124
Short-term investments		**—**	30,088
Cash and cash equivalents		**340,120**	132,360
Total current assets		**346,871**	168,845
Total assets		**1,105,523**	941,178
Equity and liabilities			
Equity			
Share capital	11	**5,411**	5,408
Share premium	11	**288,225**	287,962
Merger reserve	11	**138,506**	138,506
Other reserve	11	**(26,776)**	(18,282)
Retained earnings/(accumulated deficit)	11	**378,400**	254,444
Equity attributable to the owners of the Company	11	**783,766**	668,038
Non-controlling interests	11, 15	**(16,887)**	(17,640)
Total equity	11	**766,879**	650,398
Non-current liabilities			
Deferred revenue	3	**251**	1,220
Deferred tax liability	18	**148,418**	115,445
Lease liability, non-current	16	**33,935**	34,914
Total non-current liabilities		**182,605**	151,579
Current liabilities			
Deferred revenue	3	**1,473**	5,474
Lease liability, current	16	**3,066**	2,929
Trade and other payables		**12,802**	19,750
Taxes payable	18	**17,912**	93
Subsidiary:			
Notes payable	13, 14	**1,455**	1,455
Warrant liability	13	**7,130**	7,997
Preferred shares	12, 13	**111,238**	100,989
Other current liabilities		**963**	515
Total current liabilities		**156,039**	139,201
Total liabilities		**338,644**	290,780
Total equity and liabilities		**1,105,522**	941,178

See accompanying notes to the unaudited condensed consolidated interim financial statements.

Unaudited Condensed Consolidated Statements of Changes in Equity

	Share Capital									
	Shares	Amount $000s	Share premium $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
						Restated *	Restated *	Restated *	Restated *	Restated *
As at January 1, 2019	**282,493,867**	**5,375**	**278,385**	**138,506**	**10**	**20,923**	**(166,693)**	**276,506**	**(108,535)**	**167,971**
Net income/(loss)	—	—	—	—	—	—	73,506	73,506	(42,361)	31,145
Foreign currency exchange	—	—	—	—	(82)	—	—	(82)	—	(82)
Total comprehensive income/(loss) for the period	**—**	**—**	**—**	**—**	**(82)**	**—**	**73,506**	**73,424**	**(42,361)**	**31,063**
Deconsolidation of subsidiary	—	—	—	—	—	—	—	—	2,584	2,584
Equity settled share-based payments	—	—	—	—	—	3,251	—	3,251	3,140	6,391
Other	—	—	—	—	—	3	(81)	(78)	—	(78)
Balance June 30, 2019 (unaudited)	**282,493,867**	**5,375**	**278,385**	**138,506**	**(72)**	**24,177**	**(93,269)**	**353,103**	**(145,172)**	**207,931**

	Share Capital									
	Shares	Amount $000s	Share premium $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 as of 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)	—	—	—	—	—	—	123,957	123,957	(249)	123,708
Total comprehensive income/(loss) for the period	**—**	**—**	**—**	**—**	**—**	**—**	**123,957**	**123,957**	**(249)**	**123,708**
Settlement of restricted stock units	—	—	—	—	—	(12,522)	—	(12,522)	—	(12,522)
Exercise of share-based awards	141,842	3	263	—	—	—	—	265	1	266
Distributions	—	—	—	—	—	—	—	—	(6)	(6)
Revaluation of deferred tax assets related to share-based awards	—	—	—	—	—	(171)	—	(171)	—	(171)
Equity settled share-based payments	—	—	—	—	—	4,200	—	4,200	1,005	5,206
Balance June 30, 2020 (unaudited)	**285,512,461**	**5,411**	**288,225**	**138,506**	**—**	**(26,776)**	**378,400**	**783,766**	**(16,887)**	**766,878**

See accompanying notes to the unaudited condensed consolidated interim financial statements.

* Restated as described in Note 2, primarily as a result of a re-assessment of the Company's accounting for the deconsolidation of Karuna and for the asset acquisition by Gelesis.

Unaudited Condensed Consolidated Statements of Cash Flows
For the Six Months Ended June 30

	Note	2020 $000s	2019 $000s Restated *
Cash flows from operating activities			
Income/(loss)		**123,708**	31,145
Adjustments to reconcile net income including non-controlling interest to net cash used in operating activities:			
Non-cash items:			
Depreciation and amortization	9, 16	**3,182**	2,858
Equity settled share-based payment expense	6	**5,206**	6,391
Gain on deconsolidation	5	**—**	(108,395)
(Gain)/loss on investments held at fair value	5	**(276,910)**	(52,375)
Loss realized on sale of investments	5	**44,539**	—
Loss on associates accounted for using the equity method		**7,271**	—
Loss on disposal of assets		**15**	—
Income taxes, net	18	**50,775**	25,277
Net finance costs	7	**(1,686)**	34,125
Changes in operating assets and liabilities:			
Accounts receivable		**(80)**	(3,581)
Prepaid expenses and other current assets		**(28)**	(1,538)
Deferred revenues	3	**(4,971)**	3,546
Accounts payable and accrued expenses		**(6,991)**	1,837
Other liabilities		**368**	3,975
Other		**(6)**	478
Income taxes paid		**(295)**	—
Interest received		**1,004**	1,878
Interest paid	16	**(1,200)**	(948)
Net cash used in operating activities		**(56,098)**	(55,326)
Cash flows from investing activities:			
Purchase of property, plant and equipment	9	**(2,054)**	(9,717)
Purchases of associates preferred shares held at fair value	5	**(10,650)**	(5,650)
Purchases of investments held at fair value	5	**(500)**	(1,556)
Cash in subsidiary eliminated upon deconsolidation		**—**	(10,379)
Purchases of short term investments		**—**	(39,693)
Proceeds from sale of investments held at fair value	5	**248,970**	—
Receipt of payment for finance sub-lease	16	**171**	—
Proceeds from maturity of short term investments		**30,116**	103,995
Net cash provided by/(used in) investing activities		**266,052**	37,000
Cash flows from financing activities:			
Proceeds from issuance of convertible notes	14	**—**	1,607
Repayment of long-term debt		**—**	(178)
Receipt of PPP loan		**68**	—
Issuance of preferred shares of subsidiaries	12	**11,250**	32,478
Exercise of stock options	11	**266**	—
Payment of lease liability	16	**(1,256)**	(502)
Repurchase of vested restricted share units	11	**(12,522)**	—
Net cash provided by financing activities		**(2,194)**	33,405
Effect of exchange rates on cash and cash equivalents		**—**	(82)
Net increase in cash and cash equivalents		**207,760**	14,997
Cash and cash equivalents at beginning of year		**132,360**	117,051
Cash and cash equivalents at end of year		**340,120**	132,048
Supplemental disclosure of non-cash investment and financing activities:			
Purchase of intangible asset and investment held at fair value in consideration for issuance of warrant liability and assumption of other long and short-term liabilities		—	15,894
Leasehold improvements purchased through lease incentives (deducted from Right of Use Asset)		—	10,680

See accompanying notes to the unaudited condensed consolidated interim financial statements.

* Restated as described in Note 2, primarily as a result of a re-assessment of the Company's accounting for the deconsolidation of Karuna and for the asset acquisition by Gelesis.

Notes to the Condensed Consolidated Financial Statements

1. General information

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 3AE, United Kingdom.

PureTech, which is comprised of PureTech Health plc and its Founded Entities, is a clinical-stage biotherapeutics company dedicated to discovering, developing and commercializing highly differentiated medicines for devastating diseases, including intractable cancers, lymphatic and gastrointestinal diseases, central nervous system disorders and inflammatory and immunological diseases, among others.

PureTech's Condensed Consolidated Financial Statements ("interim financial statements") consolidate those of the Company and its subsidiaries (together referred to as the "Group").

The accounting policies applied consistently to all periods presented in these half-yearly Condensed Consolidated Financial Statements are the same as those applied by the Group in its Consolidated Financial Statements in its 2019 Annual Report and Accounts, with the exception of any new standards the Group adopted as of January 1, 2020, included below.

Basis of Accounting

These interim financial statements have been prepared in accordance with International Accounting Standards ("IAS") 34 Interim Financial Reporting and should be read in conjunction with the Group's last Consolidated Financial Statements as of and for the year ended December 31, 2019. They do not include all the information required for a complete set of IFRS financial statements. However, selected explanatory notes are included to explain events and transactions that are significant to an understanding of the changes in the Group's financial position and performance since the last annual consolidated financial information included in the annual report and accounts as of and for the year ended December 31, 2019. Certain amounts in the Condensed Consolidated Financial Statements and accompanying notes may not add due to rounding. All percentages have been calculated using unrounded amounts.

The Group has prepared trading and cash flow forecasts for the Group covering the period to the first quarter of 2024. After making inquiries and considering the impact of risks and opportunities on expected cash flows the Directors have a reasonable expectation that the Group has adequate cash to continue in operational existence for the foreseeable future. For this reason, the Group has adopted the going concern basis in preparing the half-yearly results.

These condensed financial statements were authorized for issue by the Company's Board of Directors on August 26, 2020.

COVID-19 Pandemic

In December 2019, illnesses associated with COVID-19 were reported and the virus has since caused widespread and significant disruption to daily life and economies across geographies. The World Health Organization has classified the outbreak as a pandemic. The Group's business, operations and financial condition and results has not been significantly impacted during the six months ended June 30, 2020. In response to the COVID-19 pandemic, PureTech has taken swift action to ensure the safety of its employees and other stakeholders. The Company is continuing to monitor the latest developments regarding the COVID-19 pandemic on its business, operations, and financial condition and results, and has made certain assumptions regarding the pandemic for

purposes of its operational planning and financial projections, including assumptions regarding the duration and severity of the pandemic and the global macroeconomic impact of the pandemic. Despite careful tracking and planning, however, PureTech is unable to accurately predict the extent of the impact of the pandemic on its business, operations, and financial condition and results in future periods due to the uncertainty of future developments. The Company is focused on all aspects of its business and is implementing measures aimed at mitigating issues where possible including by using digital technology to assist operations for our R&D and enabling functions.

Significant Accounting Policies

There have been no significant changes in the Group's accounting policies from those disclosed in our Consolidated Financial Statements as of and for the year ended December 31, 2019. The significant accounting policies we use for half-year financial reporting are disclosed in Note 1, Accounting policies of the accompanying notes to the Consolidated Financial Statements included in our 2019 Annual Report, in the below paragraph, and in the section below Adoption of New Accounting Standards.

Research and Development Expenses

Amounts received as part of research and collaboration agreements to participate in certain research and development activities that do not fall within the scope of IFRS 15 are recorded as a credit to the applicable costs in which the collaborating party is participating, at the time the costs are incurred.

Adoption of New Accounting Standards

There have been no recent new accounting standards that have had an impact on the Company's Condensed Consolidated Financial Statements. New accounting standards not listed below were assessed and determined to be either not applicable or did not have a material impact on the Company's Condensed Consolidated Financial Statements or processes.

We adopted the amendments to IAS 1, Presentation of Financial Statements, and IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors which clarified the definition of 'materiality' and how it should be applied. The amendments also improve the explanations of the definition and ensure consistency across all IFRS Standards. There was no impact on the Group's Condensed Consolidated Financial Statements from the adoption of this new standard.

2. Prior Period

Primarily as a result of a re-assessment of the Company's accounting for the deconsolidation of Karuna and for the asset acquisition by Gelesis (which was deconsolidated on July 1, 2019), the Company has made certain restatements in its Condensed Consolidated Statement of Comprehensive Income, Condensed Consolidated Statements of Changes in Equity and its Condensed Consolidated Statement of Cash Flows for the six months ended June 30, 2019, as follows:

a. Condensed Consolidated Statement of Comprehensive Income

During the six months ended June 30, 2019, the Company deconsolidated two of its subsidiaries due to loss of control. The gain on deconsolidation was not calculated in accordance with IFRS 10, predominantly since part of the gain was recognized in equity as opposed to Other income. An adjustment has been made in respect of the above, which resulted in an increase to Other income of $45.2 million, against a direct decrease to the retained earnings account of $46.4 million, an increase to Other reserves of $3.8 million and a decrease to Non-controlling interests of $2.6 million. The impact of these adjustments on the Company's consolidated comprehensive income for the period was an increase in income of $45.2 million to $31.1 million profit, rather

than a loss of $14.1 million as reported before. There was no impact on the opening balances at January 1, 2019. The changes are as follows:

	2019 $000s As Previously Reported	2019 $000s Adjustment	2019 $000s As Restated
Other income/(expense):			
Gain on deconsolidation	63,231	45,164	108,395
Other income/(expense)	115,565	45,164	160,729
Income/(loss) before taxes	11,123	45,164	56,287
Taxation	(25,142)	—	(25,142)
Income/(loss) for the period	(14,019)	45,164	31,145
Total other comprehensive income/(loss)	(82)	—	(82)
Total comprehensive income/(loss)	(14,101)	45,164	31,063
Income/(loss) attributable to:			
Owners of the Company	28,342	45,164	73,506
Non-controlling interests	(42,361)	—	(42,361)
	(14,019)	45,164	31,145
Comprehensive income/(loss) attributable to:			
Owners of the Company	28,260	45,164	73,424
Non-controlling interests	(42,361)	—	(42,361)
	(14,101)	45,164	31,063
Earnings per share:	$	$	$
Basic earnings per share	0.10	0.16	0.26
Diluted earnings per share	0.10	0.16	0.26

b. Condensed Consolidated Statements of Changes in Equity

As a result of the aforementioned adjustment in the application of IFRS 10, as well as an adjustment to the IFRS 16 implementation (which constituted primarily a reclassification with the Deconsolidation of Subsidiaries line item, which did not impact the total retained earnings), the Company has made the following adjustments to the Condensed Consolidated Statements of Changes in Equity for the six months ended June 30, 2019.

	Other reserve $000s	Retained earnings/(accumulated deficit) $000s	Total parent equity $000s	Non-controlling interests $000s	Total equity $000s
As previously reported					
Adjustment for the initial application of IFRS 16	—	(642)	(642)	—	(642)
Adjusted balance as of January 1, 2019	20,923	(168,334)	274,865	(108,535)	166,330
Net income/(loss)	—	28,342	28,342	(42,361)	(14,019)
Total comprehensive income/(loss) for the period	—	28,342	28,260	(42,361)	(14,101)
Deconsolidation of subsidiaries	(3,794)	47,621	43,827	5,189	49,015
Balance June 30, 2019	20,380	(92,371)	350,203	(142,567)	207,635
Adjustments					
Adjustment for the initial application of IFRS 16	—	1,641	1,641	—	1,641
Adjusted balance as of January 1, 2019	—	1,641	1,641	—	1,641
Net income/(loss)	—	45,164	45,164	—	45,164
Total comprehensive income/(loss) for the period	—	45,164	45,164	—	45,164
Deconsolidation of subsidiaries	3,794	(47,621)	(43,827)	(2,605)	(46,432)
Other	3	(81)	(78)	—	(78)
Balance June 30, 2019	3,797	(897)	2,900	(2,605)	295
As Restated					
Adjustment for the initial application of IFRS 16	—	999	999	—	999
Adjusted balance as of January 1, 2019	20,923	(166,693)	276,506	(108,535)	167,971
Net income/(loss)	—	73,506	73,506	(42,361)	31,145
Total comprehensive income/(loss) for the period	—	73,506	73,424	(42,361)	31,063
Deconsolidation of subsidiaries	—	—	—	2,584	2,584
Other	3	(81)	(78)	—	(78)
Balance June 30, 2019	24,177	(93,269)	353,103	(145,172)	207,931

c. Condensed Consolidated Statement of Cash Flows

The Company has restated the Condensed Consolidated Statement of Cash Flows for the six months ended June 30, 2019 to adjust mis-categorization of certain line items (see below). These adjustments do not change the overall increase in cash and cash equivalents during the period, which remained constant. The impact is as follows:

	2019 $000s As Previously Reported	2019 $000s Adjustments	2019 $000s As Restated
Net cash used in operating activities	(35,482)	(19,844)	(55,326)[a]
Net cash provided by investing activities	13,512	23,487	37,000[b]
Net cash provided by financing activities	37,049	(3,644)	33,405[c]
Effect of exchange rates on cash and cash equivalents	(82)	—	(82)
Net increase in cash and cash equivalents	14,997	—	14,997

(a) The adjustments to net cash used in operating activities were primarily in relation to (1) changes made to the treatment of an asset acquisition by Gelesis, which was mostly non-cash in nature for the six months ended June 30, 2019, accounted for previously as if it were an actual cash outflow. The updated presentation reflects this change which is to remove this transaction from both operating and investing activities, resulting in a $11.2 million increase in cash provided by investing activities against an increase in cash used in operating activities; (2) the sale of a short term investment, which was previously inappropriately classified as an operating activity when this was an investing activity. This totaled $5.0 million and the appropriate classification has now been applied. As a result there was a $5.0 million increase in cash used by operating activities and an increase in cash provided by investing activities; (3) changes made to the categorization of assets and liabilities that were disposed of in the deconsolidation of Karuna, resulting in a $2.0 million increase in cash used by operating activities and an increase in cash provided by investing activities; and (4) a removal of the loss on issuance of Gelesis preferred shares of $1.6 million which was originally included as a cash movement in financing activities. This change resulted in a $1.6 million increase in cash used by operating activities and an increase in cash provided by financing activities.

(b) As evidenced in footnote (a), the main adjustments to investing activities were the $11.2 million increase in cash provided by investing activities related to the Gelesis asset acquisition, the increase of $5.0 million related to the sale of a short-term investment, as well as the increase of $2.0 million related to the changes made to categorization of assets and liabilities disposed of in the deconsolidation of Karuna. Also, $4.7 million was removed from financing activities to decrease net cash provided by financing activities, and from investing activities to increase net cash provided by investing activities, that is to reflect the non-cash nature of the investment in the above mentioned asset acquisition by Gelesis in exchange for the issuance of warrants. Other changes of approximately $0.6 million resulted from an adjustment to correct purchases of property, plant and equipment.

(c) The adjustment is the result of the $4.7 million change mentioned in footnote (b) as well as an adjustment for the payment of the lease liability of $0.5 million, partially offset by the removal of the loss on issuance of Gelesis preferred shares described in footnote (a) of $1.6 million.

Please note that no changes will need to be made to the full year financials for 2019 reported on April 9, 2020 as a result of the above mentioned adjustments.

3. Revenue

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

For the six months ended June 30,	**2020 $000s**	2019 $000s
Contract revenue	**5,465**	3,955
Grant income	**1,379**	432
Total revenue	**6,844**	4,387

All amounts recorded in contract revenue were generated in the United States. All of the Company's contracts as of June 30, 2020 and 2019 were determined to have a single performance obligation which consists of a combined deliverable of license to intellectual property and research and development services. Therefore 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.

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 revenue recognition	**2020 $000s**	2019 $000s
Transferred at a point in time	**—**	—
Transferred over time	**5,465**	3,955
	5,465	3,955

Customers over 10% of revenue	**2020 $000s**	2019 $000s
Roche Holding AG	**1,518**	2,479
Eli Lilly and Company	**339**	765
Boehringer Ingelheim International GMBH	**2,398**	—
Imbrium Therapeutics L.P.	**1,148**	457
	5,403	3,701

4. Segment Information

During the second half of 2019, the Company deconsolidated one of its subsidiaries which resulted in a change to the composition of its reportable segments. Consequently, the Company revised the June 30, 2019 financial information to conform to the presentation as of and for the period ending June 30, 2020. The change in segments reflects how the Company's Board of Directors reviews the Group's results, allocates resources and assesses performance.

Information About Reportable Segments:

	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Consolidated $000s
	June 30, 2020 $000s				
Consolidated Statements of Comprehensive Loss					
Contract revenue	**3,916**	**1,549**	**—**	**—**	**5,465**
Grant revenue	**—**	**1,379**	**—**	**—**	**1,379**
Total revenue	**3,916**	**2,928**	**—**	**—**	**6,844**
General and administrative expenses	**(1,495)**	**(6,229)**	**—**	**(13,652)**	**(21,376)**
Research and development expenses	**(17,616)**	**(20,594)**	**—**	**(40)**	**(38,250)**
Total operating income/(expense)	**(15,195)**	**(23,895)**	**—**	**(13,692)**	**(52,782)**
Other income/(expense):					
Gain/(loss) on investments held at fair value	**—**	**—**	**—**	**276,910**	**276,910**
Loss realized on sale of investments	**—**	**—**	**—**	**(44,539)**	**(44,539)**
Other income/(expense)	**—**	**4**	**—**	**478**	**482**
Total other income/(expense)	**—**	**4**	**—**	**232,848**	**232,852**
Net finance income/(costs)	**17**	**1,765**	**—**	**(97)**	**1,685**
Share of net income/(loss) of associates accounted for using the equity method	**—**	**—**	**—**	**(7,271)**	**(7,271)**
Income/(loss) from continuing operations	**(15,178)**	**(22,127)**	**—**	**211,788**	**174,483**
Income/(loss) 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	**(13,489)**	**(21,617)**	**—**	**216,111**	**181,005**
Finance income/(costs)—IFRS 9 fair value accounting	**—**	**1,866**	**—**	**—**	**1,866**
Share-based payment expense	**(1,301)**	**(1,005)**	**—**	**(2,900)**	**(5,206)**
Depreciation of tangible assets	**(388)**	**(784)**	**—**	**(782)**	**(1,955)**
Amortization of ROU assets	**—**	**(586)**	**—**	**(641)**	**(1,227)**
Taxation	**—**	**(1)**	**—**	**(50,774)**	**(50,775)**
Income/(loss)	**(15,178)**	**(22,128)**	**—**	**161,014**	**123,708**
Other comprehensive income/(loss)	**—**	**—**	**—**	**—**	**—**
Total comprehensive income/(loss)	**(15,178)**	**(22,128)**	**—**	**161,014**	**123,708**
Total comprehensive income/(loss) attributable to:					
Owners of the Company	**(15,178)**	**(21,873)**	**—**	**161,008**	**123,957**
Non-controlling interests	**—**	**(254)**	**—**	**6**	**(249)**
	June 30, 2020 $000s				
Consolidated Statements of Financial Position:					
Total assets	**35,905**	**42,960**	**—**	**1,026,657**	**1,105,522**
Total liabilities	**42,222**	**156,024**	**—**	**140,398**	**338,644**
Net assets/(liabilities)	**(6,317)**	**(113,064)**	**—**	**886,259**	**766,879**

	Internal $000s	Controlled Founded Entities $000s	Non-Controlled Founded Entities $000s	Parent Company & Other $000s	Consolidated $000s
	June 30, 2019 $000s				
Consolidated Statements of Comprehensive Loss					
Contract revenue	2,479	1,262	—	213	3,955
Grant revenue	15	418	—	—	432
Total revenue	2,494	1,680	—	213	4,387
General and administrative expenses	(1,157)	(6,391)	(10,439)	(11,210)	(29,196)
Research and development expenses	(10,757)	(18,534)	(15,555)	(662)	(45,507)
Total operating income/(expense)	(9,420)	(23,244)	(25,994)	(11,659)	(70,317)
Other income/(expense):					
Gain on deconsolidation (restated)*	—	—	—	108,395	108,395
Gain/(loss) on investments held at fair value	—	—	—	52,375	52,375
Other income/(expense)	17	(39)	—	(19)	(41)
Total other income/(expense) (restated)*	17	(39)	—	160,751	160,729
Net finance income/(costs)	—	(4,099)	(30,141)	114	(34,126)
Income/(loss) from continuing operations (restated)*	(9,402)	(27,382)	(56,135)	149,207	56,287
(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	(9,285)	(21,106)	(21,874)	152,205	99,939
Finance income/(costs)—subsidiary preferred shares	—	138	(1,564)	—	(1,425)
Finance income/(costs)—IFRS 9 fair value accounting	—	(4,297)	(28,737)	55	(32,978)
Share-based payment expense	(3)	(786)	(3,543)	(2,059)	(6,391)
Depreciation of tangible assets	(70)	(818)	(207)	(126)	(1,221)
Amortization of ROU assets	—	(513)	(83)	(868)	(1,464)
Amortization of intangible assets	(44)	(1)	(129)	—	(173)
Taxation	—	(9)	(162)	(24,970)	(25,142)
Income/(loss) (restated)*	(9,402)	(27,392)	(56,297)	124,237	31,145
Other comprehensive income/(loss)	—	—	(82)	—	(82)
Total comprehensive income/(loss)	(9,402)	(27,392)	(56,380)	124,237	31,063
Total comprehensive income/(loss) attributable to:					
Owners of the Company (restated)*	688	(19,428)	(32,073)	124,237	73,424
Non-controlling interests	(10,090)	(7,964)	(24,307)	—	(42,361)
	December 31, 2019 $000s				
Consolidated Statements of Financial Position:					
Total assets	17,614	54,730	—	868,834	941,178
Total liabilities	10,053	146,054	—	134,673	290,780
Net (liabilities)/assets	7,561	(91,324)	—	734,161	650,398

* See Note 2

5. Investments held at fair value

Investments held at fair value include both unquoted nonpublic investments and quoted public investments held by PureTech. These investments, which include Akili, Vor, Karuna, Gelesis (other than the investment in common shares), resTORbio and other insignificant investments, are initially measured at fair value and are subsequently re-measured at fair value at each reporting date. Interests in these investments are accounted for as investments held at fair value, as shown below:

Investments held at fair value	$000's
Balance at December 31, 2019	714,905
Sale of Karuna shares	(245,922)
Sale of resTORbio shares	(3,048)
Loss realised on sale of investments	(44,539)
Cash purchase of Gelesis preferred shares	10,000
Cash purchase of Vor preferred shares	1,150
Gain/(loss)—fair value through profit and loss	276,910
As of June 30, 2020	**709,456**

Gelesis

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. During the six months ended June 30, 2020, the Company recognized a gain of $2.4 million related to the preferred shares and warrants that was recorded in the line item Gain/(loss) on investments held at fair value within the Condensed Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). Please refer to Note 13 for information regarding the valuation of these instruments.

Vor

On February 12, 2020, PureTech participated in the 2nd 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 1st closing of Vor's Series B Preferred Share financing. For consideration of $0.5 million, PureTech received 961,538 shares. Additionally, during the six months ended June 30, 2020 the Company recognized a fair value loss of $1.4 million that was recorded in the line item Gain/(loss) on investments held at fair value within the Condensed Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). Please refer to Note 13 for information regarding the valuation of these instruments.

Karuna

On January 22, 2020, PureTech sold 2,100,000 shares of Karuna 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. As a result of the sales, the Company recorded a loss of $44.3 million attributable to blockage discount included in the sales price, to the line item Loss Realized on Sale of Investment within the Condensed Consolidated Statement of Income/ (Loss) and Other Comprehensive Income/ (Loss). Additionally, during the six months ended June 30, 2020 and 2019 the Company recognized a gain of $261.4 million and $40.6 million, respectively that was recorded on the line item Gain/(loss) on investments held at fair value within the Condensed Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). As of June 30, 2020, PureTech continued to hold 4,739,897 Karuna common shares or 17.8 per cent of total outstanding Karuna common shares. Please refer to Note 13 for information regarding the valuation of these instruments.

Akili

During the six months ended June 30, 2020 and 2019, the Company recognized a gain of $14.3 million and a loss of $3.9 million, respectively, that was recorded on the line item Gain/(loss) on investments held at fair value

within the Condensed Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). Please refer to Note 13 for information regarding the valuation of these instruments.

resTORbio

In April 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 Investment within the Condensed Consolidated Statement of Income/ (Loss) and Other Comprehensive Income/ (Loss). Additionally, during the six months ended June 30, 2020 and 2019, the Company recognized a loss of $0.1 million and gain of $15.5 million, respectively, that was recorded on the line item Gain/(loss) on investments held at fair value within the Condensed Consolidated Statement of Income/(Loss) and Other Comprehensive Income/(Loss). Please refer to Note 13 for information regarding the valuation of these instruments.

Gain on deconsolidation

The following table summarizes the gain on deconsolidation recognized by the Company:

Six Months Ended June 30	2020 $000s	2019 (restated) * $000s
Gain on deconsolidation of Vor	—	6,357
Gain on deconsolidation of Karuna	—	102,038
Total gain on deconsolidation	**—**	**108,395**

* See Note 2

6. Share-based Payments

Share-based payments includes stock options, restricted stock units (“RSUs”) as well as service, market and performance-based RSU awards, all in which the expense is recognized based on the grant date fair value of the awards.

Share-based Payment Expense

The Group’s share-based payment expense for the six months ended June 30, 2020 and 2019, 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 Condensed Consolidated Statement of Income/(Loss):

Six months ended June 30,	2020	2019
General and administrative	**3,522**	3,847
Research and development	**1,684**	2,544
Total	**5,206**	6,391

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 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 equity settled and expire 10 years from the grant date. As of the six months ended June 30, 2020, the Company had granted share-based awards of 8,592,307 stock options and 4,636,347 RSUs, net of forfeitures, exercises and issued RSU shares.

RSUs

During the six months ended June 30, 2020 and 2019, the Company issued no new service, market and performance based RSUs under the PSP.

Each RSU entitles the holder to one ordinary share on vesting and the RSU awards are based on a cliff vesting schedule over a three-year requisite service period in which the Company recognizes compensation expense. 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 RSUs is subject to the satisfaction of service, market and performance conditions.

The Company recognizes the estimated fair value of service, market and performance-based awards as share-based compensation expense over the vesting 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-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 service, market and performance conditions attached to the 2019 RSU awards awarded in December 2019 are based on the achievement of total shareholder return (“TSR”), with 50 percent of the shares under award vesting based on the achievement of absolute TSR targets, 12.5 percent of the shares under the award vesting based on TSR as compared to the FTSE 250 Index, 12.5 percent of the shares under the award vesting based on TSR as compared to the MSCI Europe Health Care Index, and 25.0 percent of the shares under the award vesting based on the achievement of strategic targets. The RSU award 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 service, market and performance conditions. 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 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. 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.

The Company incurred share-based payment expenses for performance based RSUs of $2.7 million and $1.3 million for the six months ended June 30, 2020 and 2019, respectively.

Stock Options

During the six months ended June 30, 2020 and 2019, the Company granted 665,392 and 1,274,388 stock option awards under the PSP, respectively.

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:

For the six months ended June 30,	2020	2019
Expected volatility	**39.00 %**	36.00 %
Expected terms (in years)	**5.65**	5.47
Risk-free interest rate	**0.75 %**	2.25 %
Expected dividend yield	**—**	—
Grant date fair value	**$ 1.11**	$ 0.89
Share price at grant date	**$ 2.97**	$ 2.49

As of June 30, 2020, 5,186,804 incentive options are exercisable with a weighted-average exercise price of $1.51. Exercise prices ranged from $0.01 to $3.61.

The Company incurred share-based payment expenses for incentive options of $1.5 million and $0.9 million for the six months ended June 30, 2020 and 2019, respectively.

Significant Subsidiary Plans

The subsidiaries incurred $1.0 million and $4.3 million in share-based payment expense for the six months ended June 30, 2020 and 2019.

Vedanta 2010 Stock Incentive Plan

In 2010, the Board of Directors for Vedanta approved the 2010 Stock Incentive Plan (the “Vedanta Plan”). Through subsequent amendments, as of June 30, 2020, it allowed for the issuance of 2,145,867 share-based compensation awards through incentive share options, nonqualified share options, and restricted shares to employees, directors, and nonemployees providing services to Vedanta. At June 30, 2020, 380,723 shares remained available for issuance under the Vedanta Plan.

The options granted under Vedanta 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 Vedanta 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 weighted-average assumptions:

For the six months ended June 30,	2020	2019
Expected volatility	**78.24%**	90.94%
Expected terms (in years)	**6.00**	5.95
Risk free interest rate	**0.79%**	1.88%
Expected dividend yield	**— %**	— %
Grant date fair value	**$13.13**	$13.98
Share price at grant date	**$19.59**	$18.71

Vedanta incurred share-based compensation expense of $0.8 million for six months ended June 30, 2020.

Other Subsidiary Plans

The stock-based compensation expense under plans at other subsidiaries of the Group not including Vedanta, was $0.2 million for the six months ended June 30, 2020.

7. Finance Cost, Net

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

	2020 $000s	2019 $000s
Finance income		
Interest from financial assets not at fair value through profit or loss	**1,032**	2,383
Total finance income	**1,032**	2,383
Finance costs		
Contractual interest expense on notes payable	**(13)**	(140)
Interest Expense	**(1,200)**	(2,032)
Gain/(loss) on foreign currency exchange	**—**	67
Total finance income/(costs)—contractual	**(1,213)**	(2,106)
Gain/(loss) from change in fair value of warrant liability	**867**	(6,664)
Gain/(loss) from change in fair value of preferred share and convertible note liability	**999**	(26,314)
Total finance income/(costs)—fair value accounting	**1,866**	(32,978)
Total finance income/(costs)—subsidiary preferred shares	**—**	(1,425)
Finance income/(costs), net	**1,685**	(34,126)

8. Earnings/(Loss) per Share

Basic earnings/(loss) per share is computed by dividing the income/(loss) attributable to the Company and available to ordinary shareholders by the weighted average number of ordinary shares. Dilutive earnings/loss per share is computed by dividing the income/(loss) attributable to the Company and available to ordinary shareholders by the sum of the weighted average number of ordinary shares and the number of additional ordinary shares that would have been outstanding if the Company's outstanding potentially dilutive securities had been issued.

The following table sets forth the computation of basic and diluted earnings/(loss) per ordinary shares for the periods presented (in thousands, except for shares and per share amounts):

	2020	2019 Restated *
Numerator:		
Income/(loss) attributable to the owners of the Company	**123,957**	73,506
Denominator:		
Weighted average ordinary shares for basic earnings per ordinary share	**285,487,375**	282,493,867
Effect of dilutive securities	**8,170,249**	3,167,815
Weighted average ordinary shares for diluted earnings per ordinary share	**293,657,624**	285,661,682
Basic earnings per ordinary share	**0.43**	0.26
Diluted earnings per ordinary share	**0.42**	0.26

* See Note 2

9. 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 December 31, 2018	7,306	488	1,431	4,924	239	14,388
Additions, net of transfers	3,374	1,126	175	13,494	4,649	22,819
Disposals	(183)	(168)	(9)	(45)	—	(406)
Deconsolidation of subsidiaries	(3,076)	—	(137)	(754)	(4,190)	(8,158)
Reclassifications	(25)	6	48	36	(76)	(10)
Exchange differences	(11)	—	—	1	24	14
Balance as of December 31, 2019	7,385	1,452	1,508	17,656	645	28,647
Additions, net of transfers	829	—	51	400	818	2,098
Disposals	(20)	—	—	—	—	(20)
Reclassifications	(345)	—	(40)	—	—	(385)
Balance as of June 30, 2020	**7,849**	**1,452**	**1,519**	**18,054**	**1,465**	**30,338**

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 December 31, 2018	(3,222)	(233)	(756)	(1,854)	—	(6,065)
Depreciation	(1,328)	(144)	(312)	(1,448)	—	(3,231)
Disposals	102	138	5	20	—	265
Deconsolidation of subsidiaries	1,457	—	53	319	—	1,830
Reclassifications	15	—	(20)	6	—	1
Exchange differences	8	—	—	2	—	9
Balance as of December 31, 2019	(2,968)	(239)	(1,030)	(2,955)	—	(7,192)
Depreciation	(761)	(108)	(157)	(930)	—	(1,955)
Disposals	6	—	—	—	—	6
Reclassifications	345	—	40	—	—	385
Balance as of June 30, 2020	**(3,378)**	**(347)**	**(1,145)**	**(3,885)**	**—**	**(8,755)**

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, 2018	4,084	255	675	3,070	239	8,323
Balance as of December 31, 2019	4,418	1,213	478	14,701	645	21,455
Balance as of June 30, 2020	**4,471**	**1,106**	**373**	**14,169**	**1,465**	**21,583**

Depreciation of property and equipment is included in the General and administrative expenses, and Research and development expenses line items in the Condensed Consolidated Statements of Comprehensive Income/(Loss). The Company recorded depreciation expense of $2.0 million and $1.2 million for the six months ended June 30, 2020 and 2019, respectively.

10. 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 cash and non-cash consideration transferred. Information regarding the cost and accumulated amortization of intangible assets is as follows:

Cost	Licenses $000s
Balance at 31 December 2018	5,067
Additions	400
Deconsolidation of subsidiary	(4,842)
Balance as of 31 December 2019	625
Additions	—
Balance as of 30 June 2020	**625**

Accumulated amortisation	Licenses $000s
Balance at 31 December 2018	(1,987)
Amortisation	(117)
Deconsolidation of subsidiary	2,104
Balance as of 31 December 2019	—
Balance as of 30 June 2020	**—**

Intangible assets, net	Licenses $000s
Balance as of 31 December 2019	625
Balance as of 30 June 2020	**625**

These 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.

11. Equity

At June 30, 2020 and December 31, 2019, 285,512,461 and 285,370,619 common shares were outstanding, respectively, including all vested common shares issued pursuant to PureTech Health LLC Incentive Compensation arrangements as detailed in Note 6.

12. Subsidiary Preferred Shares

IFRS 9 addresses the classification, measurement, and recognition of financial liabilities. Preferred shares issued by subsidiaries and affiliates often contain redemption and conversion features that are assessed under IFRS 9 in conjunction with the host preferred share instrument.

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 in whole at fair value through profit and loss no bifurcation is required.

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

The Group recognizes 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 and derivatives converted into preferred shares.

The balance as of June 30, 2020 and December 31, 2019 represents the fair value of the instruments for all subsidiary preferred shares. The following summarizes the subsidiary preferred share balance:

As of June 30, 2020 and December 31, 2019	**2020 $000s**	2019 $000s
Entrega	**2,042**	3,222
Follica	**11,486**	11,663
Sonde	**12,632**	7,212
Vedanta Biosciences	**85,079**	78,892
Total subsidiary preferred share balance	**111,238**	100,989

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 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 June 30, 2020 and December 31, 2019, 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 June 30, 2020 and December 31, 2019	**2020 $000s**	2019 $000s
Entrega	**2,216**	2,216
Follica	**6,405**	6,405
Sonde	**12,000**	7,250
Vedanta Biosciences	**83,661**	77,161
Total minimum liquidation preference	**104,282**	93,032

As of June 30, 2020, the minimum liquidation preference increased as compared to December 31, 2019 owing to the issuance of shares by Vedanta and Sonde.

For the six months ended June 30, 2020, the Group recognized the following changes in the value of subsidiary preferred shares:

	$000s
Balance as of December 31, 2019	100,989
Issuance of new preferred shares	11,250
Decrease in value of preferred shares measured at fair value	(999)
Other	(2)
Balance as of June 30, 2020	**111,238**

2020

In January 2020 and April 2020, Sonde Health issued and sold shares of Series A-2 preferred shares for aggregate proceeds of $4.8 million, of which none was contributed by PureTech.

In April 2020, Vedanta issued and sold shares of Series C-2 preferred shares for aggregate proceeds of $6.5 million, of which none was contributed by PureTech.

13. 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 classified as assets held at fair value.

Fair Value Process

For financial instruments measured at fair value under IFRS 9, under the further guidance of IFRS 13, the change in the fair value of the entire instrument is reflected through profit and loss. The total business enterprise value and allocatable equity of each entity within the Group was determined using a discounted cash flow income approach, replacement cost/asset approach, market scenario approach, or market backsolve approach through a recent arm's length financing round. The approaches, in order of best evidentiary support, 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. This is based on the premise that the OIP is a result of rational negotiations and comprehensive due diligence by sophisticated financial investors, inherently making it a fair market value. It first computes the value that can be allocated to each security such that the allocated value per share is exactly equal to the OIP.
Market—Scenario	The market scenario method is based on actual prices paid in mergers and acquisitions for similar public and private companies. Also referred to as guideline merged and acquired method ("GMAC"), the GMAC method generally entails the development of revenue, earnings, or book value multiples based on the implied BEV of the target companies. In identifying the comparable publicly traded companies and similar transactions, financial and non-financial factors are usually considered (e.g., business description, size, leverage, and profitability). These methods are most commonly employed when similar transactions exist in the market and/or a similar set of reasonably comparable public companies can be identified.
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. The discounted cash flow ("DCF") method involves estimating the future cash flow of an asset or business for a certain discrete period and discounting to a present value. If the cash flow stream is expected to continue beyond the discrete period, the reversionary or terminal value is estimated and discounted to present value. The discount rate selected is based on consideration of the risks inherent in the investment and market rates of return available from alternative investments of similar type and quality as of the valuation.
Asset/Cost	The asset/cost approach considers reproduction or replacement cost as an indicator of value. The asset/cost approach is based on the assumption that a prudent investor would pay no more for an entity than the amount for which he could replace or recreate it or an asset with similar utility. Historical costs are often used to estimate

Valuation Method	Description
	the current cost of replacing the entity valued. When using the cost approach to value a business enterprise, the equity value is calculated as the appraised fair market value of the individual assets that comprise the business less the fair market value of the liabilities.

During the six months ended June 30, 2020 and year ended December 31, 2019, at each measurement date, the total fair value of preferred share, warrants and convertible note instruments, including embedded conversion rights that are not bifurcated, was determined using an 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. Under this method, the shares have value only if the funds available for distribution to shareholders exceed the value of the liquidation preferences at the time of a liquidity event (e.g., a merger, sale or IPO), assuming the company has funds available to make a liquidation preference meaningful and collectible by the shareholders. The OPM begins with the current equity or enterprise value and estimates the future distribution of outcomes using a lognormal distribution around that current value.
PWERM	Under a PWERM, the value of the preferred stock is estimated based upon an analysis of future values for the enterprise assuming various future outcomes. 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. Although the future outcomes considered in any given valuation model will vary based upon the enterprise's facts and circumstances, common future outcomes modeled might include an initial public offering ("IPO"), merger or acquisition ("M&A"), dissolution, or continued operation as a viable private enterprise
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. The HM is used when the company is aware of one or more future exit opportunities that result in vastly different payout structures, such as M&A as compared to IPO. The HM is advantageous in these situations because it utilizes the framework of option pricing theory to model a continuous distribution of future outcomes and capture the option-like payoffs of the various share classes while also explicitly considering future scenarios and the discontinuities in outcomes that early-stage companies experience.

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 and any third-party valuations are reviewed for reasonableness and compliance with the fair value measurements guidance under IFRS.

COVID-19 Consideration

At June 30, 2020, *t*he Group assessed certain key assumptions within the valuation of its unquoted instruments and considered the impact of the COVID-19 pandemic on all unobservable inputs (Level 3). The assumptions considered with respect to COVID-19 included but were not limited to the following: exit scenarios and timing,

discount rates, revenue assumptions as well as volatilities. Additionally, the Group disclosed additional sensitivities with respect to COVID-19, increasing/ decreasing enterprise values by a magnitude of 10.0 per cent and increasing/ decreasing volatilities by a magnitude of 25.0 per cent.

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 using significant unobservable inputs (Level 3):

	Subsidiary Preferred Shares $000s	Subsidiary Convertible Notes $000s
Balance at December 31, 2019	100,989	125
Value at issuance	11,250	—
Change in fair value	(999)	—
Other	(2)	—
Balance at June 30, 2020	**111,238**	**125**

Quantitative information about the significant unobservable inputs used in the fair value measurement of the Group's subsidiary preferred share liabilities designated as Level 3 is as follows:

Option Pricing Model Inputs for Preferred Shares under IFRS 9 at June 30, 2020:

	Range of Values			
Measurement Date	Expiration Date	Volatility	Risk Free Rate	Probability of IPO/M&A
31/12/2019	0.7 – 2.0 years	30.00% – 85.00%	1.58% – 1.60%	65%/35%
30/6/2020	1.4 – 2.5 years	35.00% – 85.00%	0.16% – 0.17%	65%/35%

Subsidiary Preferred Shares Sensitivity

The following summarizes the sensitivity from the assumptions made by the Company in respect to the unobservable inputs used in the fair value measurement of the Group's preferred share liabilities, which are recorded at fair value (Please refer to Note 12).

	Subsidiary Preferred Shares	
Input **As of June 30, 2020**	Sensitivity Range	Financial Liability Increase/(Decrease) **$000s**
Enterprise Value	-2%	**(1,932)**
	2%	**1,989**
	-10%	**(9,702)**
	10%	**9,679**
Volatility	-10%	**751**
	10%	**(791)**
	-25%	**1,630**
	25%	**(2,091)**
Time to Liquidity	-6 Months	**826**
	+6 Months	**(679)**
Risk-free Rate[1]	-0.02%/-0.01%	**826**
	+0.02%/+0.03%	**(679)**
IPO/M&A Event Probability	-10%	**1,241**
	10%	**(1,212)**

1. Risk-free rate is a function of the time to liquidity input assumption.

The change in fair value of preferred shares are recorded in Finance cost, net in the Condensed Consolidated Statements of Comprehensive Income/(Loss).

Financial Assets Held at Fair Value

Level 1 Inputs

resTORbio Valuation

ResTORbio (NASDAQ: TORC) is a listed entity on an active exchange and as such the fair value during the six months ended June 30, 2020 was calculated utilizing the quoted common share price. Please refer to Note 5 for further details.

Karuna Valuation

Karuna (NASDAQ: KRTX) is a listed entity on an active exchange and as such the fair value as of June 30, 2020 was calculated utilizing the quoted common share price. Please refer to Note 5 for further details.

Level 3 Inputs

Akili, Gelesis and Vor Valuation

In accordance with IFRS 9, the Company accounts for its preferred share investments in Akili, Gelesis and Vor as financial assets held at fair value through the profit and loss. During the six months ended June 30, 2020, the Company recorded its investment at fair value and recognized a gain of $15.4 million that was recorded to the Condensed Consolidated Statements of Comprehensive Income/(Loss) on the line item Gain/(loss) on investments held at fair value.

The following table summarizes the changes in the Group's investments held at fair value using significant unobservable inputs (Level 3):

	$000s
Balance December 31, 2019	154,445
Cash purchase of Gelesis preferred shares	10,000
Cash purchase of Vor preferred shares (please refer to Note 5)	1,150
Gain/(loss)—fair value through profit and loss	15,357
Balance at June 30, 2020	**180,951**

Option Pricing Model and Probability Weighted Expected Return Method Inputs for Investments Held at Fair Value at June 30, 2020 and December 31, 2019:

	Range of Values	
PWERM (IPO Scenario) Measurement Date	Time to Anticipated Exit Event	Probability of IPO
31/12/2019	1.1—3.0 years	55.0%—75.0%
30/6/2020	1.1—2.75 years	55.0%—75.0%

	Range of Values		
OPM (Long-term Exit Scenario) Measurement Date	Expiration Date	Volatility	Risk Free Rate
31/12/2019	1.13—3 years	56.0%—80.0%	1.59%—1.62%
30/6/2020	1.48—3 years	66.0%—75.0%	0.16%—0.18%

The following summarizes the sensitivity from the assumptions made by the Company in respect to the unobservable inputs used in the fair value measurement of the Group's investments held at fair value (Please refer to Note 5):

	Investments Held at Fair Value	
Input **As of June 30, 2020**	Sensitivity Range	Financial Asset Increase/ (Decrease) **$000s**
Enterprise Value	-2%	**(2,694)**
	2%	**2,721**
	-10%	**(12,948)**
	10%	**13,433**
Volatility	-10%	**(952)**
	10%	**1,219**
	-25%	**(2,570)**
	25%	**2,895**
Time to Liquidity	-6 Months	**17,570**
	+6 Months	**(14,918)**
Risk-free Rate[1]	-0.01%/-0.00%	**17,570**
	+0.00%/+0.01%	**(14,918)**

1. Risk-free rate is a function of the time to liquidity input assumption.

Subsidiary warrants

Warrants issued by subsidiaries within the Group are classified as liabilities, as they will be settled in a variable number of shares and are not fixed-for-fixed. The following table summarizes the changes in the Group's subsidiary warrant liabilities measured at fair value using significant unobservable inputs (Level 3):

	Subsidiary Warrant Liability $000s
Balance at December 31, 2019	7,997
Change in fair value	(867)
Balance at June 30, 2020	**7,130**

The $7.1 million and $8.0 million subsidiary warrant liability at June 30, 2020 and December 31, 2019, respectively, is attributable to the outstanding Follica preferred share warrants.

The following weighted average assumptions were utilized by the Company with respect to determining the fair value of the Follica warrants at June 30, 2020:

Assumption/Input	**Series A-1 Warrants**
Expected term	3.16
Expected volatility	53.7%
Risk free interest rate	0.2%
Expected dividend yield	— %
Estimated fair value of the convertible preferred shares	$ 2.62
Exercise price of the warrants	$ 0.07

The following summarizes the sensitivity from the assumptions made by the Company in respect to the unobservable inputs used in the fair value measurement of the Group's warrant liabilities as of June 30, 2020:

	Warrant Liability	
Input **As of 30 June 2020**	**Sensitivity Range**	**Financial Liability Increase/(Decrease) $000s**
Enterprise Value	-2%	**(108)**
	2%	**108**
	-10%	**(530)**
	10%	**525**

Fair Value Measurement and Classification

The fair value of financial instruments by category at June 30, 2020 and December 31, 2019:

	2020					
	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]	302,020	—	302,020	—	—	302,020
Investments held at fair value	709,456	—	528,504	—	180,951	709,456
Trade and other receivables[2]	2,200	—	—	2,200	—	2,200
Total financial assets	**1,013,675**	**—**	**830,524**	**2,200**	**180,951**	**1,013,675**
Financial liabilities:						
Subsidiary warrant liability	—	7,130	—	—	7,130	7,130
Subsidiary preferred shares	—	111,238	—	—	111,238	111,238
Subsidiary notes payable	—	1,455	—	1,455	—	1,455
Total financial liabilities	**—**	**119,824**	**—**	**1,455**	**118,369**	**119,824**

(1) Issued by a diverse group of corporations, largely consisting of financial institutions, virtually all of which are investment grade.
(2) Outstanding receivables are owed primarily by corporations and government agencies, virtually all of which are investment grade.

	2019					
	Carrying Amount		Fair Value			
	Financial Assets $000s	**Financial Liabilities $000s**	**Level 1 $000s**	**Level 2 $000s**	**Level 3 $000s**	**Total $000s**
Financial assets:						
U.S. treasuries[1]	30,088	—	30,088	—	—	30,088
Money Markets[2]	106,586	—	106,586	—	—	106,586
Investments held at fair value	714,905	—	560,460	—	154,445	714,905
Trade and other receivables[2]	1,977	—	—	1,977	—	1,977
Total financial assets	**853,556**	**—**	**697,134**	**1,977**	**154,445**	**853,556**
Financial liabilities:						
Subsidiary warrant liability	—	7,997	—	—	7,997	7,997
Subsidiary preferred shares	—	100,989	—	—	100,989	100,989
Subsidiary notes payable	—	1,455	—	1,455	—	1,455
Total financial liabilities	**—**	**110,441**	**—**	**1,455**	**108,986**	**110,441**

(1) Issued by governments and government agencies, as applicable, all of which are investment grade.
(2) Issued by a diverse group of corporations, largely consisting of financial institutions, virtually all of which are investment grade.
(3) Outstanding receivables are owed primarily by corporations and government agencies, virtually all of which are investment grade.

14. Subsidiary Notes Payable

The subsidiary notes payable are comprised of loans made to, and convertible notes issued by, subsidiaries in the Group. As of June 30, 2020 and December 31, 2019, 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	**June 30, 2020 $000s**	December 31, 2019 $000s
Loans	**1,330**	1,330
Convertible notes	**125**	125
Total subsidiary notes payable	**1,455**	1,455

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%. The outstanding loan balance totaled approximately $1.3 million as of each of June 30, 2020 and December 31, 2019, respectively.

Convertible Notes

Certain of the Group's subsidiaries have issued convertible promissory notes ("Notes") to fund their operations with an expectation of an eventual share-based award settlement of the Notes.

During the six months ended June 30, 2019, the Notes were assessed under IFRS 9 and the entire financial instruments were elected to be accounted for as FVTPL.

Convertible Notes outstanding were as follows:

	Knode $000s	Appeering $000s	Total $000s
As of December 31, 2019	50	75	125
As of June 30, 2020	**50**	**75**	**125**

15. Non-Controlling Interest

The following table summarizes the changes in the equity classified non-controlling ownership interest in subsidiaries by reportable segment during the six months ended June 30, 2020:

	Controlled Founded Entities $000s	**Parent Company & Other $000s**	**Total $000s**
Non-controlling interest as of December 31, 2019	**(18,233)**	**593**	**(17,639)**
Share of comprehensive loss	(249)	—	(249)
Distributions	(6)	—	(6)
Exercise of share-based awards	1	—	1
Equity-settled share-based payment	1,005	—	1,005
Non-controlling interest as of June 30, 2020	**(17,481)**	**593**	**(16,887)**

16. Leases

The activity related to the Group's right of use asset and lease liability for the six months ended June 30, 2020 is as follows:

	Right of use asset, net $000s
Balance at December 31, 2019	22,383
Depreciation	(1,227)
Adjustments	414
Balance at June 30, 2020	**21,570**

	Total lease liability $000s
Balance at December 31, 2019	37,843
Cash paid for rent	(2,456)
Interest expense	1,200
Adjustments	414
Balance at June 30, 2020	**37,001**

The following details the short term and long-term portion of the lease liability for the six months ended June 30, 2020:

	Total lease liability $000s
Short-term Portion of Lease Liability	3,066
Long-term Portion of Lease Liability	33,935
Total Lease Liability	**37,001**

The sublease agreement with Gelesis was determined to be a finance lease. The rent period term began June 1, 2019 and expires on August 31, 2025. As of June 30, 2020 the balances related to the sublease, classified as a finance lease, were as follows:

	Total lease receivable $000s
Short-term Portion of Lease Receivable	365
Long-term Portion of Lease Receivable	1,895
Total Lease Receivable	**2,261**

The sublease with Dewpoint Therapeutics was determined to be an operating lease. The rent period term began September 1, 2019 and expires August 31, 2021. Sublease income from operating lease recognized by the Company during the six months ended June 30, 2020 was $0.5 million.

17. Related Parties Transactions

Related Party Sublease

During 2019, PureTech executed a sublease agreement with related party Gelesis. Please refer to Note 16 for further details regarding the sublease.

Key Management Personnel Compensation

Key management includes executive directors and members of the executive management team of the Group. The key management personnel compensation of the Group was as follows:

	2020 $000s	2019 $000s
Wages and short-term employee benefits	**1,266**	1,449
Share-based payments	**2,222**	1,586
Total	**3,488**	3,035

Wages and employee benefits include salaries, health care and other non-cash benefits. Share-based payments are generally subject to vesting terms over future periods.

Convertible Notes Issued to Directors

Certain members of the Group have invested in convertible notes issued by the Group's subsidiaries. As of June 30, 2020 and December 31, 2019, the outstanding related party notes payable totaled approximately $0.1 million in each period, 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 14.

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 June 30, 2020:

Directors	Business Name (Share Class)	Number of shares held as of June 30, 2020	Number of options held as of June 30, 2020	Ownership Interest[1]
Ms Daphne Zohar[2]	Gelesis (Common)	59,443	939,086	4.00%
Dame Marjorie Scardino	—		—	— %
Dr Bennett Shapiro[3]	Akili (Series A-2 Preferred)[4]	—	33,088	0.20%
	Gelesis (Common)	24,009	10,840	0.10%
	Gelesis (Series A-1 Preferred)	23,418	—	0.10%
	Vedanta Biosciences (Common)		25,000	0.22%
	Vedanta Biosciences (Series B Preferred)	11,202		0.10%
Dr Robert Langer	Entrega (Common)		332,500	4.24%
	Alivio (Common)		1,575,000	6.19%
Dr Raju Kucherlapati	Enlight (Class B Common)		30,000	3.00%
	Gelesis (Common)[6]	—	20,000	0.10%
Dr John LaMattina[5]	Akili (Series A-2 Preferred)		37,372	0.20%
	Gelesis (Common)[5]	54,119	63,050	0.50%
	Gelesis (Common)[6]		20,000	0.10%
	Gelesis (Series A-1 Preferred)[5]		49,524	0.20%
	Vedanta Biosciences (Common)		25,000	0.23%
Mr Christopher Viehbacher	—		—	— %
Mr Stephen Muniz	Gelesis (Common)[6]		20,000	0.10%
Senior Managers:				
Dr Eric Elenko	—		—	— %
Dr Joep Muijrers	—		—	— %
Dr Bharatt Chowrira	Karuna (Common)[6]	10,000	—	0.04%
Dr Joseph Bolen	Vor (Common)		125,000	0.04%

1. Ownership interests as of June 30, 2020 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 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. Shapiro retired from PureTech's board of directors on June 11, 2020.
4. Shares held through Dr Bennett Shapiro and Ms Fredericka F. Shapiro, Joint Tenants with Right of Survivorship.
5. Dr John and Ms Mary LaMattina hold 50,540 shares of common shares and 49,523 shares of Series A-1 preferred shares in Gelesis. Individually, Dr LaMattina holds 3,579 shares and 63,050 options of Gelesis and convertible notes issued by Appeering in the aggregate principal amount of $50,000.
6. Options to purchase the listed shares were granted in connection with the service on such founded entity's Board of Directors and any value realized therefrom shall be assigned to PureTech Health LLC.

Directors and senior managers hold 27,315,840 ordinary shares and 9.6 per cent voting rights of the Company as of June 30, 2020. This amount excludes options to purchase 2,909,344 ordinary shares. This amount also excludes 4,636,347 shares, which are issuable contingent to the terms set for the performance based RSU awards. Such shares will be issued to such senior managers in future periods provided that performance conditions are met and certain of the shares will be withheld for payment of customary withholding taxes.

18. Taxation

Tax benefit/(expense) is recognized based on management's best estimate of the weighted-average annual income tax rate expected for the full financial year multiplied by the pre-tax income of the interim reporting period.

During the six months ended June 30, 2020 and 2019, the Group recorded a consolidated tax provision of $50.8 million and $25.1 million, respectively, which represented effective tax rates in continuing operations of 29.1% and 44.4%, respectively. The effective tax rate in the current period is primarily driven by the Company's earnings in the U.S. federal and state jurisdiction in which it operates and is impacted by an increase in unrecorded deferred tax assets in respect of carry-forward losses in the Company's subsidiaries (as it is not probable that they will be realized). The change in the tax rate period over period results from a lower increase in the 2020 interim period as compared to the 2019 interim period in the aforementioned unrecorded deferred tax assets due to deconsolidations and changes in ownership that occurred in 2019 and therefore impacted the 2020 consolidated tax expenses.

19. Subsequent Events

The Company has evaluated subsequent events after June 30, 2020, the date of issuance of the Condensed Consolidated Financial Statements, and has not identified any recordable or disclosable events not otherwise reported in these Condensed Consolidated Financial Statements or notes thereto, except for the following:
On July 10, 2020, pursuant to its collaboration agreement with JSR Corporation, Vedanta issued 107,389 Series C-2 Preferred shares for $2.5 million in aggregate proceeds.

On August 26, 2020, PureTech sold 1,333,333 common shares of Karuna for aggregate proceeds of $101.6 million. Immediately subsequent to the disposal, PureTech continued to hold 3,406,564 common shares or 12.8 percent of total outstanding shares of Karuna.

On September 2, 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 7.73% plus the greater of (i) 30 day U.S. Dollar LIBOR reported in the Wall Street Journal or (ii) 0.17%. The loan matures September 2025 and requires interest only payments for the initial 24 months. For loan consideration, 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.

UNAUDITED PRO FORMA CONSOLIDATED FINANCIAL INFORMATION

The following unaudited pro forma consolidated financial information for the year ended December 31, 2019 and related notes present the historical consolidated financial statements of PureTech Health plc ("PureTech," the "Parent," "Group," or the "Company") and the deconsolidation of PureTech's former consolidated subsidiaries Gelesis, Inc. ("Gelesis"), Vor Biopharma Inc. ("Vor") and Karuna Therapeutics, Inc. ("Karuna") as if the completion of all the aforementioned deconsolidations had occurred on January 1, 2019 and as if PureTech had lost its significant influence in Karuna as of January 1, 2019.

Vor

On February 12, 2019, Vor completed a Series A-2 Preferred Stock financing in which PureTech and several new third-party investors participated. As a result of the issuance of the preferred shares to third-party investors, PureTech's ownership percentage and corresponding voting rights dropped from 79.5 percent to 47.5 percent, and PureTech simultaneously lost control over Vor's Board of Directors, both of which triggered a loss of control over the entity. As of February 12, 2019, Vor was deconsolidated from the Group's financial statements. As of such date of deconsolidation, PureTech held preferred shares in Vor and no common shares. The preferred shares held by PureTech fall under the guidance of IFRS 9 and are treated as a financial asset held at fair value. All movements to the value of PureTech's investment in Vor's preferred stock are recorded through the Consolidated Statement of Comprehensive Income/(Loss).

Karuna

On March 15, 2019, Karuna completed the closing of a Series B Preferred Stock financing with PureTech and several new third-party investors. As a result of the issuance of the preferred shares to third-party investors, PureTech's ownership percentage and corresponding voting rights dropped from 70.9 percent to 44.3 percent, and PureTech simultaneously lost control over Karuna's Board of Directors, both of which triggered a loss of control over the entity. As of March 15, 2019, Karuna was deconsolidated from the Group's financial statements.

While the Company no longer controlled Karuna pursuant to the deconsolidation, PureTech still had significant influence over Karuna. PureTech's investment in common shares of Karuna that was subject to equity method accounting, was almost nil ($0 thousand) on January 1, 2019 and remained negligible until the date of conversion of Karuna preferred shares to common shares at the end of June 2019 (See Note 5 to the annual consolidated financial statements included herein).

The preferred shares and warrant held by PureTech fall under the guidance of IFRS 9 and were treated as financial assets held at fair value through profit and loss. All movements to the value of PureTech's investment in Karuna's preferred stock and warrant were recorded through the Consolidated Statement of Comprehensive Income/(Loss).

Subsequent to the conversion of the preferred shares to common shares at the end of June 2019, in light of PureTech's common share holdings in Karuna and corresponding voting rights, PureTech had re-established a basis to account for its investment in Karuna under IAS 28.

As of December 2, 2019 it was concluded that the Company no longer exerted significant influence over Karuna. As a result, Karuna was no longer deemed an Associate and did not fall under the scope of equity method accounting, resulting in the investment being accounted for as an investment held at fair value under IFRS 9. As of December 2, 2019 the Company's interest in Karuna was 28.4 percent. For the period of June 28, 2019 through December 2, 2019, PureTech's investment in Karuna was subject to equity method accounting. In accordance with IAS 28, the Company's investment was adjusted by the share of losses generated by Karuna (weighted average of 31.4 percent based on common stock ownership interest), which resulted in a net loss of $6.3 million.

Gelesis

On July 1, 2019, the Gelesis Board of Directors was restructured, resulting in two of the three PureTech representatives on the board resigning. As a result of this restructuring, PureTech lost control over Gelesis's Board of Directors, which triggered a loss of control over the entity. As of July 1, 2019, Gelesis was deconsolidated from the Group's financial statements.

Upon the date of deconsolidation, PureTech held shares of preferred stock and common stock of Gelesis and a warrant issued by Gelesis to PureTech. While the Company no longer controls Gelesis, it was concluded that PureTech still has significant influence over Gelesis and therefore the investment in Gelesis is accounted for as an associate under IAS 28.

PureTech's investment in common shares of Gelesis is subject to equity method accounting. The preferred shares and warrant held by PureTech fall under the guidance of IFRS 9 and are treated as financial assets held at fair value and all movements to the value of PureTech's investment in the preferred stock are recorded through the Consolidated Statement of Comprehensive Income/(Loss) in accordance with IFRS 9.

Unaudited Pro Forma Consolidated Statement of Comprehensive Income/(Loss)

	For the year ended December 31, 2019			
	PureTech Historical $000s	Deconsolidation Pro Forma Adjustments (a) $000s	Additional Pro Forma Adjustments $000s	PureTech Pro Forma Final $000s
Contract revenue	8,688	—	—	8,688
Grant revenue	1,119	—	—	1,119
Total revenue	**9,807**	**—**	**—**	**9,807**
Operating expenses:				
General and administrative expenses	(59,358)	10,181	—	(49,177)
Research and development expenses	(85,848)	15,555	—	(70,293)
Operating income/(loss)	**(135,399)**	**25,736**	**—**	**(109,663)**
Other income/(expense):				
Gain on deconsolidation	264,409	—	(264,409) **(b)**	—
Gain/(loss) on investments held at fair value	(37,863)	—	445,113 **(c),(e)**	407,250)
Loss on impairment of intangible asset	—	—	—	—
Gain/(loss) on disposal of assets	(82)	—	—	(82)
Gain/(loss) on loss of significant influence	445,582	—	(445,582)	—
Other income/(expense)	121	—	—	121
Other income/(expense)	**672,167**	**—**	**(264,878)**	**407,289**
Finance income/(costs):				
Finance income	4,362	(93)	—	4,269
Finance income/(costs)—subsidiary preferred shares	(1,458)	1,564	—	106
Finance income/(costs)—contractual	(2,576)	(67)	—	(2,643)
Finance income/(costs)—fair value accounting	(46,475)	28,737	—	(17,738)
Net finance income/(costs)	**(46,147)**	**30,141**	**—**	**(16,006)**
Share of net gain/(loss) of associates accounted for using the equity method	30,791	—	(21,350) **(d),(e)**	9,441
Impairment of investment in associate	(42,938)		31,097 **(d)**	(11,841)
Income/(loss) before taxes	**478,474**	**55,877**	**(255,131)**	**279,220**
Taxation	(112,409)	162	27,320 **(f)**	(84,927)
Income/(Loss) for the year	**366,065**	**56,039**	**(227,811)**	**194,293**
Other comprehensive income/(loss):				
Items that are or may be reclassified as profit or loss				
Foreign currency translation differences	(10)	—	—	(10)
Unrealized gain/(loss) on investments held at fair value	—	—	—	—
Total other comprehensive income/(loss)	(10)	—	—	(10)
Total comprehensive income/(loss) for the year	**366,055**	**56,039**	**(227,811)**	**194,293**
Income/(loss) attributable to:				
Owners of the Company	421,144	32,085	(227,811)	225,418
Non-controlling interests	(55,079)	23,954	—	(31,125)
	366,065	**56,039**	**(227,811)**	**194,293**
Comprehensive income/(loss) attributable to:				
Owners of the Company	421,134	32,085	(227,811)	225,408
Non-controlling interests	(55,079)	23,954	—	(31,125)
	366,055	**56,039**	**(227,811)**	**194,283**
Earnings/(loss) per share:				
Basic earnings/(loss) per share	1.49			0.80
Diluted earnings/(loss) per share	1.44			0.77

The accompanying unaudited pro forma consolidated financial information should be read in conjunction with the notes hereto along with PureTech's most recent historical financial information included herein.

Basis of Preparation

The unaudited pro forma financial information was prepared in accordance with Article 11 of Regulation S-X. Accordingly, the Company's historical consolidated financial statements have been adjusted in the pro forma financial statements to give effect to pro forma events that are (i) directly attributable to the deconsolidations and the loss of significant influence in Karuna, (ii) expected to have a continuing impact on the Group, and (iii) factually supportable. The unaudited pro forma consolidated financial information is presented for illustrative purposes only and does not purport to represent what the results of operations of PureTech would actually have been had the deconsolidations and the loss of significant influence in Karuna occurred on January 1, 2019, or to project the results of operations of PureTech for any future periods. The unaudited pro forma adjustments are based on available information and certain assumptions that PureTech's management believes are reasonable.

The unaudited pro forma condensed financial information is based on the assumption that the deconsolidations and the loss of significant influence in Karuna took place as of January 1, 2019 for purposes of the unaudited pro forma Consolidated Statement of Comprehensive Income/(Loss) for the year ended December 31, 2019.

Pro Forma Adjustments

(a) Deconsolidation Adjustment

The deconsolidation adjustments removes the historical results of Gelesis, Karuna and Vor included in the Consolidated Statement of Comprehensive Income/(Loss) for the year ended December 31, 2019 to effectuate the deconsolidation of such entities as of January 1, 2019.

(b) Gain on Deconsolidation

As of the result of the deconsolidations, the Company recognized a gain upon the deconsolidation of each entity in the Consolidated Statement of Comprehensive Income/(Loss) for the year ended December 31, 2019. The pro forma adjustment removes the gains that the Company recognized upon deconsolidation as they are not expected to have a continuing impact.

(c) Fair Value Adjustments

As of the date of deconsolidation, the Company held preferred shares in Gelesis, which fall under the guidance of IFRS 9 and are treated as financial assets held at fair value through profit and loss. The pro forma adjustments reflect the incremental amount of gain of $7,487 thousands that would be recorded had the deconsolidation occurred at January 1, 2019.

(d) Equity Method Accounting – Gelesis

Upon loss of control of Gelesis, the common shares of Gelesis held by the Company were subject to equity method accounting in accordance with IAS 28. The pro forma adjustments reflect the incremental share of equity method losses that the Company should recognize, as well as the adjustment of the impairment loss on Gelesis equity method investment so that the pro forma investment as of December 31, 2019 would equal its net realizable value at that date, assuming that the deconsolidation of Gelesis occurred, and the investment in Gelesis common stock was accounted for under the equity method, beginning January 1, 2019.

	$000s
The Company's pro forma investment in Gelesis as of January 1, 2019	**13,042**
Add: The Company's pro forma share of Gelesis net income for the year ended December 31, 2019	9,441
Pro forma Gelesis investment balance as of December 31, 2019	22,483
The Company's pro forma share of Gelesis net income for the year ended December 31, 2019	9,441
Less: share of net income of Gelesis recorded in the Consolidated Statement of Comprehensive Income/(Loss) for the year ended December 31, 2019	37,136
Incremental share of net loss to be included as an adjustment in this Unaudited Pro forma Consolidated Statement of Comprehensive Income/(Loss)	(27,695)
Net realizable value of investment in Gelesis accounted for under the equity method as of December 31, 2019	10,642
Pro forma Gelesis investment balance as of December 31, 2019	22,483
Pro forma impairment loss for the year ended December 31, 2019	(11,841)
Less: impairment of Gelesis equity method investment recorded in the Consolidated Statement of Comprehensive Income/(Loss) for the year ended December 31, 2019	(42,938)
Reduction of impairment loss to be included as an adjustment in this Unaudited Pro forma Consolidated Statement of Comprehensive Income/(Loss)	31,097

(e) Karuna

Upon loss of significant influence of Karuna, the common shares of Karuna held by the Company were accounted for under IFRS 9. The pro forma adjustments reflect the accounting treatment assuming that the loss of significant influence of Karuna occurred, the preferred shares in Karuna were converted to common shares, and the investment in Karuna common stock was accounted for under IFRS 9, beginning January 1, 2019.

	$000s
Pro forma gain on investments held at fair value for Karuna common stock investment, for the period from January 1 until December 2, 2019	478,259
Removal of gain on investments held at fair value recorded for Karuna preferred stock investment for the period from March 15 (date of deconsolidation) until June 28, 2019	(40,633)
Net change to Gain/(loss) on investments held at fair value	437,626
Removal of the share of the net loss in Karuna recorded under equity method accounting	6,345
Removal of gain on loss of significant influence	(445,582)

(f) Taxation

Tax effect of the pro forma adjustments discussed in the notes above, calculated at the applicable tax rate of each adjustment.

Exhibit 4.1

DEPOSIT AGREEMENT

by and among

PURETECH HEALTH PLC

and

CITIBANK, N.A.,
as Depositary,

and

THE HOLDERS AND BENEFICIAL OWNERS OF
AMERICAN DEPOSITARY SHARES
ISSUED HEREUNDER

Dated as of [•], 2020

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DEPOSIT AGREEMENT, dated as of [•], 2020, by and among (i) PURETECH HEALTH PLC, a public limited company incorporated under the laws of England and Wales, and its successors (the "Company"), (ii) CITIBANK, N.A., a national banking association organized under the laws of the United States of America ("Citibank") acting in its capacity as depositary, and any successor depositary hereunder (Citibank in such capacity, the "Depositary"), and (iii) all Holders and Beneficial Owners of American Depositary Shares issued hereunder (all such capitalized terms as hereinafter defined).

W I T N E S S E T H T H A T:

WHEREAS, the Company desires to establish with the Depositary an ADR facility to provide for the deposit of the Shares (as hereinafter defined) and the creation of American Depositary Shares representing the Shares so deposited and for the execution and Delivery (as hereinafter defined) of American Depositary Receipts (as hereinafter defined) evidencing such American Depositary Shares; and

WHEREAS, the Depositary is willing to act as the Depositary for such ADR facility upon the terms set forth in the Deposit Agreement (as hereinafter defined); and

WHEREAS, any American Depositary Receipts issued pursuant to the terms of the Deposit Agreement are to be substantially in the form of Exhibit A attached hereto, with appropriate insertions, modifications and omissions, as hereinafter provided in the Deposit Agreement; and

WHEREAS, the Shares are admitted to trading on the main market of the London Stock Exchange plc, and American Depositary Shares to be issued pursuant to the terms of the Deposit Agreement are to be listed for trading on Nasdaq; and

WHEREAS, the Board of Directors of the Company (or an authorized committee thereof) has duly approved the establishment of an ADR facility upon the terms set forth in the Deposit Agreement, the execution and delivery of the Deposit Agreement on behalf of the Company, and the actions of the Company and the transactions contemplated hereby.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

ARTICLE I

DEFINITIONS

All capitalized terms used, but not otherwise defined, herein shall have the meanings set forth below, unless otherwise clearly indicated:

Section 1.1 "**ADS Record Date**" shall have the meaning given to such term in Section 4.9.

Section 1.2 "Affiliate" shall have the meaning assigned to such term by the Commission (as hereinafter defined) under Regulation C promulgated under the Securities Act (as hereinafter defined), or under any successor regulation thereto.

Section 1.3 "**American Depositary Receipt(s)**", "**ADR(s)**" and "**Receipt(s)**" shall mean the certificate(s) issued by the Depositary to evidence the American Depositary Shares issued under the terms of the Deposit Agreement in the form of Certificated ADS(s) (as hereinafter defined), as such ADRs may be amended from time to time in accordance with the provisions of the Deposit Agreement. An ADR may evidence any number of ADSs and may, in the case of ADSs held through a central depository such as DTC, be in the form of a "Balance Certificate."

Section 1.4 "**American Depositary Share(s)**" and "**ADS(s)**" shall mean the rights and interests in the Deposited Property (as hereinafter defined) granted to the Holders and Beneficial Owners pursuant to the terms and conditions of the Deposit Agreement and, if issued as Certificated ADS(s) (as hereinafter defined), the ADR(s) issued to evidence such ADSs. ADS(s) may be issued under the terms of the Deposit Agreement in the form of (a) Certificated ADS(s) (as hereinafter defined), in which case the ADS(s) are evidenced by ADR(s), or (b) Uncertificated ADS(s) (as hereinafter defined), in which case the ADS(s) are not evidenced by ADR(s) but are reflected on the direct registration system maintained by the Depositary for such purposes under the terms of Section 2.13. Unless otherwise specified in the Deposit Agreement or in any ADR, or unless the context otherwise requires, any reference to ADS(s) shall include Certificated ADS(s) and Uncertificated ADS(s), individually or collectively, as the context may require. Each ADS shall represent the right to receive, and to exercise the beneficial ownership interests in, the number of Shares specified in the form of ADR attached hereto as Exhibit A (as amended from time to time) that are on deposit with the Depositary and/or the Custodian, subject, in each case, to the terms and conditions of the Deposit Agreement and the applicable ADR (if issued as a Certificated ADS), until there shall occur a distribution upon Deposited Securities referred to in Section 4.2 or a change in Deposited Securities referred to in Section 4.11 with respect to which additional ADSs are not issued, and thereafter each ADS shall represent the right to receive, and to exercise the beneficial ownership interests in, the applicable Deposited Property on deposit with the Depositary and the Custodian determined in accordance with the terms of such Sections, subject, in each case, to the terms and conditions of the Deposit Agreement and the applicable ADR (if issued as a Certificated ADS). In addition, the ADS(s)-to-Share(s) ratio is subject to amendment as provided in Articles IV and VI of the Deposit Agreement (which may give rise to Depositary fees).

Section 1.5 "**Articles of Association**" shall mean the Articles of Association of the Company, as amended and restated from time to time.

Section 1.6 "**Beneficial Owner**" shall mean, as to any ADS, any person or entity having a beneficial interest deriving from the ownership of such ADS. Notwithstanding anything else contained in the Deposit Agreement, any ADR(s) or any other instruments or agreements relating to the ADSs and the corresponding Deposited Property, the Depositary, the Custodian and their respective nominees are intended to be, and shall at all times during the term of the Deposit Agreement be, the record holders only of the Deposited Property represented by the ADSs for the benefit of the Holders and Beneficial Owners of the corresponding ADSs. The Depositary, on its own behalf and on behalf of the Custodian and their respective nominees, disclaims any beneficial ownership interest in the Deposited Property held on behalf of the Holders and Beneficial Owners of ADSs. The beneficial ownership interests in the Deposited Property are intended to be, and shall at all times during the term of the Deposit Agreement continue to be, vested in the Beneficial Owners of the ADSs representing the Deposited Property. The beneficial ownership interests in the Deposited Property shall, unless otherwise agreed by the Depositary, be exercisable by the Beneficial Owners of the ADSs only through the Holders of such ADSs, by the Holders of the ADSs (on behalf of the applicable Beneficial Owners) only through the Depositary, and by the Depositary (on behalf of the Holders and Beneficial 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 and, if applicable, the terms of the ADR(s) evidencing the ADSs. A Beneficial Owner of ADSs may or may not be the Holder of such ADSs. A Beneficial Owner shall be able to exercise any right or receive any benefit hereunder solely through the person who is the Holder of the ADSs owned by such Beneficial Owner. Unless otherwise identified to the Depositary, a Holder shall be deemed to be the Beneficial Owner of all the ADSs registered in his/her/its name. The manner in which a Beneficial Owner holds ADSs (e.g., in a brokerage account vs. as registered holder) may affect the rights and obligations of, the manner in which, and the extent to which, services are made available to, Beneficial Owners pursuant to the terms of the Deposit Agreement.

Section 1.7 "Certificated ADS(s)" shall have the meaning set forth in Section 2.13.

Section 1.8 "Citibank" shall mean Citibank, N.A., a national banking association organized under the laws of the United States of America, and its successors.

Section 1.9 "**Commission**" shall mean the Securities and Exchange Commission of the United States or any successor governmental agency thereto in the United States.

Section 1.10 "**Company**" shall mean PureTech Health plc, a public limited company incorporated and existing under the laws of England and Wales, and its successors.

Section 1.11 "**CREST**" shall mean the system for the paperless settlement of trades in securities and the holding of uncertificated securities operated by CREST Limited in accordance with the Uncertificated Securities Regulations 2001 (SI 2001 No. 3755), as amended from time to time, or any successor thereto.

Section 1.12 "**Custodian**" shall mean (i) as of the date hereof, Citibank, N.A. (London), having its principal office at Citigroup Centre, Canary Wharf, London, E14 5LB, United Kingdom, as the custodian of Deposited Property for the purposes of the Deposit Agreement, (ii) Citibank, N.A., acting as custodian of Deposited Property pursuant to the Deposit Agreement, and (iii) any other entity that may be appointed by the Depositary pursuant to the terms of Section 5.5 as successor, substitute or additional custodian hereunder. The term "Custodian" shall mean any Custodian individually or all Custodians collectively, as the context requires.

Section 1.13 "**Deliver**" and "**Delivery**" shall mean (x) *when used in respect of Shares and other Deposited Securities*, whichever is appropriate of (i) the physical delivery of the certificate(s) representing such securities, or (ii) the book-entry transfer and recordation of such securities on the books of the Share Registrar (as hereinafter defined) or in the book-entry settlement of CREST, and (y) *when used in respect of ADSs*, either (i) the physical delivery of ADR(s) evidencing the ADSs, or (ii) the book-entry transfer and recordation of ADSs on the books of the Depositary or any book-entry settlement system in which the ADSs are settlement-eligible.

Section 1.14 "**Deposit Agreement**" shall mean this Deposit Agreement and all exhibits hereto, as the same may from time to time be amended and supplemented from time to time in accordance with the terms of the Deposit Agreement.

Section 1.15 "**Depositary**" shall mean Citibank, N.A., a national banking association organized under the laws of the United States, in its capacity as depositary under the terms of the Deposit Agreement, and any successor depositary hereunder.

Section 1.16 "Deposited Property" shall mean the Deposited Securities and any cash and other property held on deposit by the Depositary and the Custodian in respect of the ADSs or the Deposited Securities under the terms of the Deposit Agreement, subject, in the case of cash, to the provisions of Section 4.8. All Deposited Property shall be held by the Custodian, the Depositary and their respective nominees for the benefit of the Holders and Beneficial Owners of the ADSs representing the Deposited Property. The Deposited Property is not intended to, and shall not, constitute proprietary assets of the Depositary, the Custodian or their nominees. Beneficial ownership in the Deposited Property is intended to be, and shall at all times during the term of the Deposit Agreement continue to be, vested in the Beneficial Owners of the ADSs representing the Deposited Property.

Section 1.17 "Deposited Securities" shall mean the Shares and any other securities held on deposit by the Custodian from time to time in respect of the ADSs under the Deposit Agreement and constituting Deposited Property.

Section 1.18 "**Disclosure Guidence and Transparency Rules" or "DTRs"**shall mean the Disclosure Guidence and Transparency Rules of the United Kingdom Financial Conduct Authority (or any successor), as amended, replaced and re-enacted or supplemented from time to time.

Section 1.19 "**Dollars**" and "**$**" shall refer to the lawful currency of the United States.

Section 1.20 "**DTC**" shall mean The Depository Trust Company, a national clearinghouse and the central book-entry settlement system for securities traded in the United States and, as such, the custodian for the securities of DTC Participants (as hereinafter defined) maintained in DTC, and any successor thereto.

Section 1.21 "**DTC Participant**" shall mean any financial institution (or any nominee of such institution) having one or more participant accounts with DTC for receiving, holding and delivering the securities and cash held in DTC. A DTC Participant may or may not be a Beneficial Owner. If a DTC Participant is not the Beneficial Owner of the ADSs credited to its account at DTC, or of the ADSs in respect of which the DTC Participant is otherwise acting, such DTC Participant shall be deemed, for all purposes hereunder, to have all requisite authority to act on behalf of the Beneficial Owner(s) of the ADSs credited to its account at DTC or in respect of which the DTC Participant is so acting. A DTC Participant, upon acceptance in any one of its DTC accounts of any ADSs (or any interest therein) issued in accordance with the terms and conditions of the Deposit Agreement, shall (notwithstanding any explicit or implicit disclosure that it may be acting on behalf of another party) be deemed for all purposes to be a party to, and bound by, the terms of the Deposit Agreement and the applicable ADR(s) to the same extent as, and as if the DTC Participant were, the Holder of such ADSs.

Section 1.22 "**Exchange Act**" shall mean the United States Securities Exchange Act of 1934, as amended from time to time.

Section 1.23 "**Foreign Currency**" shall mean any currency other than Dollars.

Section 1.24 "Full Entitlement ADR(s)", "Full Entitlement ADS(s)" and "Full Entitlement Share(s)" shall have the respective meanings set forth in Section 2.12.

Section 1.25 "**Holder(s)**" shall mean the person(s) in whose name the ADSs are registered on the books of the Depositary (or the Registrar, if any) maintained for such purpose. A Holder may or may not be a Beneficial Owner. If a Holder is not the Beneficial Owner of the ADS(s) registered in its name, such person shall be deemed, for all purposes hereunder, to have all requisite authority to act on behalf of the Beneficial Owners of the ADSs registered in its name. The manner in which a Holder holds ADSs (e.g., in certificated vs. uncertificated form) may affect the rights and obligations of, and the manner in which, and the extent to which, the services are made available to, Holders pursuant to the terms of the Deposit Agreement.

Section 1.26 "Partial Entitlement ADR(s)", "Partial Entitlement ADS(s)" and "Partial Entitlement Share(s)" shall have the respective meanings set forth in Section 2.12.

Section 1.27 "**Pounds**", "**Pence**", **and** "**£**" shall refer to the lawful currency of England.

Section 1.28 "**Principal Office**" shall mean, when used with respect to the Depositary, the principal office of the Depositary at which at any particular time its depositary receipts business shall be administered, which, at the date of the Deposit Agreement, is located at 388 Greenwich Street, New York, New York 10013, U.S.A.

Section 1.29 "**Registrar**" shall mean the Depositary or any bank or trust company having an office in the Borough of Manhattan, The City of New York, which shall be appointed by the Depositary to register issuances, transfers and cancellations of ADSs as herein provided, and shall include any co-registrar appointed by the Depositary for such purposes. Registrars (other than the Depositary) may be removed and substitutes appointed by the Depositary. Each Registrar (other than the Depositary) appointed pursuant to the Deposit Agreement shall be required to give notice in writing to the Depositary accepting such appointment and agreeing to be bound by the applicable terms of the Deposit Agreement.

Section 1.30 "**Restricted Securities**" shall mean Shares, Deposited Securities or ADSs which (i) have been acquired directly or indirectly from the Company or any of its Affiliates in a transaction or chain of transactions not involving any public offering and are subject to resale limitations under the Securities Act or the rules issued thereunder, or (ii) are held by an executive officer or director (or persons performing similar functions) or other Affiliate of the Company, or (iii) are subject to other restrictions on sale or deposit under the laws of the United States, England and Wales, or under a shareholder agreement or the Articles of Association of the Company or under the regulations of an applicable securities exchange unless, in each case, such Shares, Deposited Securities or ADSs are being transferred or sold to persons other than an Affiliate of the Company in a transaction (a) covered by an effective resale registration statement, or (b) exempt from the registration requirements of the Securities Act (as hereinafter defined), and the Shares, Deposited Securities or ADSs are not, when held by such person(s), Restricted Securities.

Section 1.31 "**Restricted ADR(s)" "Restricted ADS(s)" and "Restricted Shares"** shall have the respective meanings set forth in Section 2.14.

Section 1.32 "**Securities Act**" shall mean the United States Securities Act of 1933, as amended from time to time.

Section 1.33 "**Share Registrar**" shall mean Computershare Investor Services PLC, a company registered in England and Wales or any other institution organized under the laws of England and Wales appointed by the Company from time to time to carry out the duties of registrar for the Shares, and any successor thereto.

Section 1.34 "**Shares**" shall mean the Company's ordinary shares, with a nominal value of £0.01 per share, validly issued and outstanding and fully paid and may, if the Depositary so agrees after consultation with the Company, include evidence of the right to receive Shares; provided that in no event shall Shares include evidence of the right to receive Shares with respect to which the full purchase price has not been paid or Shares as to which preemptive rights have theretofore not been validly waived or exercised; provided further, however, that, if there shall occur any change in nominal value, split-up, consolidation, reclassification, exchange, conversion or any other event described in Section 4.11 in respect of the Shares of the Company, the term "Shares" shall thereafter, to the maximum extent permitted by law, represent the successor securities resulting from such event.

Section 1.35 "Uncertificated ADS(s)" shall have the meaning set forth in Section 2.13.

Section 1.36 "**United States**" and "**U.S.**" shall have the meaning assigned to it in Regulation S as promulgated by the Commission under the Securities Act.

ARTICLE II

APPOINTMENT OF DEPOSITARY; FORM OF RECEIPTS;
DEPOSIT OF SHARES; EXECUTION AND
DELIVERY, TRANSFER AND SURRENDER OF RECEIPTS

Section 2.1 Appointment of Depositary. The Company hereby appoints the Depositary as depositary for the Deposited Property and hereby authorizes and directs the Depositary to act in accordance with the terms and conditions set forth in the Deposit Agreement and the applicable ADRs. Each Holder and each Beneficial Owner, upon acceptance of any ADSs (or any interest therein) issued in accordance with the terms and conditions of the Deposit Agreement shall be deemed for all purposes to (a) be a party to and bound by the terms of the Deposit Agreement and the applicable ADR(s), and (b) appoint the Depositary its attorney-in-fact, with full power to delegate, to act on its behalf and to take any and all actions contemplated in the Deposit Agreement and the applicable ADR(s), to adopt any and all procedures necessary to comply with applicable law and to take such action as the Depositary in its sole discretion may deem necessary or appropriate to carry out the purposes of the Deposit Agreement and the applicable ADR(s), the taking of such actions to be the conclusive determinant of the necessity and appropriateness thereof.

Section 2.2 Form and Transferability of ADSs.

(a) Form. Certificated ADSs shall be evidenced by definitive ADRs which shall be engraved, printed, lithographed or produced in such other manner as may be agreed upon by the Company and the Depositary. ADRs may be issued under the Deposit Agreement in denominations of any whole number of ADSs. The ADRs shall be substantially in the form set forth in Exhibit A to the Deposit Agreement, with any appropriate insertions, modifications and omissions, in each case as otherwise contemplated in the Deposit Agreement or required by law. ADRs shall be (i) dated, (ii) signed by the manual or facsimile signature of a duly authorized signatory of the Depositary, (iii) countersigned by the manual or facsimile signature of a duly authorized signatory of the Registrar, and (iv) registered in the books maintained by the Registrar for the registration of issuances and transfers of ADSs. No ADR and no Certificated ADS evidenced thereby shall be entitled to any benefits under the Deposit Agreement or be valid or enforceable for any purpose against the Depositary or the Company, unless such ADR shall have been so dated, signed, countersigned and registered. ADRs bearing the facsimile signature of a duly-authorized signatory of the Depositary or the Registrar, who at the time of signature was a duly-authorized signatory of the Depositary or the Registrar, as the case may be, shall bind the Depositary, notwithstanding the fact that such signatory has ceased to be so authorized prior to the Delivery of such ADR by the Depositary. The ADRs shall bear a CUSIP number that is different from any CUSIP number that was, is or may be assigned to any depositary receipts previously or subsequently issued pursuant to any other arrangement between the Depositary (or any other depositary) and the Company and which are not ADRs outstanding hereunder.

(b) Legends. The ADRs may be endorsed with, or have incorporated in the text thereof, such legends or recitals not inconsistent with the provisions of the Deposit Agreement as may be (i) necessary to enable the Depositary and the Company to perform their respective obligations hereunder, (ii) required to comply with any applicable laws or regulations, or with the rules and regulations of any securities exchange or market upon which ADSs may be traded, listed or quoted, or to conform with any usage with respect thereto, (iii) necessary to indicate any special limitations or restrictions to which any particular ADRs or ADSs are subject by reason of the date of issuance of the Deposited Securities or otherwise, or (iv) required by any book-entry system in which the ADSs are held. Holders and Beneficial Owners shall be deemed, for all purposes, to have notice of, and to be bound by, the terms and conditions of the legends set forth, in the case of Holders, on the ADR registered in the name of the applicable Holders or, in the case of Beneficial Owners, on the ADR representing the ADSs owned by such Beneficial Owners.

(c) Title. Subject to the limitations contained herein and in the ADR, title to an ADR (and to each Certificated ADS evidenced thereby) shall be transferable upon the same terms as a certificated security under the laws of the State of New York, provided that, in the case of Certificated ADSs, such ADR has been properly endorsed or is accompanied by proper instruments of transfer. Notwithstanding any notice to the contrary, the Depositary and the Company may deem and treat the Holder of an ADS (that is, the person in whose name an ADS is registered on the books of the Depositary) as the absolute owner thereof for all purposes. Neither the Depositary nor the Company shall have any obligation nor be subject to any liability under the Deposit Agreement or any ADR to any holder or any Beneficial Owner unless, in the case of a holder of ADSs, such holder is the Holder registered on the books of the Depositary or, in the case of a Beneficial Owner, such Beneficial Owner, or the Beneficial Owner's representative, is the Holder registered on the books of the Depositary.

(d) Book-Entry Systems. The Depositary shall make arrangements for the acceptance of the ADSs into DTC. All ADSs held through DTC will be registered in the name of the nominee for DTC (currently "Cede & Co."). The nominee of DTC will be the only "Holder" of all ADSs held through DTC. Unless issued by the Depositary as Uncertificated ADSs, the ADSs registered in the name of Cede & Co. will be evidenced by one or more ADR(s) in the form of a "Balance Certificate," which will provide that it represents the aggregate number of ADSs from time to time indicated in the records of the Depositary as being issued hereunder and that the aggregate number of ADSs represented thereby may from time to time be increased or decreased by making adjustments on such records of the Depositary and of DTC or its nominee as hereinafter provided. Citibank, N.A. (or such other entity as is appointed by DTC or its nominee) may hold the "Balance Certificate" as custodian for DTC. Each Beneficial Owner of ADSs held through DTC must rely upon the procedures of DTC and the DTC Participants to exercise or be entitled to any rights attributable to such ADSs. The DTC Participants shall for all purposes be deemed to have all requisite power and authority to act on behalf of the Beneficial Owners of the ADSs held in the DTC Participants' respective accounts in DTC and the Depositary shall for all purposes be authorized to rely upon any instructions and information given to it by DTC Participants. So long as ADSs are held through DTC or unless otherwise required by law, ownership of beneficial interests in the ADSs registered in the name of the nominee for DTC will be shown on, and transfers of such ownership will be effected only through, records maintained by (i) DTC or its nominee (with respect to the interests of DTC Participants), or (ii) DTC Participants or their nominees (with respect to the interests of clients of DTC Participants). Any distributions made, and any notices given, by the Depositary to DTC under the terms of the Deposit Agreement shall (unless otherwise specified by the Depositary) satisfy the Depositary's obligations under the Deposit Agreement to make such distributions, and give such notices, in respect of the ADSs held in DTC (including, for avoidance of doubt, to the DTC Participants holding the ADSs in their DTC accounts and to the Beneficial Owners of such ADSs).

Section 2.3 Deposit of Shares. Subject to the terms and conditions of the Deposit Agreement and applicable law, Shares or evidence of rights to receive Shares (other than Restricted Securities) may be deposited by any person (including the Depositary in its individual capacity but subject, however, in the case of the Company or any Affiliate of the Company, to Section 5.7) at any time, whether or not the transfer books of the Company or the Share Registrar, if any, are closed, by Delivery of the Shares to the Custodian. Every deposit of Shares shall be accompanied by the following: (A) (i) *in the case of Shares represented by certificates issued in registered form*, the certificate(s) representing such Shares and, where relevant, appropriate instruments of transfer or endorsement, in a form reasonably satisfactory to the Custodian, (ii) *in the case of Shares represented by certificates in bearer form*, the requisite coupons and talons pertaining thereto, and (iii) *in the case of Shares delivered by book-entry transfer and recordation*, confirmation of such book-entry transfer and recordation in the books of the Share Registrar or of CREST, as applicable, to the Custodian or that irrevocable instructions have been given to cause such Shares to be so issued or transferred, as applicable, and recorded, (B) such certifications and payments (including, without limitation, the Depositary's fees and related charges) and evidence of such payments (including, without limitation, stamping or otherwise marking such Shares by way of receipt) as may be reasonably required by the Depositary or the Custodian in accordance with the provisions of the Deposit Agreement and applicable law, (C) if the Depositary so requires, a written order directing the Depositary to issue and deliver to, or upon the written order of, the person(s) stated in such order the number of ADSs representing the Shares so deposited, (D) evidence reasonably satisfactory to the Depositary (which may be an opinion of counsel) that all necessary approvals have been granted by, or there has been compliance with the rules and regulations of, any applicable governmental agency in England and Wales, and (E) if the Depositary so requires, (i) an agreement, assignment or instrument reasonably satisfactory to the Depositary or the Custodian which provides for the prompt transfer by any person in whose name the Shares are or have been recorded to the Custodian of any distribution, or right to subscribe for additional Shares or to receive other property in respect of any such deposited Shares or, in lieu thereof, such indemnity or other agreement as shall be reasonably satisfactory to the Depositary or the Custodian and (ii) if the Shares are registered in the name of the person on whose behalf they are presented for deposit, a proxy or proxies entitling the Custodian to exercise voting rights in respect of the Shares for any and all purposes until the Shares so deposited are registered in the name of the Depositary, the Custodian or any nominee.

Without limiting any other provision of the Deposit Agreement, the Depositary shall instruct the Custodian not to, and the Depositary shall not knowingly, accept for deposit (a) any Restricted Securities (except as contemplated by Section 2.14) nor (b) any fractional Shares or fractional Deposited Securities nor (c) a number of Shares or Deposited Securities which upon application of the ADS to Shares ratio would give rise to fractional ADSs. No Shares shall be accepted for deposit unless accompanied by evidence, if any is required by the Depositary, that is reasonably satisfactory to the Depositary or the Custodian that all conditions to such deposit have been satisfied by the person depositing such Shares under the laws and regulations of England and Wales and any necessary approval has been granted by any applicable governmental body in England and Wales, if any. The Depositary may issue ADSs against evidence of rights to receive Shares from the Company, any agent of the Company or any custodian, registrar, transfer agent, clearing agency or other entity involved in ownership or transaction records in respect of the Shares. Such evidence of rights shall consist of written blanket or specific guarantees of ownership of Shares furnished by the Company or any such custodian, registrar, transfer agent, clearing agency or other entity involved in ownership or transaction records in respect of the Shares.

Without limitation of the foregoing, the Depositary shall not knowingly accept for deposit under the Deposit Agreement (A) any Shares or other securities required to be registered under the provisions of the Securities Act, unless (i) a registration statement is in effect as to such Shares or other securities or (ii) the deposit is made upon terms contemplated in Section 2.14, or (B) any Shares or other securities the deposit of which would violate any provisions of the Articles of Association of the Company or English law. For purposes of the foregoing sentence, the Depositary shall be entitled to rely upon representations and warranties made or deemed made pursuant to the Deposit Agreement and shall not be required to make any further investigation. The Depositary will comply with written instructions of the Company (received by the Depositary reasonably in advance) not to accept for deposit hereunder any Shares identified in such instructions at such times and under such circumstances as may reasonably be specified in such instructions in order to facilitate the Company's compliance with the securities laws of the United States.

Section 2.4 Registration and Safekeeping of Deposited Securities. The Depositary shall instruct the Custodian upon each Delivery of registered Shares being deposited hereunder with the Custodian (or other Deposited Securities pursuant to Article IV hereof), together with the other documents above specified, to present such Shares, together with the appropriate instrument(s) of transfer or endorsement, duly stamped, to the Share Registrar for transfer and registration of the Shares (as soon as transfer and registration can be accomplished and at the expense of the person for whom the deposit is made) in the name of the Depositary, the Custodian or a nominee of either. Deposited Securities shall be held by the Depositary, or by a Custodian for the account and to the order of the Depositary or a nominee of the Depositary, in each case, on behalf of the Holders and Beneficial Owners, at such place(s) as the Depositary or the Custodian shall determine. Notwithstanding anything else contained in the Deposit Agreement, any ADR(s), or any other instruments or agreements relating to the ADSs and the corresponding Deposited Property, the registration of the Deposited Securities in the name of the Depositary, the Custodian or any of their respective nominees, shall, to the maximum extent permitted by applicable law, vest in the Depositary, the Custodian or the applicable nominee the record ownership in the applicable Deposited Securities with the beneficial ownership rights and interests in such Deposited Securities being at all times vested with the Beneficial Owners of the ADSs representing the Deposited Securities. Notwithstanding the foregoing, the Depositary, the Custodian and the applicable nominee 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, upon the terms set forth in the Deposit Agreement and, if applicable, the ADR(s) representing the ADSs. The Depositary, the Custodian and their respective nominees shall for all purposes be deemed to have all requisite power and authority to act in respect of Deposited Property on behalf of the Holders and Beneficial Owners of ADSs representing the Deposited Property, and upon making payments to, or acting upon instructions from, or information provided by, the Depositary, the Custodian or their respective nominees all persons shall be authorized to rely upon such power and authority.

Section 2.5 Issuance of ADSs. The Depositary has made arrangements with the Custodian for the Custodian to confirm to the Depositary upon receipt of a deposit of Shares (i) that a deposit of Shares has been made pursuant to Section 2.3, (ii) that such Deposited Securities have been recorded in the name of the Depositary, the Custodian or a nominee of either on the shareholders' register maintained by or on behalf of the Company by the Share Registrar on the books of CREST, (iii) that all required documents have been received, and (iv) the person(s) to whom or upon whose order ADSs are deliverable in respect thereof and the number of ADSs to be so delivered. Such notification may be made by letter, cable, telex, SWIFT message or, at the risk and expense of the person making the deposit, by facsimile or other means of electronic transmission. Upon receiving such notice from the Custodian, the Depositary, subject to the terms and conditions of the Deposit Agreement and applicable law, shall issue the ADSs representing the Shares so deposited to or upon the order of the person(s) named in the notice delivered to the Depositary and, if applicable, shall execute and deliver at its Principal Office Receipt(s) registered in the name(s) requested by such person(s) and evidencing the aggregate number of ADSs to which such person(s) are entitled, but, in each case, only upon payment to the Depositary of the charges of the Depositary for accepting a deposit of Shares and issuing ADSs (as set forth in Section 5.9 and Exhibit B hereto) and all taxes and governmental charges and fees payable in connection with such deposit and the transfer of the Shares and the issuance of the ADS(s). The Depositary shall only issue ADSs in whole numbers and deliver, if applicable, ADR(s) evidencing whole numbers of ADSs.

The Company and the Depositary hereby understand and agree that Restricted ADSs may be issued by the Depositary prior to the effective date of Registration Statement on Form F-6; however, freely transferable ADSs may not be issued by the Depositary until the applicable Registration Statement on Form F-6 is declared effective by the Commission.

Section 2.6 Transfer, Combination and Split-up of ADRs.

(a) Transfer. The Registrar shall register the transfer of ADRs (and of the ADSs represented thereby) on the books maintained for such purpose and the Depositary shall (x) cancel such ADRs and execute new ADRs evidencing the same aggregate number of ADSs as those evidenced by the ADRs canceled by the Depositary, (y) cause the Registrar to countersign such new ADRs and (z) Deliver such new ADRs to or upon the order of the person entitled thereto, if each of the following conditions has been satisfied: (i) the ADRs have been duly Delivered by the Holder (or by a duly authorized attorney of the Holder) to the Depositary at its Principal Office for the purpose of effecting a transfer thereof, (ii) the surrendered ADRs have been properly endorsed or are accompanied by proper instruments of transfer (including signature guarantees in accordance with standard securities industry practice), (iii) the surrendered ADRs have been duly stamped (if required by the laws of the State of New York or of the United States), and (iv) all applicable fees and charges of, and expenses incurred by, the Depositary and all applicable taxes and governmental charges (as are set forth in Section 5.9 and Exhibit B hereto) have been paid, *subject, however, in each case*, to the terms and conditions of the applicable ADRs, of the Deposit Agreement and of applicable law, in each case as in effect at the time thereof.

(b) Combination & Split-Up. The Registrar shall register the split-up or combination of ADRs (and of the ADSs represented thereby) on the books maintained for such purpose and the Depositary shall (x) cancel such ADRs and execute new ADRs for the number of ADSs requested, but in the aggregate not exceeding the number of ADSs evidenced by the ADRs canceled by the Depositary, (y) cause the Registrar to countersign such new ADRs and (z) Deliver such new ADRs to or upon the order of the Holder thereof, if each of the following conditions has been satisfied: (i) the ADRs have been duly Delivered by the Holder (or by a duly authorized attorney of the Holder) to the Depositary at its Principal Office for the purpose of effecting a split-up or combination thereof, and (ii) all applicable fees and charges of, and expenses incurred by, the Depositary and all applicable taxes and governmental charges (as are set forth in Section 5.9 and Exhibit B hereto) have been paid, *subject, however, in each case*, to the terms and conditions of the applicable ADRs, of the Deposit Agreement and of applicable law, in each case as in effect at the time thereof.

Section 2.7 Surrender of ADSs and Withdrawal of Deposited Securities. The Holder of ADSs shall be entitled to Delivery (at the Custodian's designated office) of the Deposited Securities at the time represented by the ADSs upon satisfaction of each of the following conditions: (i) the Holder (or a duly-authorized attorney of the Holder) has duly Delivered ADSs to the Depositary at its Principal Office (and if applicable, the ADRs evidencing such ADSs) for the purpose of withdrawal of the Deposited Securities represented thereby, (ii) if applicable and so required by the Depositary, the ADRs Delivered to the Depositary for such purpose have been properly endorsed in blank or are accompanied by proper instruments of transfer in blank (including signature guarantees in accordance with standard securities industry practice), (iii) if so required by the Depositary, the Holder of the ADSs has executed and delivered to the Depositary a written order directing the Depositary to cause the Deposited Securities being withdrawn to be Delivered to or upon the written order of the person(s) designated in such order, and (iv) all applicable fees and charges of, and expenses incurred by, the Depositary and all applicable taxes and governmental charges (as are set forth in Section 5.9 and Exhibit B) have been paid, *subject, however, in each case*, to the terms and conditions of the ADRs evidencing the surrendered ADSs, of the Deposit Agreement, of the Company's Articles of Association and of any applicable laws and the rules of CREST, and to any provisions of or governing the Deposited Securities, in each case as in effect at the time thereof.

Upon satisfaction of each of the conditions specified above, the Depositary (i) shall cancel the ADSs Delivered to it (and, if applicable, the ADR(s) evidencing the ADSs so Delivered), (ii) shall direct the Registrar to record the cancellation of the ADSs so Delivered on the books maintained for such purpose, and (iii) shall direct the Custodian to Deliver, or cause the Delivery of, in each case, without unreasonable delay, the Deposited Securities represented by the ADSs so canceled together with any certificate or other document of title for the Deposited Securities, or evidence of the electronic transfer thereof (if available), as the case may be, to or upon the written order of the person(s) designated in the order delivered to the Depositary for such purpose, *subject however, in each case*, to the terms and conditions of the Deposit Agreement, of the ADRs evidencing the ADSs so canceled, of the Articles of Association of the Company, of any applicable laws and of the rules of CREST, and to the terms and conditions of or governing the Deposited Securities, in each case as in effect at the time thereof.

The Depositary shall not accept for surrender ADSs representing less than one (1) Share. In the case of Delivery to it of ADSs representing a number other than a whole number of Shares, the Depositary shall cause ownership of the appropriate whole number of Shares to be Delivered in accordance with the terms hereof, and shall, at the discretion of the Depositary, either (i) return to the person surrendering such ADSs the number of ADSs representing any remaining fractional Share, or (ii) sell or cause to be sold the fractional Share represented by the ADSs so surrendered and remit the proceeds of such sale (net of (a) applicable fees and charges of, and expenses incurred by, the Depositary and (b) applicable taxes required to be withheld as a result of such sale) to the person surrendering the ADSs.

Notwithstanding anything else contained in any ADR or the Deposit Agreement, the Depositary may make delivery at the Principal Office of the Depositary of Deposited Property consisting of (i) any cash dividends or cash distributions, or (ii) any proceeds from the sale of any non-cash distributions, which are at the time held by the Depositary in respect of the Deposited Securities represented by the ADSs surrendered for cancellation and withdrawal. At the request, risk and expense of any Holder so surrendering ADSs, and for the account of such Holder, the Depositary shall direct the Custodian to forward (to the extent permitted by law) any Deposited Property (other than Deposited Securities) held by the Custodian in respect of such ADSs to the Depositary for delivery at the Principal Office of the Depositary. Such direction shall be given by letter or, at the request, risk and expense of such Holder, by cable, telex or facsimile transmission.

Section 2.8 Limitations on Execution and Delivery, Transfer, etc. of ADSs; Suspension of Delivery, Transfer, etc.

(a) Additional Requirements. As a condition precedent to the execution and Delivery, the registration of issuance, transfer, split-up, combination or surrender, of any ADS, the delivery of any distribution thereon, or the withdrawal of any Deposited Property, the Depositary or the Custodian may require (i) payment from the depositor of Shares or presenter of ADSs or of an ADR of a sum sufficient to reimburse it for any tax or other governmental charge and any stock transfer or registration fee with respect thereto (including any such tax or charge and fee with respect to Shares being deposited or withdrawn) and payment of any applicable fees and charges of the Depositary as provided in Section 5.9 and Exhibit B, (ii) the production of proof reasonably satisfactory to it as to the identity and genuineness of any signature or any other matter contemplated by Section 3.1, and (iii) compliance with (A) any laws or governmental regulations relating to the execution and Delivery of ADRs or ADSs or to the withdrawal of Deposited Securities and (B) such reasonable regulations as the Depositary and the Company may establish consistent with the provisions of the representative ADR, if applicable, the Deposit Agreement and applicable law.

(b) Additional Limitations. The issuance of ADSs against deposits of Shares generally or against deposits of particular Shares may be suspended, or the deposit of particular Shares may be refused, or the registration of transfer of ADSs in particular instances may be refused, or the registration of transfers of ADSs generally may be suspended, during any period when the transfer books of the Company, the Depositary, a Registrar or the Share Registrar are closed or if any such action is deemed necessary or advisable by the Depositary or the Company, in good faith, at any time or from time to time because of any requirement of law or regulation, any government or governmental body or commission or any securities exchange on which the ADSs or Shares are listed, or under any provision of the Deposit Agreement or the representative ADR(s), if applicable, or under any provision of, or governing, the Deposited Securities, or because of a meeting of shareholders of the Company or for any other reason, subject, in all cases, to Section 7.8(a).

(c) Regulatory Restrictions. Notwithstanding any provision of the Deposit Agreement or any ADR(s) to the contrary, Holders are entitled to surrender outstanding ADSs to withdraw the Deposited Securities associated herewith at any time subject only to (i) temporary delays caused by closing the transfer books of the Depositary or the Company or the deposit of Shares in connection with voting at a shareholders' meeting or the payment of dividends, (ii) the payment of fees, taxes and similar charges, (iii) compliance with any U.S. or foreign laws or governmental regulations relating to the ADSs or to the withdrawal of the Deposited Securities, and (iv) other circumstances specifically contemplated by Instruction I.A.(l) of the General Instructions to Form F-6 (as such General Instructions may be amended from time to time).

Section 2.9 Lost ADRs, etc. In case any ADR shall be mutilated, destroyed, lost, or stolen, the Depositary shall execute and deliver a new ADR of like tenor at the expense of the Holder (a) *in the case of a mutilated ADR*, in exchange of and substitution for such mutilated ADR upon cancellation thereof, or (b) *in the case of a destroyed, lost or stolen ADR*, in lieu of and in substitution for such destroyed, lost, or stolen ADR, after the Holder thereof (i) has submitted to the Depositary a written request for such exchange and substitution before the Depositary has notice that the ADR has been acquired by a bona fide purchaser, (ii) has provided such security or indemnity (including an indemnity bond) as may be required by the Depositary to save it and any of its agents harmless, and (iii) has satisfied any other reasonable requirements imposed by the Depositary, including, without limitation, evidence satisfactory to the Depositary of such destruction, loss or theft of such ADR, the authenticity thereof and the Holder's ownership thereof.

Section 2.10 Cancellation and Destruction of Surrendered ADRs; Maintenance of Records. All ADRs surrendered to the Depositary shall be canceled by the Depositary. Canceled ADRs shall not be entitled to any benefits under the Deposit Agreement or be valid or enforceable against the Depositary for any purpose. The Depositary is authorized to destroy ADRs so canceled, provided the Depositary maintains a record of all destroyed ADRs. Any ADSs held in book-entry form (*e.g.*, through accounts at DTC) shall be deemed canceled when the Depositary causes the number of ADSs evidenced by the Balance Certificate to be reduced by the number of ADSs surrendered (without the need to physically destroy the Balance Certificate).

Section 2.11 Escheatment. In the event any unclaimed property relating to the ADSs, for any reason, is in the possession of Depositary and has not been claimed by the Holder thereof or cannot be delivered to the Holder thereof through usual channels, the Depositary shall, upon expiration of any applicable statutory period relating to abandoned property laws, escheat such unclaimed property to the relevant authorities in accordance with the laws of each of the relevant States of the United States.

Section 2.12 Partial Entitlement ADSs. In the event any Shares are deposited which (i) entitle the holders thereof to receive a per-share distribution or other entitlement in an amount different from the Shares then on deposit or (ii) are not fully fungible (including, without limitation, as to settlement or trading) with the Shares then on deposit (the Shares then on deposit collectively, "Full Entitlement Shares" and the Shares with different entitlement, "Partial Entitlement Shares"), the Depositary shall (i) cause the Custodian to hold Partial Entitlement Shares separate and distinct from Full Entitlement Shares, and (ii) subject to the terms of the Deposit Agreement, issue ADSs representing Partial Entitlement Shares which are separate and distinct from the ADSs representing Full Entitlement Shares, by means of separate CUSIP numbering and legending (if necessary) and, if applicable, by issuing ADRs evidencing such ADSs with applicable notations thereon ("Partial Entitlement ADSs/ADRs" and "Full Entitlement ADSs/ADRs", respectively). If and when Partial Entitlement Shares become Full Entitlement Shares, the Depositary shall (a) give notice thereof to Holders of Partial Entitlement ADSs and give Holders of Partial Entitlement ADRs the opportunity to exchange such Partial Entitlement ADRs for Full Entitlement ADRs, (b) cause the Custodian to transfer the Partial Entitlement Shares into the account of the Full Entitlement Shares, and (c) take such actions as are necessary to remove the distinctions between (i) the Partial Entitlement ADRs and ADSs, on the one hand, and (ii) the Full Entitlement ADRs and ADSs on the other. Holders and Beneficial Owners of Partial Entitlement ADSs shall only be entitled to the entitlements of Partial Entitlement Shares. Holders and Beneficial Owners of Full Entitlement ADSs shall be entitled only to the entitlements of Full Entitlement Shares. All provisions and conditions of the Deposit Agreement shall apply to Partial Entitlement ADRs and ADSs to the same extent as Full Entitlement ADRs and ADSs, except as contemplated by this Section 2.12. The Depositary is authorized to take any and all other actions as may be necessary (including, without limitation, making the necessary notations on ADRs) to give effect to the terms of this Section 2.12. The Company agrees to give timely written notice to the Depositary if any Shares issued or to be issued are Partial Entitlement Shares and shall assist the Depositary with the establishment of procedures enabling the identification of Partial Entitlement Shares upon Delivery to the Custodian.

Section 2.13 Certificated/Uncertificated ADSs. Notwithstanding any other provision of the Deposit Agreement, the Depositary may, at any time and from time to time, issue ADSs that are not evidenced by ADRs (such ADSs, the "Uncertificated ADS(s)" and the ADS(s) evidenced by ADR(s), the "Certificated ADS(s)"). When issuing and maintaining Uncertificated ADS(s) under the Deposit Agreement, the Depositary shall at all times be subject to (i) the standards applicable to registrars and transfer agents maintaining direct registration systems for equity securities in New York and issuing uncertificated securities under New York law, and (ii) the terms of New York law applicable to uncertificated equity securities.

Uncertificated ADSs shall not be represented by any instruments but shall be evidenced by registration in the books of the Depositary maintained for such purpose. Holders of Uncertificated ADSs, that are not subject to any registered pledges, liens, restrictions or adverse claims of which the Depositary has notice at such time, shall at all times have the right to exchange the Uncertificated ADS(s) for Certificated ADS(s) of the same type and class, subject in each case to (x) the applicable laws and any rules and regulations the Depositary may have established in respect of the Uncertificated ADSs, and (y) the continued availability of Certificated ADSs in the U.S. Holders of Certificated ADSs shall, if the Depositary maintains a direct registration system for the ADSs, have the right to exchange the Certificated ADSs for Uncertificated ADSs upon (i) the due surrender of the Certificated ADS(s) to the Depositary for such purpose and (ii) the presentation of a written request to that effect to the Depositary, subject in each case to (a) all liens and restrictions noted on the ADR evidencing the Certificated ADS(s) and all adverse claims of which the Depositary then has notice, (b) the terms of the Deposit Agreement and the rules and regulations that the Depositary may establish for such purposes hereunder, (c) applicable law, and (d) payment of the Depositary fees and expenses applicable to such exchange of Certificated ADS(s) for Uncertificated ADS(s). Uncertificated ADSs shall in all material respects be identical to Certificated ADS(s) of the same type and class, except that (i) no ADR(s) shall be, or shall need to be, issued to evidence Uncertificated ADS(s), (ii) Uncertificated ADS(s) shall, subject to the terms of the Deposit Agreement, be transferable upon the same terms and conditions as uncertificated securities under New York law, (iii) the ownership of Uncertificated ADS(s) shall be recorded on the books of the Depositary maintained for such purpose and evidence of such ownership shall be reflected in periodic statements provided by the Depositary to the Holder(s) in accordance with applicable New York law, (iv) the Depositary may from time to time, upon notice to the Holders of Uncertificated ADSs affected thereby, establish rules and regulations, and amend or supplement existing rules and regulations, as may be deemed reasonably necessary to maintain Uncertificated ADS(s) on behalf of Holders, provided that (a) such rules and regulations do not conflict with the terms of the Deposit Agreement and applicable law, and (b) the terms of such rules and regulations are readily available to Holders upon request, (v) the Uncertificated ADS(s) shall not be entitled to any benefits under the Deposit Agreement or be valid or enforceable for any purpose against the Depositary or the Company unless such Uncertificated ADS(s) is/are registered on the books of the Depositary maintained for such purpose, (vi) the Depositary may, in connection with any deposit of Shares resulting in the issuance of Uncertificated ADSs and with any transfer, pledge, release and cancellation of Uncertificated ADSs, require the prior receipt of such documentation as the Depositary may deem reasonably appropriate, and (vii) upon termination of the Deposit Agreement, the Depositary shall not require Holders of Uncertificated ADSs to affirmatively instruct the Depositary before remitting proceeds from the sale of the Deposited Property represented by such Holders' Uncertificated ADSs under the terms of Section 6.2. When issuing ADSs under the terms of the Deposit Agreement, including, without limitation, issuances pursuant to Sections 2.5, 4.2, 4.3, 4.4, 4.5 and 4.11, the Depositary may in its discretion determine to issue Uncertificated ADSs rather than Certificated ADSs, unless otherwise specifically instructed by the applicable Holder to issue Certificated ADSs. All provisions and conditions of the Deposit Agreement shall apply to Uncertificated ADSs to the same extent as to Certificated ADSs, except as contemplated by this Section 2.13. The Depositary is authorized and directed to take any and all actions and establish any and all procedures deemed reasonably necessary to give effect to the terms of this Section 2.13. Any references in the Deposit Agreement or any ADR(s) to the terms "American Depositary Share(s)" or "ADS(s)" shall, unless the context otherwise requires, include Certificated ADS(s) and Uncertificated ADS(s). Except as set forth in this Section 2.13 and except as required by applicable law, the Uncertificated ADSs shall be treated as ADSs issued and outstanding under the terms of the Deposit Agreement. In the event that, in determining the rights and obligations of parties hereto with respect to any Uncertificated ADSs, any conflict arises between (a) the terms of the Deposit Agreement (other than this Section 2.13) and (b) the terms of this Section 2.13, the terms and conditions set forth in this Section 2.13 shall be controlling and shall govern the rights and obligations of the parties to the Deposit Agreement pertaining to the Uncertificated ADSs.

Section 2.14 Restricted ADSs. The Depositary shall, at the request and expense of the Company, establish procedures enabling the deposit hereunder of Shares that are Restricted Securities in order to enable the holder of such Shares to hold its ownership interests in such Restricted Securities in the form of ADSs issued under the terms hereof (such Shares, "Restricted Shares"). Upon receipt of a written request from the Company to accept Restricted Shares for deposit hereunder, the Depositary agrees to establish procedures permitting the deposit of such Restricted Shares and the issuance of ADSs representing the right to receive, subject to the terms of the Deposit Agreement and the applicable ADR (if issued as a Certificated ADS), such deposited Restricted Shares (such ADSs, the "Restricted ADSs," and the ADRs evidencing such Restricted ADSs, the "Restricted ADRs"). Notwithstanding anything contained in this Section 2.14, the Depositary and the Company may, to the extent not prohibited by law, agree to issue the Restricted ADSs in uncertificated form ("Uncertificated Restricted ADSs") upon such terms and conditions as the Company and the Depositary may deem necessary and appropriate. The Company shall assist the Depositary in the establishment of such procedures and agrees that it shall take all steps necessary and reasonably satisfactory to the Depositary to ensure that the establishment of such procedures does not violate the provisions of the Securities Act or any other applicable laws. The depositors of such Restricted Shares and the Holders of the Restricted ADSs may be required prior to the deposit of such Restricted Shares, the transfer of the Restricted ADRs and Restricted ADSs or the withdrawal of the Restricted Shares represented by Restricted ADSs to provide such written certifications or agreements as the Depositary or the Company may require. The Company shall provide to the Depositary in writing the legend(s) to be affixed to the Restricted ADRs (if the Restricted ADSs are to be issued as Certificated ADSs**)**, or to be included in the statements issued from time to time to Holders of Uncertificated ADSs (if issued as Uncertificated Restricted ADSs), which legends shall (i) be in a form reasonably satisfactory to the Depositary and (ii) contain the specific circumstances under which the Restricted ADSs, and, if applicable, the Restricted ADRs evidencing the Restricted ADSs, may be transferred or the Restricted Shares withdrawn. The Restricted ADSs issued upon the deposit of Restricted Shares shall be separately identified on the books of the Depositary and the Restricted Shares so deposited shall, to the extent required by law, be held separate and distinct from the other Deposited Securities held hereunder. The Restricted ADSs shall not be eligible for inclusion in any book-entry settlement system, including, without limitation, DTC, (unless (x) otherwise agreed by the Company and the Depositary, (y) the inclusion of Restricted ADSs is acceptable to the applicable clearing system, and (z) the terms of such inclusion are generally accepted by the Commission for Restricted Securities of that type) and shall not in any way be fungible with the ADSs issued under the terms hereof that are not Restricted ADSs. The Restricted ADSs, and, if applicable, the Restricted ADRs evidencing the Restricted ADSs, shall be transferable only by the Holder thereof upon delivery to the Depositary of (i) all documentation otherwise contemplated by the Deposit Agreement and (ii) an opinion of counsel reasonably satisfactory to the Depositary setting forth, *inter alia*, the conditions upon which the Restricted ADSs presented, and, if applicable, the Restricted ADRs evidencing the Restricted ADSs, are transferable by the Holder thereof under applicable securities laws and the transfer restrictions contained in the legend applicable to the Restricted ADSs presented for transfer. Except as set forth in this Section 2.14 and except as required by applicable law, the Restricted ADSs and the Restricted ADRs evidencing Restricted ADSs shall be treated as ADSs and ADRs issued and outstanding under the terms of the Deposit Agreement. In the event that, in determining the rights and obligations of parties hereto with respect to any Restricted ADSs, any conflict arises between (a) the terms of the Deposit Agreement (other than this Section 2.14) and (b) the terms of (i) this Section 2.14 or (ii) the applicable Restricted ADR, the terms and conditions set forth in this Section 2.14 and of the Restricted ADR shall be controlling and shall govern the rights and obligations of the parties to the Deposit Agreement pertaining to the deposited Restricted Shares, the Restricted ADSs and Restricted ADRs.

If the Restricted ADRs, the Restricted ADSs and the Restricted Shares cease to be Restricted Securities, the Depositary, upon receipt of (x) an opinion of counsel reasonably satisfactory to the Depositary setting forth, *inter alia*, that the Restricted ADRs, the Restricted ADSs and the Restricted Shares are not as of such time Restricted Securities, and (y) instructions from the Company to remove the restrictions applicable to the Restricted ADRs, the Restricted ADSs and the Restricted Shares, shall (i) eliminate the distinctions and separations that may have been established between the applicable Restricted Shares held on deposit under this Section 2.14 and the other Shares held on deposit under the terms of the Deposit Agreement that are not Restricted Shares, (ii) treat the newly unrestricted ADRs and ADSs on the same terms as, and fully fungible with, the other ADRs and ADSs issued and outstanding under the terms of the Deposit Agreement that are not Restricted ADRs or Restricted ADSs, and (iii) take all actions necessary to remove any distinctions, limitations and restrictions previously existing under this Section 2.14 between the applicable Restricted ADRs and Restricted ADSs, respectively, on the one hand, and the other ADRs and ADSs that are not Restricted ADRs or Restricted ADSs, respectively, on the other hand, including, without limitation, by making the newly-unrestricted ADSs eligible for inclusion in the applicable book-entry settlement systems.

ARTICLE III

CERTAIN OBLIGATIONS OF HOLDERS AND BENEFICIAL OWNERS OF ADSs

Section 3.1 Proofs, Certificates and Other Information. Any person presenting Shares for deposit, any Holder and any Beneficial Owner may be required, and every Holder and Beneficial Owner agrees, from time to time to provide to the Depositary and the Custodian such proof of citizenship or residence, taxpayer status, payment of all applicable taxes or other governmental charges, exchange control approval, legal or beneficial ownership of ADSs and Deposited Property, compliance with applicable laws, the terms of the Deposit Agreement or the ADR(s) evidencing the ADSs and the provisions of, or governing, the Deposited Property, to execute such certifications and to make such representations and warranties, and to provide such other information and documentation (or, in the case of Shares in registered form presented for deposit, such information relating to the registration on the books of the Company or of the Share Registrar) as the Depositary or the Custodian may deem necessary or proper or as the Company may reasonably require by written request to the Depositary consistent with its obligations under the Deposit Agreement and the applicable ADR(s). The Depositary and the Registrar, as applicable, may and at the reasonable request of the Company, shall, to the extent practicable and subject to applicable law, withhold the execution or delivery or registration of transfer of any ADR or ADS or the distribution or sale of any dividend or distribution of rights or of the proceeds thereof or, to the extent not limited by the terms of Section 7.8(a), the delivery of any Deposited Property until such proof or other information is filed or such certifications are executed, or such representations and warranties are made, or such other documentation or information provided, in each case to the Depositary's, the Registrar's and the Company's satisfaction. The Depositary shall provide the Company, in a timely manner, with copies or originals if necessary and appropriate of (i) any such proofs of citizenship or residence, taxpayer status, or exchange control approval or copies of written representations and warranties which it receives from Holders and Beneficial Owners, and (ii) any other information or documents which the Company may reasonably request and which the Depositary shall request and receive from any Holder or Beneficial Owner or any person presenting Shares for deposit or ADSs for cancellation, transfer or withdrawal. Nothing herein shall obligate the Depositary to (i) obtain any information for the Company if not provided by the Holders or Beneficial Owners, or (ii) verify or vouch for the accuracy of the information so provided by the Holders or Beneficial Owners.

Section 3.2 Liability for Taxes and Other Charges. Any tax or other governmental charge payable by the Custodian or by the Depositary with respect to any Deposited Property, ADSs or ADRs shall be payable by the Holders and Beneficial Owners to the Depositary. The Company, the Custodian and/or the Depositary may withhold or deduct from any distributions made in respect of Deposited Property held on behalf of such Holder and/or Beneficial Owner, and may sell for the account of a Holder and/or Beneficial Owner any or all of such Deposited Property and apply such distributions and sale proceeds in payment of, any taxes (including applicable interest and penalties) or charges that are or may be payable by Holders or Beneficial Owners in respect of the ADSs, Deposited Property and ADRs, the Holder and the Beneficial Owner remaining liable for any deficiency. The Custodian may refuse the deposit of Shares and the Depositary may refuse to issue ADSs, to deliver ADRs, register the transfer of ADSs, register the split-up or combination of ADRs and (subject to Section 7.8(a)) the withdrawal of Deposited Property until payment in full of such tax, charge, penalty or interest is received. Every Holder and Beneficial Owner agrees to indemnify the Depositary, the Company, the Custodian, and any of their agents, officers, employees and Affiliates for, and to hold each of them harmless from, any claims with respect to taxes (including applicable interest and penalties thereon) arising from (i) any ADSs held by such Holder and/or owned by such Beneficial Owner, (ii) the Deposited Property represented by the ADSs, and (iii) any transaction entered into by such Holder and/or Beneficial Owner in respect of the ADSs and/or the Deposited Property represented thereby. Notwithstanding anything to the contrary contained in the Deposit Agreement or any ADR, the obligations of Holders and Beneficial Owners under this Section 3.2 shall survive any transfer of ADSs, any cancellation of ADSs and withdrawal of Deposited Securities, and the termination of the Deposit Agreement.

Section 3.3 Representations and Warranties on Deposit of Shares. Each person depositing Shares under the Deposit Agreement shall be deemed thereby to represent and warrant that (i) such Shares and the certificates therefor are duly authorized, validly allotted and issued, fully paid, not subject to any call for the payment of further capital and legally obtained by such person, (ii) all preemptive (and similar) rights, if any, with respect to such Shares have been validly waived, disapplied or exercised, (iii) the person making such deposit is duly authorized so to do, (iv) the Shares presented for deposit are free and clear of any lien, encumbrance, security interest, charge, mortgage or adverse claim, (v) the Shares presented for deposit are not, and the ADSs issuable upon such deposit will not be, Restricted Securities (except as contemplated in Section 2.14), (vi) the Shares presented for deposit have not been stripped of any rights or entitlements and (vii) the deposit of the Shares does not violate any applicable provisions of English law. Such representations and warranties shall survive the deposit and withdrawal of Shares, the issuance and cancellation of ADSs in respect thereof and the transfer of such ADSs. If any such representations or warranties are false in any way, the Company and the Depositary shall be authorized, at the cost and expense of the person depositing Shares, to take any and all actions necessary to correct the consequences thereof.

Section 3.4 Compliance with Information Requests. Notwithstanding any other provision of the Deposit Agreement or any ADR(s), each Holder and Beneficial Owner agrees to comply with requests from the Company pursuant to applicable law, the rules and requirements of any stock exchange on which the Shares or ADSs are, or will be, registered, traded or listed or the Articles of Association of the Company, which are made to provide information, *inter alia*, as to the capacity in which such Holder or Beneficial Owner owns ADSs (and Shares as the case may be) and regarding the identity of any other person(s) interested in such ADSs and the nature of such interest and various other matters, whether or not they are Holders and/or Beneficial Owners at the time of such request. The Depositary agrees to use its reasonable efforts to forward, upon the request of the Company and at the Company's expense, any such request from the Company to the Holders and to forward to the Company, as promptly as practicable, any such responses to such requests received by the Depositary.

Section 3.5 Ownership Restrictions. Notwithstanding any other provision in the Deposit Agreement or any ADR, the Company may restrict transfers of the Shares where such transfer might result in ownership of Shares exceeding limits imposed by applicable law or the Articles of Association of the Company. The Company may also restrict, in such manner as it deems appropriate, transfers of the ADSs where such transfer may result in the total number of Shares represented by the ADSs owned by a single Holder or Beneficial Owner to exceed any such limits. The Company may, in its sole discretion but subject to applicable law, instruct the Depositary to take action with respect to the ownership interest of any Holder or Beneficial Owner in excess of the limits set forth in the preceding sentence, including, but not limited to, the imposition of restrictions on the transfer of ADSs, the removal or limitation of voting rights or mandatory sale or disposition on behalf of a Holder or Beneficial Owner of the Shares represented by the ADSs held by such Holder or Beneficial Owner in excess of such limitations, if and to the extent such disposition is permitted by applicable law and (if required) the Articles of Association of the Company. Nothing herein shall be interpreted as obligating the Depositary or the Company to ensure compliance with the ownership restrictions described in this Section 3.5.

Notwithstanding any provision of the Deposit Agreement or of the ADRs and without limiting the foregoing, by being a Holder or Beneficial Owner of an ADS, each such Holder and Beneficial Owner agrees to provide such information as the Company may request in a disclosure notice (a "Disclosure Notice") given pursuant to the U.K. Companies Act 2006 (as amended from time to time and including any statutory modification or re-enactment thereof, the "Companies Act") or the Articles of Association of the Company. By accepting or holding an ADS, each Holder and Beneficial Owner acknowledges that it understands that failure to comply with a Disclosure Notice may result in the imposition of sanctions against the holder of the 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 of Association 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. In addition, by accepting or holding an ADR, each Holder and Beneficial Owner agrees to comply with the provisions of the DTRs, which as of the date of this Deposit Agreement provide, *inter alia*, that a person must notify the Company of the percentage of its voting rights which such person holds as a shareholder or is deemed to hold through such person's direct or indirect holding of certain financial instruments (as defined in the DTRs) (or a combination of such holdings) if the percentage of such voting rights (i) reaches, exceeds or falls below 3% and each 1% threshold thereafter up to 100% as a result of an acquisition or disposal of Shares or certain financial instruments, or (ii) reaches, exceeds or falls below such applicable thresholds as a result of events changing the breakdown of voting rights and on the basis of information disclosed by the Company in accordance with the DTRs. Such notification must be effected as soon as possible, but not later than two trading days after the date on which the Holder or Beneficial Owner (as the case may be) (a) learns of the acquisition or disposal or of the possibility of exercising voting rights, or on which, having regard to the circumstances, should have learned of it, regardless of the date on which the acquisition, disposal or possibility of exercising voting rights takes effect, or (b) is informed of the event mentioned in (ii) above.

The Company reserves the right to instruct Holders and Beneficial Owners to deliver their ADSs for cancellation and withdrawal of the Deposited Securities so as to permit the Company to deal directly with the Holder and Beneficial Owner thereof as a holder of Shares and Holders agree to comply with such instructions. The Depositary agrees to cooperate with the Company in its efforts to inform Holders and Beneficial Owners of the Company's exercise of its rights under this paragraph and agrees to consult with, and provide reasonable assistance without risk, liability or expense on the part of the Depositary, to the Company on the manner or manners in which it may enforce such rights with respect to any Holder or Beneficial Owner.

Section 3.6 Reporting Obligations and Regulatory Approvals. Applicable laws and regulations may require holders and beneficial owners of Shares, including the Holders and Beneficial Owners of ADSs, to satisfy reporting requirements and obtain regulatory approvals in certain circumstances. Holders and Beneficial Owners of ADSs are solely responsible for determining and complying with such reporting requirements and obtaining such approvals. Each Holder and each Beneficial Owner hereby agrees to make such determination, file such reports, and obtain such approvals to the extent and in the form required by applicable laws and regulations as in effect from time to time. Neither the Depositary, the Custodian, the Company or any of their respective agents or Affiliates shall be required to take any actions whatsoever on behalf of Holders or Beneficial Owners to determine or satisfy such reporting requirements or obtain such regulatory approvals under applicable laws and regulations.

ARTICLE IV

THE DEPOSITED SECURITIES

Section 4.1 Cash Distributions. Whenever the Company intends to make a distribution of a cash dividend or other cash distribution in respect of any Deposited Securities, the Company shall give notice thereof to the Depositary at least twenty (20) days (or such other number of days as mutually agreed to in writing by the Depositary and the Company) prior to the proposed distribution specifying, *inter alia*, the record date applicable for determining the holders of Deposited Securities entitled to receive such distribution. Upon the timely receipt of such notice, the Depositary shall establish an ADS Record Date upon the terms described in Section 4.9. Upon receipt of confirmation of the receipt of (x) any cash dividend or other cash distribution on any Deposited Securities, or (y) proceeds from the sale of any Deposited Property held in respect of the ADSs under the terms hereof, the Depositary will (i) if any amounts are received in a Foreign Currency, promptly convert or cause to be converted such cash dividend, distribution or proceeds into Dollars (on the terms described in Section 4.8), (ii) if applicable and unless previously established, establish the ADS Record Date upon the terms described in Section 4.9, and (iii) distribute promptly the amount thus received (net of (a) the applicable fees and charges set forth in the Fee Schedule attached hereto as Exhibit B, and (b) applicable taxes required to be withheld as a result of the distribution) to the Holders entitled thereto as of the ADS Record Date in proportion to the number of ADSs held as of the ADS Record Date. The Depositary shall distribute only such amount, however, as can be distributed without attributing to any Holder a fraction of one cent, and any balance not so distributed shall be held by the Depositary (without liability for interest thereon) and shall be added to and become part of the next sum received by the Depositary for distribution to Holders of ADSs outstanding at the time of the next distribution. If the Company, the Custodian or the Depositary is required to withhold and does withhold from any cash dividend or other cash distribution in respect of any Deposited Securities, or from any cash proceeds from the sales of Deposited Property, an amount on account of taxes, duties or other governmental charges, the amount distributed to Holders on the ADSs shall be reduced accordingly. Such withheld amounts shall be forwarded by the Company, the Custodian or the Depositary to the relevant governmental authority. Evidence of payment thereof by the Company shall be forwarded by the Company to the Depositary upon request. The Depositary 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 holds must be escheated as unclaimed property in accordance with the laws of the relevant states of the United States. Notwithstanding anything contained in the Deposit Agreement to the contrary, in the event the Company fails to give the Depositary timely notice of the proposed distribution provided for in this Section 4.1, the Depositary agrees to use commercially reasonable efforts to perform the actions contemplated in this Section 4.1, and the Company, the Holders and the Beneficial Owners acknowledge that the Depositary shall have no liability for the Depositary's failure to perform the actions contemplated in this Section 4.1 where such notice has not been so timely given, other than its failure to use commercially reasonable efforts, as provided herein.

Section 4.2 Distribution in Shares. Whenever the Company intends to make a distribution that consists of a dividend in, or free distribution of, Shares, the Company shall give notice thereof to the Depositary at least twenty (20) days (or such other number of days as mutually agreed to in writing by the Depositary and the Company) prior to the proposed distribution, specifying, *inter alia*, the record date applicable to holders of Deposited Securities entitled to receive such distribution. Upon the timely receipt of such notice from the Company, the Depositary shall establish the ADS Record Date upon the terms described in Section 4.9. Upon receipt of confirmation from the Custodian of the receipt of the Shares so distributed by the Company, the Depositary shall either (i) subject to Section 5.9, distribute to the Holders as of the ADS Record Date in proportion to the number of ADSs held as of the ADS Record Date, additional ADSs, which represent in the aggregate the number of Shares received as such dividend, or free distribution, subject to the other terms of the Deposit Agreement (including, without limitation, (a) the applicable fees and charges of, and expenses incurred by, the Depositary and (b) applicable taxes required to be withheld), or (ii) if additional ADSs are not so distributed, take all actions necessary so that each ADS issued and outstanding after the ADS Record Date shall, to the extent permissible by law, thenceforth also represent rights and interests in the additional integral number of Shares distributed upon the Deposited Securities represented thereby (net of (a) the applicable fees and charges of, and expenses incurred by, the Depositary and (b) applicable taxes). In lieu of delivering fractional ADSs, the Depositary shall sell the number of Shares or ADSs, as the case may be, represented by the aggregate of such fractions and distribute the net proceeds upon the terms described in Section 4.1. In the event that the Depositary determines that any distribution in property (including Shares) is subject to any tax or other governmental charges which the Depositary is obligated to withhold, or, if the Company in the fulfillment of its obligation under Section 5.7, has furnished an opinion of U.S. counsel determining that Shares must be registered under the Securities Act or other laws in order to be distributed to Holders (and no such registration statement has been declared effective), the Depositary may, after consultation with the Company to the extent reasonably practicable, dispose of all or a portion of such property (including Shares and rights to subscribe therefor) in such amounts and in such manner, including by public or private sale, as the Depositary deems necessary and practicable, and the Depositary shall distribute the net proceeds of any such sale (after deduction of (a) applicable taxes required to be withheld and (b) fees and charges of, and expenses incurred by, the Depositary) to Holders entitled thereto upon the terms described in Section 4.1. The Depositary shall hold and/or distribute any unsold balance of such property in accordance with the provisions of the Deposit Agreement. Notwithstanding anything contained in the Deposit Agreement to the contrary, in the event the Company fails to give the Depositary timely notice of the proposed distribution provided for in this Section 4.2, the Depositary agrees to use commercially reasonable efforts to perform the actions contemplated in this Section 4.2, and the Company, the Holders and the Beneficial Owners acknowledge that the Depositary shall have no liability for the Depositary's failure to perform the actions contemplated in this Section 4.2 where such notice has not been so timely given, other than its failure to use commercially reasonable efforts, as provided herein.

Section 4.3 Elective Distributions in Cash or Shares. Whenever the Company intends to make a distribution payable at the election of the holders of Deposited Securities in cash or in additional Shares, the Company shall give notice thereof to the Depositary at least forty-five (45) days (or such other number of days as mutually agreed to in writing by the Depositary and the Company) prior to the proposed distribution specifying, *inter alia*, the record date applicable to holders of Deposited Securities entitled to receive such elective distribution and whether or not it wishes such elective distribution to be made available to Holders of ADSs. Upon the timely receipt of a notice indicating that the Company wishes such elective distribution to be made available to Holders of ADSs, the Depositary shall consult with the Company to determine, and the Company shall assist the Depositary in its determination, whether it is lawful and reasonably practicable to make such elective distribution available to the Holders of ADSs. The Depositary shall make such elective distribution available to Holders only if (i) the Company shall have timely requested that the elective distribution be made available to Holders, (ii) the Depositary shall have determined that such distribution is reasonably practicable and (iii) the Depositary shall have received satisfactory documentation within the terms of Section 5.7. If the above conditions are not satisfied or if the Company requests such elective distribution not to be made available to Holders of ADSs, the Depositary shall establish the ADS Record Date on the terms described in Section 4.9 and, to the extent permitted by law, distribute to the Holders, on the basis of the same determination as is made in England and Wales in respect of the Shares for which no election is made, either (X) cash upon the terms described in Section 4.1 or (Y) additional ADSs representing such additional Shares upon the terms described in Section 4.2. If the above conditions are satisfied, the Depositary shall establish an ADS Record Date on the terms described in Section 4.9 and establish procedures to enable Holders to elect the receipt of the proposed distribution in cash or in additional ADSs. The Company shall assist the Depositary in establishing such procedures to the extent necessary. If a Holder elects to receive the proposed distribution (X) in cash, the distribution shall be made upon the terms described in Section 4.1, or (Y) in ADSs, the distribution shall be made upon the terms described in Section 4.2. Nothing herein shall obligate the Depositary to make available to Holders a method to receive the elective distribution in Shares (rather than ADSs). There can be no assurance that Holders generally, or any Holder in particular, will be given the opportunity to receive elective distributions on the same terms and conditions as the holders of Shares. Notwithstanding anything contained in the Deposit Agreement to the contrary, in the event the Company fails to give the Depositary timely notice of the proposed distribution provided for in this Section 4.3, the Depositary agrees to use commercially reasonable efforts to perform the actions contemplated in this Section 4.3, and the Company, the Holders and the Beneficial Owners acknowledge that the Depositary shall have no liability for the Depositary's failure to perform the actions contemplated in this Section 4.3 where such notice has not been so timely given, other than its failure to use commercially reasonable efforts, as provided herein.

Section 4.4 Distribution of Rights to Purchase Additional ADSs.

(a) Distribution to ADS Holders. Whenever the Company intends to distribute to the holders of the Deposited Securities rights to subscribe for additional Shares, the Company shall give notice thereof to the Depositary at least forty-five (45) days (or such other number of days as mutually agreed to in writing by the Depositary and the Company) prior to the proposed distribution specifying, *inter alia*, the record date applicable to holders of Deposited Securities entitled to receive such distribution and whether or not it wishes such rights to be made available to Holders of ADSs. Upon the timely receipt of a notice indicating that the Company wishes such rights to be made available to Holders of ADSs, the Depositary shall consult with the Company to determine, and the Company shall assist the Depositary in its determination, whether it is lawful and reasonably practicable to make such rights available to the Holders. The Depositary shall make such rights available to Holders only if (i) the Company shall have timely requested that such rights be made available to Holders, (ii) the Depositary shall have received satisfactory documentation within the terms of Section 5.7, and (iii) the Depositary shall have determined that such distribution of rights is reasonably practicable. In the event any of the conditions set forth above are not satisfied or if the Company requests that the rights not be made available to Holders of ADSs, the Depositary shall proceed with the sale of the rights as contemplated in Section 4.4(b) below. In the event all conditions set forth above are satisfied, the Depositary shall establish the ADS Record Date (upon the terms described in Section 4.9) and establish procedures to (x) distribute rights to purchase additional ADSs (by means of warrants or otherwise), (y) enable the Holders to exercise such rights (upon payment of the subscription price and of the applicable (a) fees and charges of, and expenses incurred by, the Depositary and (b) taxes), and (z) deliver ADSs upon the valid exercise of such rights. The Company shall assist the Depositary to the extent necessary in establishing such procedures. Nothing herein shall obligate the Depositary to make available to the Holders a method to exercise rights to subscribe for Shares (rather than ADSs).

(b) Sale of Rights. If (i) the Company does not timely request the Depositary to make the rights available to Holders or requests that the rights not be made available to Holders, (ii) the Depositary fails to receive satisfactory documentation within the terms of Section 5.7, or determines it is not reasonably practicable to make the rights available to Holders, or (iii) any rights made available are not exercised and appear to be about to lapse, the Depositary shall determine whether it is lawful and reasonably practicable to sell such rights, in a riskless principal capacity, at such place and upon such terms (including public or private sale) as it may deem practicable. The Company shall assist the Depositary to the extent necessary to determine such legality and practicability. The Depositary shall, upon such sale, convert and distribute proceeds of such sale (net of applicable (a) fees and charges of, and expenses incurred by, the Depositary and (b) taxes) upon the terms set forth in Section 4.1.

(c) Lapse of Rights. If the Depositary is unable to make any rights available to Holders upon the terms described in Section 4.4(a) or to arrange for the sale of the rights upon the terms described in Section 4.4(b), the Depositary shall allow such rights to lapse.

The Depositary shall not be liable for (i) any failure to accurately determine whether it may be lawful or practicable to make such rights available to Holders in general or any Holders in particular, (ii) any foreign exchange exposure or loss incurred in connection with such sale, or exercise, or (iii) the content of any materials forwarded to the Holders on behalf of the Company in connection with the rights distribution.

Notwithstanding anything to the contrary in this Section 4.4, if registration (under the Securities Act or any other applicable law) of the rights or the securities to which any rights relate may be required in order for the Company to offer such rights or such securities to Holders and to sell the securities represented by such rights, the Depositary will not distribute such rights to the Holders (i) unless and until a registration statement under the Securities Act (or other applicable law) covering such offering is in effect or (ii) unless the Company furnishes the Depositary opinion(s) of counsel for the Company in the United States and counsel to the Company in any other applicable country in which rights would be distributed, in each case reasonably satisfactory to the Depositary, to the effect that the offering and sale of such securities to Holders and Beneficial Owners are exempt from, or do not require registration under, the provisions of the Securities Act or any other applicable laws.

In the event that the Company, the Depositary or the Custodian shall be required to withhold and does withhold from any distribution of Deposited Property (including rights) an amount on account of taxes or other governmental charges, the amount distributed to the Holders of ADSs shall be reduced accordingly. In the event that the Depositary reasonably determines that any distribution of Deposited Property (including Shares and rights to subscribe therefor) is subject to any tax or other governmental charges which the Depositary is obligated to withhold, the Depositary may dispose of all or a portion of such Deposited Property (including Shares and rights to subscribe therefor) in such amounts and in such manner, including by public or private sale, as the Depositary deems necessary and practicable to pay any such taxes or charges.

There can be no assurance that Holders generally, or any Holder in particular, will be given the opportunity to receive or exercise rights on the same terms and conditions as the holders of Shares or be able to exercise such rights. Nothing herein shall obligate the Company to file any registration statement in respect of any rights or Shares or other securities to be acquired upon the exercise of such rights.

Section 4.5 Distributions Other Than Cash, Shares or Rights to Purchase Shares.

(a) Whenever the Company intends to distribute to the holders of Deposited Securities property other than cash, Shares or rights to purchase additional Shares, the Company shall give timely notice thereof to the Depositary and shall indicate whether or not it wishes such distribution to be made to Holders of ADSs. Upon receipt of a notice indicating that the Company wishes such distribution to be made to Holders of ADSs, the Depositary shall consult with the Company, and the Company shall assist the Depositary, to determine whether such distribution to Holders is lawful and reasonably practicable. The Depositary shall not make such distribution unless (i) the Company shall have requested the Depositary to make such distribution to Holders, (ii) the Depositary shall have received satisfactory documentation within the terms of Section 5.7, and (iii) the Depositary shall have determined that such distribution is reasonably practicable.

(b) Upon receipt of satisfactory documentation and the request of the Company to distribute property to Holders of ADSs and after making the requisite determinations set forth in (a) above, the Depositary shall distribute the property so received to the Holders of record, as of the ADS Record Date, in proportion to the number of ADSs held by them respectively and in such manner as the Depositary may deem practicable for accomplishing such distribution (i) upon receipt of payment or net of the applicable fees and charges of, and expenses incurred by, the Depositary, and (ii) net of any applicable taxes required to be withheld. The Depositary may dispose of all or a portion of the property so distributed and deposited, in such amounts and in such manner (including public or private sale) as the Depositary may deem practicable or necessary to satisfy any taxes (including applicable interest and penalties) or other governmental charges applicable to the distribution.

(c) If (i) the Company does not request the Depositary to make such distribution to Holders or requests the Depositary not to make such distribution to Holders, (ii) the Depositary does not receive satisfactory documentation within the terms of Section 5.7, or (iii) the Depositary determines that all or a portion of such distribution is not reasonably practicable, the Depositary shall sell or cause such property to be sold in a public or private sale, at such place or places and upon such terms as it may deem practicable and shall (i) cause the proceeds of such sale, if any, to be converted into Dollars and (ii) distribute the proceeds of such conversion received by the Depositary (net of applicable (a) fees and charges of, and expenses incurred by, the Depositary and (b) taxes) to the Holders as of the ADS Record Date upon the terms of Section 4.1. If the Depositary is unable to sell such property, the Depositary may dispose of such property for the account of the Holders in any way it deems reasonably practicable under the circumstances.

(d) Neither the Depositary nor the Company shall be liable for (i) any failure to accurately determine whether it is lawful or practicable to make the property described in this Section 4.5 available to Holders in general or any Holders in particular, nor (ii) any loss incurred in connection with the sale or disposal of such property.

Section 4.6 Distributions with Respect to Deposited Securities in Bearer Form. Subject to the terms of this Article IV, distributions in respect of Deposited Securities that are held by the Depositary or the Custodian in bearer form shall be made to the Depositary for the account of the respective Holders of ADS(s) with respect to which any such distribution is made upon due presentation by the Depositary or the Custodian to the Company of any relevant coupons, talons, or certificates. The Company shall promptly notify the Depositary of such distributions. The Depositary or the Custodian shall promptly present such coupons, talons or certificates, as the case may be, in connection with any such distribution.

Section 4.7 Redemption. If the Company intends to exercise any right of redemption in respect of any of the Deposited Securities, the Company shall give notice thereof to the Depositary at least forty-five (45) days (or such other number of days as mutually agreed to in writing by the Depositary and the Company) prior to the intended date of redemption which notice shall set forth the particulars of the proposed redemption. Upon timely receipt of (i) such notice and (ii) satisfactory documentation given by the Company to the Depositary within the terms of Section 5.7, and only if after consultation between the Depositary and the Company, the Depositary shall have determined that such proposed redemption is practicable, the Depositary shall provide to each Holder a notice setting forth the intended exercise by the Company of the redemption rights and any other particulars set forth in the Company's notice to the Depositary. The Depositary shall instruct the Custodian to present to the Company the Deposited Securities in respect of which redemption rights are being exercised against payment of the applicable redemption price. Upon receipt of confirmation from the Custodian that the redemption has taken place and that funds representing the redemption price have been received, the Depositary shall convert, transfer, and distribute the proceeds (net of applicable (a) fees and charges of, and the expenses incurred by, the Depositary, and (b) taxes), retire ADSs and cancel ADRs, if applicable, upon delivery of such ADSs by Holders thereof and the terms set forth in Sections 4.1 and 6.2. If less than all outstanding Deposited Securities are redeemed, the ADSs to be retired will be selected by lot or on a pro rata basis, as may be determined by the Depositary after consultation with the Company. The redemption price per ADS shall be the dollar equivalent of the per share amount received by the Depositary (adjusted to reflect the ADS(s)-to-Share(s) ratio) upon the redemption of the Deposited Securities represented by ADSs (subject to the terms of Section 4.8 and the applicable fees and charges of, and expenses incurred by, the Depositary, and applicable taxes) multiplied by the number of Deposited Securities represented by each ADS redeemed.

Notwithstanding anything contained in the Deposit Agreement to the contrary, in the event the Company fails to give the Depositary timely notice of the proposed redemption provided for in this Section 4.7, the Depositary agrees to use commercially reasonable efforts to perform the actions contemplated in this Section 4.7, and the Company, the Holders and the Beneficial Owners acknowledge that the Depositary shall have no liability for the Depositary's failure to perform the actions contemplated in this Section 4.7 where such notice has not been so timely given, other than its failure to use commercially reasonable efforts, as provided herein.

Section 4.8 Conversion of Foreign Currency. Whenever the Depositary or the Custodian shall receive Foreign Currency, by way of dividends or other distributions or the net proceeds from the sale of Deposited Property, which in the judgment of the Depositary can at such time be converted on a practicable basis, by sale or in any other manner that it may determine in accordance with applicable law, into Dollars transferable to the United States and distributable to the Holders entitled thereto, the Depositary shall convert or cause to be converted, by sale or in any other manner that it may determine, such Foreign Currency into Dollars, and shall distribute such Dollars (net of the fees and charges set forth in the Fee Schedule attached hereto as Exhibit B, and applicable taxes withheld) in accordance with the terms of the applicable sections of the Deposit Agreement. The Depositary and/or its agent (which may be a division, branch or Affiliate of the Depositary) may act as principal for any conversion of Foreign Currency. If the Depositary shall have distributed warrants or other instruments that entitle the holders thereof to such Dollars, the Depositary shall distribute such Dollars to the holders of such warrants and/or instruments upon surrender thereof for cancellation, in either case without liability for interest thereon. Such distribution may be made upon an averaged or other practicable basis without regard to any distinctions among Holders on account of any application of exchange restrictions or otherwise.

If such conversion or distribution generally or with regard to a particular Holder can be effected only with the approval or license of any government or agency thereof, the Depositary shall have authority to file such application for approval or license, if any, as it may deem desirable. In no event, however, shall the Depositary be obligated to make such a filing.

If at any time the Depositary shall determine that in its judgment the conversion of any Foreign Currency and the transfer and distribution of proceeds of such conversion received by the Depositary is not practicable or lawful, or if any approval or license of any governmental authority or agency thereof that is required for such conversion, transfer and distribution is denied or, in the opinion of the Depositary, not obtainable at a reasonable cost or within a reasonable period, the Depositary may, in its reasonable discretion, (i) make such conversion and distribution in Dollars to the Holders for whom such conversion, transfer and distribution is lawful and practicable, (ii) distribute the Foreign Currency (or an appropriate document evidencing the right to receive such Foreign Currency) to Holders for whom this is lawful and practicable, or (iii) hold (or cause the Custodian to hold) such Foreign Currency (without liability for interest thereon) for the respective accounts of the Holders entitled to receive the same.

Section 4.9 Fixing of ADS Record Date. Whenever (a) the Depositary shall receive notice of the fixing of a record date by the Company for the determination of holders of Deposited Securities entitled to receive any distribution (whether in cash, Shares, rights, or other distribution), (b) for any reason the Depositary causes a change in the number of Shares that are represented by each ADS, (c) the Depositary shall receive notice of any meeting of, or solicitation of consents or proxies of, holders of Shares or other Deposited Securities, or (d) the Depositary shall find it necessary or convenient in connection with the giving of any notice, solicitation of any consent or any other matter, the Depositary, after consultation with the Company to the extent reasonably practicable, shall fix the record date (the "ADS Record Date") for the determination of the Holders of ADS(s) who shall be entitled to receive such distribution, to give instructions for the exercise of voting rights at any such meeting, to give or withhold such consent, to receive such notice or solicitation or to otherwise take action, or to exercise the rights of Holders with respect to such changed number of Shares represented by each ADS. The Depositary shall make reasonable efforts to establish the ADS Record Date as closely as practicable to the applicable record date for the Deposited Securities (if any) set by the Company in England and Wales and shall not announce the establishment of any ADS Record Date prior to the relevant corporate action having been made public by the Company (if such corporate action affects the Deposited Securities). Subject to applicable law and the provisions of Section 4.1 through 4.8 and to the other terms and conditions of the Deposit Agreement, only the Holders of ADSs at the close of business in New York on such ADS Record Date shall be entitled to receive such distribution, to give such voting instructions, to receive such notice or solicitation, or otherwise take action.

Section 4.10 Voting of Deposited Securities. As soon as practicable after receipt of notice of any meeting at which the holders of Deposited Securities are entitled to vote, or of solicitation of consents or proxies from holders of Deposited Securities, the Depositary shall fix the ADS Record Date in respect of such meeting or solicitation of consent or proxy in accordance with Section 4.9. The Depositary shall, if requested by the Company in writing in a timely manner (the Depositary having no obligation to take any further action if the request shall not have been received by the Depositary at least thirty (30) days (or such lesser number of days as mutually agreed by the Company and the Depositary) prior to the date of such vote or meeting), at the Company's expense and provided no U.S. legal prohibitions exist, distribute as soon as practicable after receipt thereof to Holders as of the ADS Record Date: (a) such notice of meeting or solicitation of consent or proxy, (b) a statement that the Holders at the close of business on the ADS Record Date will be entitled, subject to any applicable law, the provisions of the Deposit Agreement, the Articles of Association of the Company and the provisions of or governing the Deposited Securities (which provisions, if any, shall be summarized in pertinent part by the Company), to instruct the Depositary as to the exercise of the voting rights, if any, pertaining to the Deposited Securities represented by such Holder's ADSs, and (c) a brief statement as to the manner and timing (such timing to be determined after consultation with the Company) in which such voting instructions may be given to the Depositary or in which voting instructions may be deemed to have been given in accordance with this Section 4.10 if no instructions are received prior to the deadline set for such purposes to the Depositary to give a discretionary proxy to a person designated by the Company.

Notwithstanding anything contained in the Deposit Agreement or any ADR, with the Company's prior written consent, the Depositary may, to the extent not prohibited by law or regulations, or by the requirements of any stock exchange on which the ADSs may be listed, in lieu of distribution of the materials provided to the Depositary in connection with any meeting of, or solicitation of consents or proxies from, holders of Deposited Securities, distribute to the Holders a notice that provides Holders with, or otherwise publicize to Holders, instructions on how to retrieve such materials or receive such materials upon request (*e.g.*, by reference to a website containing the materials for retrieval or a contact for requesting copies of the materials).

The Depositary has been advised by the Company that the Articles of Association (as in effect on the date hereof), voting at any meeting of shareholders of the Company is by show of hands unless (before or immediately following the declaration of the result of the show of hands) a poll is demanded or the Company elects to proceed with the voting by a poll. The Depositary will not join in demanding a poll, whether or not requested to do so by Holders of ADSs. Under the Articles of Association (as in effect on the date hereof) a poll may be demanded by (i) the chairman of the meeting; (ii) not less than five shareholders present in person or by proxy and entitled to vote on the resolution; (iii) by any shareholder or shareholders of the Company present in person (or by proxy), representing in aggregate not less than 10 per cent of the total voting rights of all the shareholders having the right to vote on the resolution (excluding any voting rights attached to any shares held as treasury shares); or (iv) by any shareholder or shareholders of the Company present in person (or by proxy), in each case, holding shares 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 per cent of the total sum paid up on all the shares conferring that right (excluding shares held as treasury shares).

Voting instructions may be given only in respect of a number of ADSs representing an integral number of Deposited Securities. Upon the timely receipt from a Holder of ADSs as of the ADS Record Date of voting instructions in the manner specified by the Depositary, the Depositary shall endeavor, insofar as practicable and permitted under any applicable law, the provisions of the Deposit Agreement, the Articles of Association of the Company and the provisions of the Deposited Securities, to vote, or cause the Custodian to vote, the Deposited Securities (in person or by proxy) represented by such Holder's ADSs as follows: (i) in the event voting takes place at a shareholders' meeting by a show of hands, the Depositary will instruct the Custodian to vote all Deposited Securities in accordance with the voting instructions received from a majority of Holders of ADSs who provided voting instructions, and (ii) in the event voting takes place at a shareholders' meeting by poll, the Depositary will instruct the Custodian to vote the Deposited Securities in accordance with the voting instructions received from the Holders of ADSs. If voting is by poll and the Depositary does not receive voting instructions from a Holder as of the ADS Record Date on or before the date established by the Depositary for such purpose, such Holder shall be deemed, and the Depositary shall (unless otherwise specified in the notice) deem such Holder, to have instructed the Depositary to give a discretionary proxy to a person designated by the Company to vote the Deposited Securities; provided, however, that no such discretionary proxy shall be given by the Depositary with respect to any matter to be voted upon as to which the Company informs the Depositary that (a) the Company does not wish such proxy to be given, (b) substantial opposition exists, or (c) the rights of holders of Deposited Securities may be adversely affected.

Deposited Securities represented by ADSs for which no timely voting instructions are received by the Depositary from the Holder shall not be voted (except (a) in the case voting is by show of hands, in which case the Depositary will instruct the Custodian to vote all Deposited Securities in accordance with the voting instructions received from a majority of Holders of ADSs who provided timely voting instructions, and (b) as contemplated in this Section 4.10). Neither the Depositary nor the Custodian shall under any circumstances exercise any discretion as to voting and neither the Depositary nor the Custodian shall vote, attempt to exercise the right to vote, or in any way make use of, for purposes of establishing a quorum or otherwise, the Deposited Securities represented by ADSs, except pursuant to and in accordance with the voting instructions timely received from Holders or as otherwise contemplated herein. If the Depositary timely receives voting instructions from a Holder which fail to specify the manner in which the Depositary is to vote the Deposited Securities represented by such Holder's ADSs, the Depositary will deem such Holder (unless otherwise specified in the notice distributed to Holders) to have instructed the Depositary to vote in favor of the items set forth in such voting instructions.

Notwithstanding anything to the contrary contained herein, the Depositary shall, if so requested in writing by the Company, represent all Deposited Securities (whether or not voting instructions have been received in respect of such Deposited Securities from Holders as of the ADS Record Date) for the sole purpose of establishing quorum at a meeting of shareholders.

Notwithstanding anything to the contrary contained in the Deposit Agreement or any ADR, the Depositary shall not have any obligation to take any action with respect to any meeting, or solicitation of consents or proxies, of holders of Deposited Securities if the taking of such action would violate U.S. or English laws. The Company agrees to take any and all actions reasonably necessary and as permitted by the laws of England and Wales to enable Holders and Beneficial Owners to exercise the voting rights accruing to the Deposited Securities and to deliver to the Depositary an opinion of U.S. counsel addressing any actions requested to be taken if so reasonably requested by the Depositary.

There can be no assurance that Holders generally or any Holder in particular will receive the notice described above with sufficient time to enable the Holder to return voting instructions to the Depositary in a timely manner.

Section 4.11 Changes Affecting Deposited Securities. Upon any change in nominal or par value, split-up, cancellation, consolidation or any other reclassification of Deposited Securities, or upon any recapitalization, reorganization, merger, consolidation or sale of assets affecting the Company or to which it is a party, any property which shall be received by the Depositary or the Custodian in exchange for, or in conversion of, or replacement of, or otherwise in respect of, such Deposited Securities shall, to the extent permitted by law, be treated as new Deposited Property under the Deposit Agreement, and the ADSs shall, subject to the provisions of the Deposit Agreement, any ADR(s) evidencing such ADSs and applicable law, represent the right to receive such additional or replacement Deposited Property. In giving effect to such change, split-up, cancellation, consolidation or other reclassification of Deposited Securities, recapitalization, reorganization, merger, consolidation or sale of assets, the Depositary may, with the Company's approval, and shall, if the Company shall so request, subject to the terms of the Deposit Agreement (including, without limitation, (a) the applicable fees and charges of, and expenses incurred by, the Depositary, and (b) applicable taxes) and receipt of an opinion of counsel to the Company satisfactory to the Depositary that such actions are not in violation of any applicable laws or regulations, (i) issue and deliver additional ADSs as in the case of a stock dividend on the Shares, (ii) amend the Deposit Agreement and the applicable ADRs, (iii) amend the applicable Registration Statement(s) on Form F-6 as filed with the Commission in respect of the ADSs, (iv) call for the surrender of outstanding ADRs to be exchanged for new ADRs, and (v) take such other actions as are appropriate to reflect the transaction with respect to the ADSs. The Company agrees to, jointly with the Depositary, amend the Registration Statement on Form F-6 as filed with the Commission to permit the issuance of such new form of ADRs. Notwithstanding the foregoing, in the event that any Deposited Property so received may not be lawfully distributed to some or all Holders, the Depositary may, with the Company's approval, and shall, if the Company requests, subject to receipt of an opinion of Company's counsel reasonably satisfactory to the Depositary that such action is not in violation of any applicable laws or regulations, sell such Deposited Property at public or private sale, at such place or places and upon such terms as it may deem proper and may allocate the net proceeds of such sales (net of applicable (a) fees and charges of, and expenses incurred by, the Depositary and (b) taxes) for the account of the Holders otherwise entitled to such Deposited Property upon an averaged or other practicable basis without regard to any distinctions among such Holders and distribute the net proceeds so allocated to the extent practicable as in the case of a distribution received in cash pursuant to Section 4.1. The Depositary shall not be responsible for (i) any failure to determine that it may be lawful or practicable to make such Deposited Property available to Holders in general or to any Holder in particular, (ii) any foreign exchange exposure or loss incurred in connection with such sale, or (iii) any liability to the purchaser of such Deposited Property.

Section 4.12 Available Information. The Company is subject to the periodic reporting requirements of the Exchange Act and, accordingly, is required to file or furnish certain reports with the Commission. These reports can be retrieved from the Commission's website (www.sec.gov) and can be inspected and copied at the public reference facilities maintained by the Commission located (as of the date of the Deposit Agreement) at 100 F Street, N.E., Washington D.C. 20549.

Section 4.13 Reports. The Depositary shall make available for inspection by Holders at its Principal Office, as promptly as practicable after receipt thereof, any reports and communications, including any proxy soliciting materials, received from the Company which are both (a) received by the Depositary, the Custodian, or the nominee of either of them as the holder of the Deposited Property and (b) made generally available to the holders of such Deposited Property by the Company. The Depositary shall also provide or make available to Holders copies of such reports when furnished by the Company pursuant to Section 5.6.

Section 4.14 List of Holders. Promptly upon written request by the Company, the Depositary shall furnish to it a list, as of a recent date, of the names, addresses and holdings of ADSs of all Holders.

Section 4.15 Taxation. The Depositary will, and will instruct the Custodian to, forward to the Company or its agents such information from its records as the Company may reasonably request to enable the Company or its agents to file the necessary tax reports with governmental authorities or agencies. The Depositary, the Custodian or the Company and its agents may file such reports as are necessary to reduce or eliminate applicable taxes on dividends and on other distributions in respect of Deposited Property under applicable tax treaties or laws for the Holders and Beneficial Owners. In accordance with instructions from the Company and to the extent practicable, the Depositary or the Custodian will take reasonable administrative actions to obtain tax refunds, reduced withholding of tax at source on dividends and other benefits under applicable tax treaties or laws with respect to dividends and other distributions on the Deposited Property. As a condition to receiving such benefits, Holders and Beneficial Owners of ADSs may be required from time to time, and in a timely manner, to file such proof of taxpayer status, residence and beneficial ownership (as applicable), to execute such certificates and to make such representations and warranties, or to provide any other information or documents, as the Depositary or the Custodian may deem necessary or proper to fulfill the Depositary's or the Custodian's obligations under applicable law. The Depositary and the Company shall have no obligation or liability to any person if any Holder or Beneficial Owner fails to provide such information or if such information does not reach the relevant tax authorities in time for any Holder or Beneficial Owner to obtain the benefits of any tax treatment. The Holders and Beneficial Owners shall indemnify the Depositary, the Company, the Custodian and any of their respective directors, employees, agents and Affiliates against, and hold each of them harmless from, any claims by any governmental authority with respect to taxes, additions to tax, penalties or interest arising out of any refund of taxes, reduced rate of withholding at source or other tax benefit obtained for that Holder or Beneficial Owner which is required to be paid to such governmental authority.

If the Company (or any of its agents) withholds from any distribution any amount on account of taxes or governmental charges, or pays any other tax in respect of such distribution (*e.g.*, stamp duty tax, capital gains or other similar tax), the Company shall use its commercially reasonable efforts to (and shall cause such agent to) remit promptly to the Depositary information about such taxes or governmental charges withheld or paid, and, if so requested, the tax receipt (or other proof of payment to the applicable governmental authority) therefor, in each case, in a form reasonably satisfactory to the Depositary. The Depositary shall, to the extent required by U.S. law, report to Holders any taxes withheld by it or the Custodian, and, if such information is provided to it by the Company, any taxes withheld by the Company. The Depositary and the Custodian shall not be required to provide the Holders with any evidence of the remittance by the Company (or its agents) of any taxes withheld, or of the payment of taxes by the Company, except to the extent the evidence is provided by the Company to the Depositary or the Custodian, as applicable. Neither the Depositary nor the Custodian shall be liable for the failure by any Holder or Beneficial Owner to obtain the benefits of credits on the basis of non-U.S. tax paid against such Holder's or Beneficial Owner's income tax liability.

The Depositary is under no obligation to provide the Holders and Beneficial Owners with any information about the tax status of the Company, except to the extent that the Company provides such information to the Depositary for distribution to the Holders and Beneficial Owners. The Depositary shall not incur any liability for any tax consequences that may be incurred by Holders and Beneficial Owners on account of their ownership of the ADSs, including without limitation, tax consequences resulting from the Company (or any of its subsidiaries) being treated as a "Passive Foreign Investment Company" (in each case as defined in the U.S. Internal Revenue Code and the regulations issued thereunder) or otherwise.

ARTICLE V

THE DEPOSITARY, THE CUSTODIAN AND THE COMPANY

Section 5.1 Maintenance of Office and Transfer Books by the Registrar. Until termination of the Deposit Agreement in accordance with its terms, the Registrar shall maintain in the Borough of Manhattan, the City of New York, an office and facilities for the issuance and delivery of ADSs, the acceptance for surrender of ADS(s) for the purpose of withdrawal of Deposited Securities, the registration of issuances, cancellations, transfers, combinations and split-ups of ADS(s) and, if applicable, to countersign ADRs evidencing the ADSs so issued, transferred, combined or split-up, in each case in accordance with the provisions of the Deposit Agreement.

The Registrar shall keep books for the registration of ADSs which at all reasonable times shall be open for inspection by the Company and by the Holders of such ADSs, provided that such inspection shall not be, to the Registrar's knowledge, for the purpose of communicating with Holders of such ADSs in the interest of a business or object other than the business of the Company or other than a matter related to the Deposit Agreement or the ADSs.

The Registrar may close the transfer books with respect to the ADSs, at any time or from time to time, when deemed necessary or advisable by it in good faith in connection with the performance of its duties hereunder, or at the reasonable written request of the Company subject, in all cases, to Section 7.8(a).

If any ADSs are listed on one or more stock exchanges or automated quotation systems in the United States, the Depositary shall act as Registrar or, with written notice given as promptly as practicable to the Company, appoint a Registrar or one or more co-registrars for registration of issuances, cancellations, transfers, combinations and split-ups of ADSs and, if applicable, to countersign ADRs evidencing the ADSs so issued, transferred, combined or split-up, in accordance with any requirements of such exchanges or systems. Such Registrar or co-registrars may be removed and a substitute or substitutes appointed by the Depositary with written notice given as promptly as practicable to the Company.

Section 5.2 Exoneration. Notwithstanding anything contained in the Deposit Agreement or any ADR, neither the Depositary nor the Company shall be obligated to do or perform any act or thing which is inconsistent with the provisions of the Deposit Agreement or incur any liability (to the extent not limited by Section 7.8(b)) (i) if the Depositary, the Custodian, the Company or their respective agents shall be prevented or forbidden from, hindered or delayed in, doing or performing any act or thing required or contemplated by the terms of the Deposit Agreement, by reason of any provision of any present or future law or regulation of the United States, England and Wales or any other country, or of any other governmental authority or regulatory authority or stock exchange, or on account of potential criminal or civil penalties or restraint, or by reason of any provision, present or future, of the Articles of Association of the Company or any provision of or governing any Deposited Securities, or by reason of any act of God or other event or circumstance beyond its control (including, without limitation, fire, flood, earthquake, tornado, hurricane, tsunami, explosion, or other natural disaster, nationalization, expropriation, currency restriction, work stoppage, strikes, civil unrest, act of war (whether declared or not) or terrorism, revolution, rebellion, embargo, computer failure, failure of public infrastructure (including communication or utility failure), failure of common carriers, nuclear, cyber or biochemical incident, any pandemic, epidemic or other prevalent disease or illness with an actual or probable threat to human life, any quarantine order or travel restriction imposed by a governmental authority or other competent public health authority, or the failure or unavailability of the United States Federal Reserve Bank (or other central banking system) or DTC (or other clearing system)), (ii) by reason of any exercise of, or failure to exercise, any discretion provided for in the Deposit Agreement or in the Articles of Association of the Company or provisions of or governing Deposited Securities, (iii) for any action or inaction in reliance upon the advice of or information from legal counsel, accountants, any person presenting Shares for deposit, any Holder, any Beneficial Owner or authorized representative thereof, or any other person believed by it in good faith to be competent to give such advice or information, (iv) for the inability by a Holder or Beneficial Owner to benefit from any distribution, offering, right or other benefit which is made available to holders of Deposited Securities but is not, under the terms of the Deposit Agreement, made available to Holders of ADSs, (v) for any action or inaction of any clearing or settlement system (and any participant thereof) for the Deposited Property or the ADSs, or (vi) for any consequential or punitive damages (including lost profits) for any breach of the terms of the Deposit Agreement.

The Depositary, its controlling persons, its agents, any Custodian and the Company, its controlling persons and its agents may rely and shall be protected in acting upon any written notice, request or other document reasonably believed by it to be genuine and to have been signed or presented by the proper party or parties.

Section 5.3 Standard of Care. The Company and the Depositary assume no obligation and shall not be subject to any liability under the Deposit Agreement or any ADRs to any Holder(s) or Beneficial Owner(s), except that the Company and the Depositary agree to perform their respective obligations specifically set forth in the Deposit Agreement or the applicable ADRs without negligence or bad faith.

Without limitation of the foregoing, neither the Depositary, nor the Company, nor any of their respective controlling persons, or agents, shall be under any obligation to appear in, prosecute or defend any action, suit or other proceeding in respect of any Deposited Property or in respect of the ADSs, which in its reasonable opinion may involve it in expense or liability, unless indemnity satisfactory to it against all expense (including fees and disbursements of counsel) and liability be furnished as often as may be required (and no Custodian shall be under any obligation whatsoever with respect to such proceedings, the responsibility of the Custodian being solely to the Depositary).

The Depositary and its agents shall not be liable for any failure to carry out any instructions to vote any of the Deposited Securities, or for the manner in which any vote is cast or the effect of any vote, provided that any such action or omission is in good faith and without negligence and in accordance with the terms of the Deposit Agreement. The Depositary shall not incur any liability for any failure to accurately determine that any distribution or action may be lawful or reasonably practicable, for the content of any information submitted to it by the Company for distribution to the Holders or for any inaccuracy of any translation thereof, for any investment risk associated with acquiring an interest in the Deposited Property, for the validity or worth of the Deposited Property, for the value of any Deposited Property or any distribution thereon, for any interest on Deposited Property, for any tax consequences that may result from the ownership of ADSs, Shares or other Deposited Property, for the credit-worthiness of any third party, for allowing any rights to lapse upon the terms of the Deposit Agreement, for the failure or timeliness of any notice from the Company, or for any action of or failure to act by, or any information provided or not provided by, DTC or any DTC Participant.

The Depositary shall not be liable for any acts or omissions made by a successor depositary whether in connection with a previous act or omission of the Depositary or in connection with any matter arising wholly after the removal or resignation of the Depositary, provided that in connection with the issue out of which such potential liability arises the Depositary performed its obligations without negligence or bad faith while it acted as Depositary for the Company.

Section 5.4 Resignation and Removal of the Depositary; Appointment of Successor Depositary. The Depositary may at any time resign as Depositary hereunder by written notice of resignation delivered to the Company, such resignation to be effective on the earlier of (i) the 90th day after delivery thereof to the Company (whereupon the Depositary shall be entitled to take the actions contemplated in Section 6.2), or (ii) the appointment by the Company of a successor depositary and its acceptance of such appointment as hereinafter provided.

The Depositary may at any time be removed by the Company by written notice of such removal, which removal shall be effective on the later of (i) the 90th day after delivery thereof to the Depositary (whereupon the Depositary shall be entitled to take the actions contemplated in Section 6.2), or (ii) upon the appointment by the Company of a successor depositary and its acceptance of such appointment as hereinafter provided.

In case at any time the Depositary acting hereunder shall resign or be removed, the Company shall use its best efforts to appoint a successor depositary, which shall be a bank or trust company having an office in the Borough of Manhattan, the City of New York. Every successor depositary shall be required by the Company to execute and deliver to its predecessor and to the Company an instrument in writing accepting its appointment hereunder, and thereupon such successor depositary, without any further act or deed (except as required by applicable law), shall become fully vested with all the rights, powers, duties and obligations of its predecessor (other than as contemplated in Sections 5.8 and 5.9). The predecessor depositary, upon payment of all sums due it and on the written request of the Company, shall, (i) execute and deliver an instrument transferring to such successor all rights and powers of such predecessor hereunder (other than as contemplated in Sections 5.8 and 5.9), (ii) duly assign, transfer and deliver all of the Depositary's right, title and interest to the Deposited Property to such successor, and (iii) deliver to such successor a list of the Holders of all outstanding ADSs and such other information relating to ADSs and Holders thereof as the successor may reasonably request. Any such successor depositary shall promptly provide notice of its appointment to such Holders.

Any entity into or with which the Depositary may be merged or consolidated shall be the successor of the Depositary without the execution or filing of any document or any further act.

Section 5.5 The Custodian. The Depositary has initially appointed Citibank, N.A. (London) as Custodian for the purpose of the Deposit Agreement. The Custodian or its successors in acting hereunder shall be authorized to act as custodian in England and Wales and shall be subject at all times and in all respects to the direction of the Depositary for the Deposited Property for which the Custodian acts as custodian and shall be responsible solely to it. If any Custodian resigns or is discharged from its duties hereunder with respect to any Deposited Property and no other Custodian has previously been appointed hereunder, the Depositary shall promptly appoint a substitute custodian. The Depositary shall require such resigning or discharged Custodian to Deliver, or cause the Delivery of, the Deposited Property held by it, together with all such records maintained by it as Custodian with respect to such Deposited Property as the Depositary may request, to the Custodian designated by the Depositary. Whenever the Depositary determines, in its discretion, that it is appropriate to do so, it may appoint an additional custodian with respect to any Deposited Property, or discharge the Custodian with respect to any Deposited Property and appoint a substitute custodian, which shall thereafter be Custodian hereunder with respect to the Deposited Property. Immediately upon any such change, the Depositary shall give notice thereof in writing to all Holders of ADSs, each other Custodian and the Company.

Citibank may at any time act as Custodian of the Deposited Property pursuant to the Deposit Agreement, in which case any reference to Custodian shall mean Citibank solely in its capacity as Custodian pursuant to the Deposit Agreement and the Depositary shall promptly give notice thereof to the Company. Notwithstanding anything contained in the Deposit Agreement or any ADR, the Depositary shall not be obligated to give notice to any Holders of ADSs or any other Custodian of its acting as Custodian pursuant to the Deposit Agreement.

Upon the appointment of any successor depositary, any Custodian then acting hereunder shall, unless otherwise instructed by the Depositary, continue to be the Custodian of the Deposited Property without any further act or writing, and shall be subject to the direction of the successor depositary. The successor depositary so appointed shall, nevertheless, on the written request of any Custodian, execute and deliver to such Custodian all such instruments as may be proper to give to such Custodian full and complete power and authority to act on the direction of such successor depositary.

Section 5.6 Notices and Reports. On or before the first date on which the Company gives notice, by publication or otherwise, of any meeting of holders of Shares or other Deposited Securities, or of any adjourned meeting of such holders, or of the taking of any action by such holders other than at a meeting, or of the taking of any action in respect of any cash or other distributions or the offering of any rights in respect of Deposited Securities, the Company shall transmit to the Depositary and the Custodian a copy of the notice thereof in the English language but otherwise in the form given or to be given to holders of Shares or other Deposited Securities. The Company shall also furnish to the Custodian and the Depositary a summary, in English, of any applicable provisions or proposed provisions of the Articles of Association of the Company that may be relevant or pertain to such notice of meeting or be the subject of a vote thereat.

The Depositary shall arrange, at the request of the Company and at the Company's expense, to provide copies thereof to all Holders or make such notices, reports and other communications available to all Holders on a basis similar to that for holders of Shares or other Deposited Securities or on such other basis as the Company may advise the Depositary or as may be required by any applicable law, regulation or stock exchange requirement. The Company has delivered to the Depositary and the Custodian a copy of the Company's Articles of Association along with the provisions of or governing the Shares and any other Deposited Securities issued by the Company in connection with such Shares, and promptly upon any amendment thereto or change therein, the Company shall deliver to the Depositary and the Custodian a copy of such amendment thereto or change therein to the extent such amendment or change is not available on the Company's website or is not otherwise publicly available. The Depositary may rely upon such copy for all purposes of the Deposit Agreement.

The Depositary will, at the expense of the Company, make available a copy of any such notices, reports or communications issued by the Company and delivered to the Depositary for inspection by the Holders of the ADSs at the Depositary's Principal Office, at the office of the Custodian and at any other designated transfer office.

Section 5.7 Issuance of Additional Shares, ADSs etc. The Company agrees that in the event it or any of its Affiliates proposes (i) an issuance, sale or distribution of additional Shares, (ii) an offering of rights to subscribe for Shares or other Deposited Securities, (iii) an issuance or assumption of securities convertible into or exchangeable for Shares, (iv) an issuance of rights to subscribe for securities convertible into or exchangeable for Shares, (v) an elective dividend of cash or Shares, (vi) a redemption of Deposited Securities, (vii) a meeting of holders of Deposited Securities, or solicitation of consents or proxies, relating to any reclassification of securities, merger or consolidation or transfer of assets, (viii) any assumption, reclassification, recapitalization, reorganization, merger, consolidation or sale of assets which affects the Deposited Securities, or (ix) a distribution of securities other than Shares, it will obtain U.S. legal advice and take all steps necessary to ensure that the application of the proposed transaction to Holders and Beneficial Owners does not violate the registration provisions of the Securities Act, or any other applicable laws (including, without limitation, the Investment Company Act of 1940, as amended, the Exchange Act and the securities laws of the states of the U.S.). In support of the foregoing, the Company will furnish to the Depositary (a) a written opinion of U.S. counsel (reasonably satisfactory to the Depositary) stating whether such transaction (1) requires a registration statement under the Securities Act to be in effect or (2) is exempt from the registration requirements of the Securities Act and (b) an opinion of English counsel stating that (1) making the transaction available to Holders and Beneficial Owners does not violate the laws or regulations of England and Wales and (2) all requisite regulatory consents and approvals have been obtained in England and Wales. If the filing of a registration statement is required, the Depositary shall not have any obligation to proceed with the transaction unless it shall have received evidence reasonably satisfactory to it that such registration statement has been declared effective. If, being advised by counsel, the Company determines that a transaction is required to be registered under the Securities Act, the Company will either (i) register such transaction to the extent necessary, (ii) alter the terms of the transaction to avoid the registration requirements of the Securities Act or (iii) direct the Depositary to take specific measures, in each case as contemplated in the Deposit Agreement, to prevent such transaction from violating the registration requirements of the Securities Act. The Company agrees with the Depositary that neither the Company nor any of its Affiliates will at any time (i) deposit any Shares or other Deposited Securities, either upon original issuance or upon a sale of Shares or other Deposited Securities previously issued and reacquired by the Company or by any such Affiliate, or (ii) issue additional Shares, rights to subscribe for such Shares, securities convertible into or exchangeable for Shares or rights to subscribe for such securities or distribute securities other than Shares, unless such transaction and the securities issuable in such transaction do not violate the registration provisions of the Securities Act, or any other applicable laws (including, without limitation, the Investment Company Act of 1940, as amended, the Exchange Act and the securities laws of the states of the U.S.).

Notwithstanding anything else contained in the Deposit Agreement, nothing in the Deposit Agreement shall be deemed to obligate the Company to file any registration statement in respect of any proposed transaction.

Section 5.8 Indemnification. The Depositary agrees to indemnify the Company and its directors, officers, employees, agents and Affiliates against, and hold each of them harmless from, any direct loss, liability, tax, charge or expense of any kind whatsoever (including, but not limited to, the reasonable fees and expenses of counsel) which may arise out of acts performed or omitted by the Depositary under the terms hereof due to the negligence or bad faith of the Depositary.

The Company agrees to indemnify the Depositary, the Custodian and any of their respective directors, officers, employees, agents and Affiliates against, and hold each of them harmless from, any direct loss, liability, tax, charge or expense of any kind whatsoever (including, but not limited to, the reasonable fees and expenses of counsel) that may arise (a) out of, or in connection with, any offer, issuance, sale, resale, transfer, deposit or withdrawal of ADRs, ADSs, the Shares, or other Deposited Securities, as the case may be, to the extent it is not unlawful for the Company to indemnify such person at such time under applicable English law, (b) out of, or as a result of, any offering documents in respect thereof or (c) out of acts performed or omitted, including, but not limited to, any delivery by the Depositary on behalf of the Company of information regarding the Company, in connection with the Deposit Agreement, any ancillary or supplemental agreement entered into between the Company and the Depositary, the ADRs, the ADSs, the Shares, or any Deposited Property, in any such case (i) by the Depositary, the Custodian or any of their respective directors, officers, employees, agents and Affiliates, except to the extent such loss, liability, tax, charge or expense is due to the fraud, negligence or bad faith of any of them, or (ii) by the Company or any of its directors, officers, employees, agents and Affiliates; provided. However, that the Company shall not be liable for any fees, charges or expenses payable by third party Holders or Beneficial Owners under this Deposit Agreement. The Company shall not indemnify the Depositary or the Custodian (for so long as the Custodian is a branch of Citibank, N.A.) against any liability or expense arising out of information relating to the Depositary or such Custodian, as the case may be, furnished in a signed writing to the Company, executed by the Depositary expressly for use in any registration statement, prospectus or preliminary prospectus relating to any Deposited Securities represented by the ADSs.

The obligations set forth in this Section shall survive the termination of the Deposit Agreement and the succession or substitution of any party hereto.

Any person seeking indemnification hereunder (an "indemnified person") shall notify the person from whom it is seeking indemnification (the "indemnifying person") of the commencement of any indemnifiable action or claim promptly after such indemnified person becomes aware of such commencement (provided that the failure to make such notification shall not affect such indemnified person's rights to seek indemnification except to the extent the indemnifying person is materially prejudiced by such failure) and shall consult in good faith with the indemnifying person as to the conduct of the defense of such action or claim that may give rise to an indemnity hereunder, which defense shall be reasonable in the circumstances. No indemnified person shall compromise or settle any action or claim that may give rise to an indemnity hereunder without the consent of the indemnifying person, which consent shall not be unreasonably withheld.

Section 5.9 ADS Fees and Charges. The Company, the Holders, the Beneficial Owners, persons depositing Shares or withdrawing Deposited Securities in connection with the issuance and cancellation of ADSs, and persons receiving ADSs upon issuance or for whom ADSs are being cancelled shall be required to pay the Depositary's fees and related charges identified as payable by them respectively in the Fee Schedule attached hereto as Exhibit B. All ADS fees and charges so payable may be deducted from distributions or must be remitted to the Depositary, or its designee, and may, at any time and from time to time, be changed by agreement between the Depositary and the Company, but, in the case of ADS fees and charges payable by Holders and Beneficial Owners, only in the manner contemplated in Section 6.1. The Depositary shall provide, without charge, a copy of its latest ADS fee schedule to anyone upon request.

ADS fees and charges for (i) the issuance of ADSs and (ii) the cancellation of ADSs will be payable by the person for whom the ADSs are so issued by the Depositary (in the case of ADS issuances) and by the person whose ADSs are being cancelled (in the case of ADS cancellations). In the case of ADSs issued by the Depositary into DTC or presented to the Depositary via DTC, the ADS issuance and cancellation fees and charges will be payable by the DTC Participant(s) receiving the ADSs from the Depositary 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(s) of the applicable Beneficial Owner(s) in accordance with the procedures and practices of the DTC Participant(s) as in effect at the time. ADS fees and charges in respect of distributions and the ADS service fee are payable by Holders as of the applicable ADS Record Date established by the Depositary. 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, the applicable Holders as of the ADS Record Date established by the Depositary will be invoiced for the amount of the ADS fees and charges and such ADS fees may be deducted from distributions made to Holders. 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 from time to time 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.

The Depositary may reimburse the Company for certain expenses incurred by the Company in respect of the ADR program established pursuant to the Deposit Agreement, by making available a portion of the ADS fees charged in respect of the ADR program or otherwise, upon such terms and conditions as the Company and the Depositary agree from time to time. The Company shall pay to the Depositary such fees and charges, and reimburse the Depositary for such out-of-pocket expenses, as the Depositary and the Company may agree from time to time. Responsibility for payment of such fees, charges and reimbursements may from time to time be changed by agreement between the Company and the Depositary. Unless otherwise agreed, the Depositary shall present its statement for such fees, charges and reimbursements to the Company once every three months. The charges and expenses of the Custodian are for the sole account of the Depositary.

The obligations of Holders and Beneficial Owners to pay ADS fees and charges shall survive the termination of the Deposit Agreement. As to any Depositary, upon the resignation or removal of such Depositary as described in Section 5.4, the right to collect ADS fees and charges shall extend for those ADS fees and charges incurred prior to the effectiveness of such resignation or removal.

Section 5.10 Restricted Securities Owners. The Company agrees to advise in writing each of the persons or entities who, to the knowledge of the Company, holds Restricted Securities that such Restricted Securities are ineligible for deposit hereunder (except under the circumstances contemplated in Section 2.14) and, to the extent practicable, shall require each of such persons to represent in writing that such person will not deposit Restricted Securities hereunder (except under the circumstances contemplated in Section 2.14).

ARTICLE VI

AMENDMENT AND TERMINATION

Section 6.1 Amendment/Supplement. Subject to the terms and conditions of this Section 6.1 and applicable law, the ADRs outstanding at any time, the provisions of the Deposit Agreement and the form of ADR attached hereto and to be issued under the terms hereof may at any time and from time to time be amended or supplemented by written agreement between the Company and the Depositary in any respect which they may deem necessary or desirable without the prior written consent of the Holders or Beneficial Owners. Any amendment or supplement which shall impose or increase any fees or charges (other than charges in connection with foreign exchange control regulations, and taxes and other governmental charges, delivery and other such expenses), or which shall otherwise materially prejudice any substantial existing right of Holders or Beneficial Owners, shall not, however, become effective as to outstanding ADSs until the expiration of thirty (30) days after notice of such amendment or supplement shall have been given to the Holders of outstanding ADSs. Notice of any amendment to the Deposit Agreement or any ADR shall not need to describe in detail the specific amendments effectuated thereby, and failure to describe the specific amendments in any such notice shall not render such notice invalid, provided, however, that, in each such case, the notice given to the Holders identifies a means for Holders and Beneficial Owners to retrieve or receive the text of such amendment (*e.g.*, upon retrieval from the Commission's, the Depositary's or the Company's website or upon request from the Depositary). The parties hereto agree that any amendments or supplements which (i) are reasonably necessary (as agreed by the Company and the Depositary) in order for (a) the ADSs to be registered on Form F-6 under the Securities Act or (b) the ADSs to be settled solely in electronic book-entry form and (ii) do not in either such case impose or increase any fees or charges to be borne by Holders, shall be deemed not to materially prejudice any substantial rights of Holders or Beneficial Owners. Every Holder and Beneficial Owner at the time any amendment or supplement so becomes effective shall be deemed, by continuing to hold such ADSs, to consent and agree to such amendment or supplement and to be bound by the Deposit Agreement and the ADR, if applicable, as amended or supplemented thereby. In no event shall any amendment or supplement impair the right of the Holder to surrender such ADS and receive therefor the Deposited Securities represented thereby, except in order to comply with mandatory provisions of applicable law. Notwithstanding the foregoing, if any governmental body should adopt new laws, rules or regulations which would require an amendment of, or supplement to, the Deposit Agreement to ensure compliance therewith, the Company and the Depositary may amend or supplement the Deposit Agreement and any ADRs at any time in accordance with such changed laws, rules or regulations. Such amendment or supplement to the Deposit Agreement and any ADRs in such circumstances may become effective before a notice of such amendment or supplement is given to Holders or within any other period of time as required for compliance with such laws, rules or regulations.

Section 6.2 Termination. The Depositary shall, at any time at the written direction of the Company, terminate the Deposit Agreement by distributing notice of such termination to the Holders of all ADSs then outstanding at least thirty (30) days prior to the date fixed in such notice for such termination. If ninety (90) days shall have expired after (i) the Depositary shall have delivered to the Company a written notice of its election to resign, or (ii) the Company shall have delivered to the Depositary a written notice of the removal of the Depositary, and, in either case, a successor depositary shall not have been appointed and accepted its appointment as provided in Section 5.4 of the Deposit Agreement, the Depositary may terminate the Deposit Agreement by distributing notice of such termination to the Holders of all ADSs then outstanding at least thirty (30) days prior to the date fixed in such notice for such termination. The date so fixed for termination of the Deposit Agreement in any termination notice so distributed by the Depositary to the Holders of ADSs is referred to as the "Termination Date". Until the Termination Date, the Depositary shall continue to perform all of its obligations under the Deposit Agreement, and the Holders and Beneficial Owners will be entitled to all of their rights under the Deposit Agreement.

If any ADSs shall remain outstanding after the Termination Date, the Registrar and the Depositary shall not, after the Termination Date, have any obligation to perform any further acts under the Deposit Agreement, except that the Depositary shall, subject, in each case, to the terms and conditions of the Deposit Agreement, continue to (i) collect dividends and other distributions pertaining to Deposited Securities, (ii) sell Deposited Property received in respect of Deposited Securities, (iii) deliver Deposited Securities, together with any dividends or other distributions received with respect thereto and the net proceeds of the sale of any other Deposited Property, in exchange for ADSs surrendered to the Depositary (after deducting, or charging, as the case may be, in each case, the fees and charges of, and expenses incurred by, the Depositary, and all applicable taxes or governmental charges for the account of the Holders and Beneficial Owners, in each case upon the terms set forth in Section 5.9 of the Deposit Agreement), and (iv) take such actions as may be required under applicable law in connection with its role as Depositary under the Deposit Agreement.

At any time after the Termination Date, the Depositary may sell the Deposited Property then held under the Deposit Agreement and shall after such sale hold un-invested the net proceeds of such sale, together with any other cash then held by it under the Deposit Agreement, in an un-segregated account and without liability for interest, for the pro rata benefit of the Holders whose ADSs have not theretofore been surrendered. After making such sale, the Depositary shall be discharged from all obligations under the Deposit Agreement except (i) to account for such net proceeds and other cash (after deducting, or charging, as the case may be, in each case, the fees and charges of, and expenses incurred by, the Depositary, and all applicable taxes or governmental charges for the account of the Holders and Beneficial Owners, in each case upon the terms set forth in Section 5.9 of the Deposit Agreement), and (ii) as may be required at law in connection with the termination of the Deposit Agreement. After the Termination Date, the Company shall be discharged from all obligations under the Deposit Agreement, except for its obligations to the Depositary under Sections 5.8, 5.9 and 7.6 of the Deposit Agreement. The obligations under the terms of the Deposit Agreement of Holders and Beneficial Owners of ADSs outstanding as of the Termination Date shall survive the Termination Date and shall be discharged only when the applicable ADSs are presented by their Holders to the Depositary for cancellation under the terms of the Deposit Agreement (except as specifically provided in the Deposit Agreement).

Notwithstanding anything contained in the Deposit Agreement or any ADR, in connection with the termination of the Deposit Agreement, the Depositary may, independently and without the need for any action by the Company, make available to Holders of ADSs a means to withdraw the Deposited Securities represented by their ADSs and to direct the deposit of such Deposited Securities into an unsponsored American depositary shares program established by the Depositary, upon such terms and conditions as the Depositary may deem reasonably appropriate, subject however, in each case, to satisfaction of the applicable registration requirements by the unsponsored American depositary shares program under the Securities Act, and to receipt by the Depositary of payment of the applicable fees and charges of, and reimbursement of the applicable expenses incurred by, the Depositary.

ARTICLE VII

MISCELLANEOUS

Section 7.1 Counterparts. The Deposit Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of such counterparts together shall constitute one and the same agreement. Copies of the Deposit Agreement shall be maintained with the Depositary and shall be open to inspection by any Holder during business hours.

Section 7.2 No Third-Party Beneficiaries/Acknowledgments. The Deposit Agreement is for the exclusive benefit of the parties hereto (and their successors) and shall not be deemed to give any legal or equitable right, remedy or claim whatsoever to any other person, except to the extent specifically set forth in the Deposit Agreement. Nothing in the Deposit Agreement shall be deemed to give rise to a partnership or joint venture among the parties nor establish a fiduciary or similar relationship among the parties. The parties hereto acknowledge and agree that (i) Citibank and its Affiliates may at any time have multiple banking relationships with the Company, the Holders, the Beneficial Owners, and their respective Affiliates, (ii) Citibank and its Affiliates may own and deal in any class of securities of the Company and its Affiliates and in ADSs, and may be engaged at any time in transactions in which parties adverse to the Company, the Holders, the Beneficial Owners or their respective Affiliates may have interests, (iii) the Depositary and its Affiliates may from time to time have in their possession non-public information about the Company, the Holders, the Beneficial Owners, and their respective Affiliates, (iv) nothing contained in the Deposit Agreement shall (a) preclude Citibank or any of its Affiliates from engaging in such transactions or establishing or maintaining such relationships, or (b) obligate Citibank or any of its Affiliates to disclose such information, transactions or relationships, or to account for any profit made or payment received in such transactions or relationships, (v) the Depositary shall not be deemed to have knowledge of any information any other division of Citibank or any of its Affiliates may have about the Company, the Holders, the Beneficial Owners, or any of their respective Affiliates, and (vi) the Company, the Depositary, the Custodian and their respective agents and controlling persons may be subject to the laws and regulations of jurisdictions other than the United States, England, and the authority of courts and regulatory authorities of such other jurisdictions, and, consequently, the requirements and the limitations of such other laws and regulations, and the decisions and orders of such other courts and regulatory authorities, may affect the rights and obligations of the parties to the Deposit Agreement.

Section 7.3 Severability. In case any one or more of the provisions contained in the Deposit Agreement or in the ADRs should be or become invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein or therein shall in no way be affected, prejudiced or disturbed thereby.

Section 7.4 Holders and Beneficial Owners as Parties; Binding Effect. The Holders and Beneficial Owners from time to time of ADSs issued hereunder shall be parties to the Deposit Agreement and shall be bound by all of the terms and conditions hereof and of any ADR evidencing their ADSs by acceptance thereof or any beneficial interest therein.

Section 7.5 Notices. Any and all notices to be given to the Company shall be deemed to have been duly given if personally delivered or sent by mail, air courier or cable, telex or facsimile transmission, confirmed by letter personally delivered or sent by mail or air courier, addressed to PureTech Health plc, 20 Farringdon Street, 8th Floor, London EC4A 4AB, United Kingdom, Attention: Stephen Muniz, Chief Operating Officer, with a copy to PureTech Health plc, Labs and Corporate Offices 6 Tide Street, Suite 400, Boston, MA 02210, USA, Attention: Stephen Muniz, Chief Operating Officer or to any other address which the Company may specify in writing to the Depositary.

Any and all notices to be given to the Depositary shall be deemed to have been duly given if personally delivered or sent by mail, air courier or cable, telex or facsimile transmission, confirmed by letter personally delivered or sent by mail or air courier, addressed to Citibank, N.A., 388 Greenwich Street, New York, New York 10013, U.S.A., Attention: Depositary Receipts Department, or to any other address which the Depositary may specify in writing to the Company.

Any and all notices to be given to any Holder shall be deemed to have been duly given **(a)** if personally delivered or sent by mail or cable, telex or facsimile transmission, confirmed by letter, addressed to such Holder at the address of such Holder as it appears on the books of the Depositary or, if such Holder shall have filed with the Depositary a request that notices intended for such Holder be mailed to some other address, at the address specified in such request, or **(b)** if a Holder shall have designated such means of notification as an acceptable means of notification under the terms of the Deposit Agreement, by means of electronic messaging addressed for delivery to the e-mail address designated by the Holder for such purpose. Notice to Holders shall be deemed to be notice to Beneficial Owners for all purposes of the Deposit Agreement. Failure to notify a Holder or any defect in the notification to a Holder shall not affect the sufficiency of notification to other Holders or to the Beneficial Owners of ADSs held by such other Holders. Any notices given to DTC under the terms of the Deposit Agreement shall (unless otherwise specified by the Depositary) constitute notice to the DTC Participants who hold the ADSs in their DTC accounts and to the Beneficial Owners of such ADSs.

Delivery of a notice sent by mail, air courier or cable, telex or facsimile transmission shall be deemed to be effective at the time when a duly addressed letter containing the same (or a confirmation thereof in the case of a cable, telex or facsimile transmission) is deposited, postage prepaid, in a post-office letter box or delivered to an air courier service, without regard for the actual receipt or time of actual receipt thereof by a Holder. The Depositary or the Company may, however, act upon any cable, telex or facsimile transmission received by it from any Holder, the Custodian, the Depositary, or the Company, notwithstanding that such cable, telex or facsimile transmission shall not be subsequently confirmed by letter.

Delivery of a notice by means of electronic messaging shall be deemed to be effective at the time of the initiation of the transmission by the sender (as shown on the sender's records), notwithstanding that the intended recipient retrieves the message at a later date, fails to retrieve such message, or fails to receive such notice on account of its failure to maintain the designated e-mail address, its failure to designate a substitute e-mail address or for any other reason.

Section 7.6 Governing Law and Jurisdiction. The Deposit Agreement, the ADRs and the ADSs shall be interpreted in accordance with, and all rights hereunder and thereunder and provisions hereof and thereof shall be governed by, the laws of the State of New York applicable to contracts made and to be wholly performed in that State. Notwithstanding anything contained in the Deposit Agreement, any ADR or any present or future provisions of the laws of the State of New York, the rights of holders of Shares and of any other Deposited Securities and the obligations and duties of the Company in respect of the holders of Shares and other Deposited Securities, as such, shall be governed by the laws of England and Wales (or, if applicable, such other laws as may govern the Deposited Securities).

Except as set forth in the following paragraph of this Section 7.6, the Company and the Depositary agree that the federal or state courts in the City of New York shall have jurisdiction to hear and determine any suit, action or proceeding and to settle any dispute between them that may arise out of or in connection with the Deposit Agreement and, for such purposes, each irrevocably submits to the non-exclusive jurisdiction of such courts. The Company hereby irrevocably designates, appoints and empowers PureTech Health LLC (the "Agent") now at 6 Tide Street, Suite 400, Boston, MA 02210, as its authorized agent to receive and accept for and on its behalf, and on behalf of its properties, assets and revenues, service by mail of any and all legal process, summons, notices and documents that may be served in any suit, action or proceeding brought against the Company in any federal or state court as described in the preceding sentence or in the next paragraph of this Section 7.6. If for any reason the Agent shall cease to be available to act as such, the Company agrees to designate a new agent in New York on the terms and for the purposes of this Section 7.6 reasonably satisfactory to the Depositary. The Company further hereby irrevocably consents and agrees to the service of any and all legal process, summons, notices and documents in any suit, action or proceeding against the Company, by service by mail of a copy thereof upon the Agent (whether or not the appointment of such Agent shall for any reason prove to be ineffective or such Agent shall fail to accept or acknowledge such service), with a copy mailed to the Company by registered or certified air mail, postage prepaid, to its address provided in Section 7.5. The Company agrees that the failure of the Agent to give any notice of such service to it shall not impair or affect in any way the validity of such service or any judgment rendered in any action or proceeding based thereon.

Notwithstanding the foregoing, the Depositary and the Company unconditionally agree that in the event that a Holder or Beneficial Owner brings a suit, action or proceeding against (a) the Company, (b) the Depositary in its capacity as Depositary under the Deposit Agreement, or (c) against both the Company and the Depositary, in any such case, in any state or federal court of the United States, and the Depositary or the Company have any claim, for indemnification or otherwise, against each other arising out of the subject matter of such suit, action or proceeding, then the Company and the Depositary may pursue such claim against each other in the state or federal court in the United States in which such suit, action, or proceeding is pending and, for such purposes, the Company and the Depositary irrevocably submit to the non-exclusive jurisdiction of such courts. The Company agrees that service of process upon the Agent in the manner set forth in the preceding paragraph shall be effective service upon it for any suit, action or proceeding brought against it as described in this paragraph.

The Company irrevocably and unconditionally waives, to the fullest extent permitted by law, any objection that it may now or hereafter have to the laying of venue of any actions, suits or proceedings brought in any court as provided in this Section 7.6, and hereby further irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such action, suit or proceeding brought in any such court has been brought in an inconvenient forum.

The Company irrevocably and unconditionally waives, to the fullest extent permitted by law, and agrees not to plead or claim, any right of immunity from legal action, suit or proceeding, from setoff or counterclaim, from the jurisdiction of any court, from service of process, from attachment upon or prior to judgment, from attachment in aid of execution or judgment, from execution of judgment, or from any other legal process or proceeding for the giving of any relief or for the enforcement of any judgment, and consents to such relief and enforcement against it, its assets and its revenues in any jurisdiction, in each case with respect to any matter arising out of, or in connection with, the Deposit Agreement, any ADR or the Deposited Property.

EACH OF THE PARTIES TO THE DEPOSIT AGREEMENT (INCLUDING, WITHOUT LIMITATION, EACH HOLDER AND BENEFICIAL OWNER) IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING AGAINST THE COMPANY AND/OR THE DEPOSITARY ARISING OUT OF, OR RELATING TO, THE DEPOSIT AGREEMENT, ANY ADR AND ANY TRANSACTIONS CONTEMPLATED THEREIN (WHETHER BASED ON CONTRACT, TORT, COMMON LAW OR OTHERWISE).

The provisions of this Section 7.6 shall survive any termination of the Deposit Agreement, in whole or in part.

Section 7.7 Assignment. Subject to the provisions of Section 5.4, the Deposit Agreement may not be assigned by either the Company or the Depositary.

Section 7.8 Compliance with, and No Disclaimer under, U.S. Securities Laws.

(a) Notwithstanding anything in the Deposit Agreement to the contrary, the withdrawal or delivery of Deposited Securities will not be suspended by the Company or the Depositary except as would be permitted by Instruction I.A.(1) of the General Instructions to Form F-6 Registration Statement, as amended from time to time, under the Securities Act.

(b) Each of the parties to the Deposit Agreement (including, without limitation, each Holder and Beneficial Owner) acknowledges and agrees that no provision of the Deposit Agreement or any ADR shall, or shall be deemed to, disclaim any liability under the Securities Act or the Exchange Act, in each case to the extent established under applicable U.S. laws.

Section 7.9 English Law References. Any summary of English laws and regulations and of the terms of the Company's Articles of Association set forth in the Deposit Agreement have been provided by the Company solely for the convenience of Holders, Beneficial Owners and the Depositary. While such summaries are believed by the Company to be accurate as of the date of the Deposit Agreement, (i) they are summaries and as such may not include all aspects of the materials summarized applicable to a Holder or Beneficial Owner, and (ii) these laws and regulations and the Company's Articles of Association may change after the date of the Deposit Agreement. Neither the Depositary nor the Company has any obligation under the terms of the Deposit Agreement to update any such summaries.

Section 7.10 Titles and References.

(a) Deposit Agreement. All references in the Deposit Agreement to exhibits, articles, sections, subsections, and other subdivisions refer to the exhibits, articles, sections, subsections and other subdivisions of the Deposit Agreement unless expressly provided otherwise. The words "the Deposit Agreement", "herein", "hereof", "hereby", "hereunder", and words of similar import refer to the Deposit Agreement as a whole as in effect at the relevant time between the Company, the Depositary and the Holders and Beneficial Owners of ADSs and not to any particular subdivision unless expressly so limited. Pronouns in masculine, feminine and neuter gender shall be construed to include any other gender, and words in the singular form shall be construed to include the plural and *vice versa* unless the context otherwise requires. Titles to sections of the Deposit Agreement are included for convenience only and shall be disregarded in construing the language contained in the Deposit Agreement. References to "applicable laws and regulations" shall refer to laws and regulations applicable to ADRs, ADSs or Deposited Property as in effect at the relevant time of determination, unless otherwise required by law or regulation.

(b) ADRs. All references in any ADR(s) to paragraphs, exhibits, articles, sections, subsections, and other subdivisions refer to the paragraphs, exhibits, articles, sections, subsections and other subdivisions of the ADR(s) in question unless expressly provided otherwise. The words "the Receipt", "the ADR", "herein", "hereof", "hereby", "hereunder", and words of similar import used in any ADR refer to the ADR as a whole and as in effect at the relevant time, and not to any particular subdivision unless expressly so limited. Pronouns in masculine, feminine and neuter gender in any ADR shall be construed to include any other gender, and words in the singular form shall be construed to include the plural and *vice versa* unless the context otherwise requires. Titles to paragraphs of any ADR are included for convenience only and shall be disregarded in construing the language contained in the ADR. References to "applicable laws and regulations" shall refer to laws and regulations applicable to the Company, the Depositary, the Custodian, their agents and controlling persons, the ADRs, the ADSs and the Deposited Property as in effect at the relevant time of determination, unless otherwise required by law or regulation.

[*Signature Page to Follow*]

IN WITNESS WHEREOF, PURETECH HEALTH PLC and CITIBANK, N.A. have duly executed the Deposit Agreement as of the day and year first above set forth and all Holders and Beneficial Owners shall become parties hereto upon acceptance by them of ADSs issued in accordance with the terms hereof, or upon acquisition of any beneficial interest therein.

PURETECH HEALTH PLC

By: _____
Name:
Title:

CITIBANK, N.A.

By: _____
Name:
Title:

EXHIBIT A

[FORM OF ADR]

Number _____

CUSIP NUMBER: _____

American Depositary Shares (each American Depositary Share representing the right to receive ten (10) fully paid ordinary shares)

AMERICAN DEPOSITARY RECEIPT

for

AMERICAN DEPOSITARY SHARES

representing

DEPOSITED ORDINARY SHARES

of

PURETECH HEALTH PLC

(Incorporated under the laws of England and Wales)

CITIBANK, N.A., a national banking association organized and existing under the laws of the United States of America, as depositary (the "Depositary"), hereby certifies that _____is the owner of _____ American Depositary Shares (hereinafter "ADS") representing deposited ordinary shares, including evidence of rights to receive such ordinary shares (the "Shares"), of PureTech Health plc, a public limited company incorporated under the laws of England and Wales (the "Company"). As of the date of issuance of this ADR, each ADS represents the right to receive ten (10) Shares deposited under the Deposit Agreement (as hereinafter defined) with the Custodian, which at the date of issuance of this ADR is Citibank, N.A. (London) (the "Custodian"). The ADS(s)-to-Share(s) ratio is subject to amendment as provided in Articles IV and VI of the Deposit Agreement. The Depositary's Principal Office is located at 388 Greenwich Street, New York, New York 10013, U.S.A.

(1) The Deposit Agreement. This American Depositary Receipt is one of an issue of American Depositary Receipts ("ADRs"), all issued and to be issued upon the terms and conditions set forth in the Deposit Agreement, dated as of [•], 2020 (as amended and supplemented from time to time, the "Deposit Agreement"), by and among the Company, the Depositary, and all Holders and Beneficial Owners from time to time of ADSs issued thereunder. The Deposit Agreement sets forth the rights and obligations of Holders and Beneficial Owners of ADSs and the rights and duties of the Depositary in respect of the Shares deposited thereunder and any and all other Deposited Property (as defined in the Deposit Agreement) from time to time received and held on deposit in respect of the ADSs. Copies of the Deposit Agreement are on file at the Principal Office of the Depositary and with the Custodian. Each Holder and each Beneficial Owner, upon acceptance of any ADSs (or any interest therein) issued in accordance with the terms and conditions of the Deposit Agreement, shall be deemed for all purposes to (a) be a party to and bound by the terms of the Deposit Agreement and the applicable ADR(s), and (b) appoint the Depositary its attorney-in-fact, with full power to delegate, to act on its behalf and to take any and all actions contemplated in the Deposit Agreement and the applicable ADR(s), to adopt any and all procedures necessary to comply with applicable law and to take such action as the Depositary in its sole discretion may deem necessary or appropriate to carry out the purposes of the Deposit Agreement and the applicable ADR(s), the taking of such actions to be the conclusive determinant of the necessity and appropriateness thereof. The manner in which a Beneficial Owner holds ADSs (e.g., in a brokerage account vs. as registered holder) may affect the rights and obligations of, the manner in which, and the extent to which, services are made available to, Beneficial Owners pursuant to the terms of the Deposit Agreement.

The statements made on the face and reverse of this ADR are summaries of certain provisions of the Deposit Agreement and the Articles of Association of the Company (as in effect on the date of the signing of the Deposit Agreement) and are qualified by and subject to the detailed provisions of the Deposit Agreement and the Articles of Association, to which reference is hereby made.

All capitalized terms not defined herein shall have the meanings ascribed thereto in the Deposit Agreement.

The Depositary makes no representation or warranty as to the validity or worth of the Deposited Property. The Depositary has made arrangements for the acceptance of the ADSs into DTC. Each Beneficial Owner of ADSs held through DTC must rely on the procedures of DTC and the DTC Participants to exercise and be entitled to any rights attributable to such ADSs. The Depositary may issue Uncertificated ADSs subject, however, to the terms and conditions of Section 2.13 of the Deposit Agreement.

(2) Surrender of ADSs and Withdrawal of Deposited Securities. The Holder of this ADR (and of the ADSs evidenced hereby) shall be entitled to Delivery (at the Custodian's designated office) of the Deposited Securities at the time represented by the ADSs evidenced hereby upon satisfaction of each of the following conditions: (i) the Holder (or a duly-authorized attorney of the Holder) has duly Delivered ADSs to the Depositary at its Principal Office the ADSs evidenced hereby (and, if applicable, this ADR evidencing such ADSs) for the purpose of withdrawal of the Deposited Securities represented thereby, (ii) if applicable and so required by the Depositary, this ADR Delivered to the Depositary for such purpose has been properly endorsed in blank or is accompanied by proper instruments of transfer in blank (including signature guarantees in accordance with standard securities industry practice), (iii) if so required by the Depositary, the Holder of the ADSs has executed and delivered to the Depositary a written order directing the Depositary to cause the Deposited Securities being withdrawn to be Delivered to or upon the written order of the person(s) designated in such order, and (iv) all applicable fees and charges of, and expenses incurred by, the Depositary and all applicable taxes and governmental charges (as are set forth in Section 5.9 of, and Exhibit B to, the Deposit Agreement) have been paid, *subject, however, in each case*, to the terms and conditions of this ADR evidencing the surrendered ADSs, of the Deposit Agreement, of the Company's Articles of Association and of any applicable laws and the rules of CREST, and to any provisions of or governing the Deposited Securities, in each case as in effect at the time thereof.

Upon satisfaction of each of the conditions specified above, the Depositary (i) shall cancel the ADSs Delivered to it (and, if applicable, this ADR(s) evidencing the ADSs so Delivered), (ii) shall direct the Registrar to record the cancellation of the ADSs so Delivered on the books maintained for such purpose, and (iii) shall direct the Custodian to Deliver, or cause the Delivery of, in each case, without unreasonable delay, the Deposited Securities represented by the ADSs so canceled together with any certificate or other document of title for the Deposited Securities, or evidence of the electronic transfer thereof (if available), as the case may be, to or upon the written order of the person(s) designated in the order delivered to the Depositary for such purpose, *subject however, in each case*, to the terms and conditions of the Deposit Agreement, of this ADR evidencing the ADS so canceled, of the Articles of Association of the Company, of any applicable laws and of the rules of CREST, and to the terms and conditions of or governing the Deposited Securities, in each case as in effect at the time thereof.

The Depositary shall not accept for surrender ADSs representing less than one (1) Share. In the case of Delivery to it of ADSs representing a number other than a whole number of Shares, the Depositary shall cause ownership of the appropriate whole number of Shares to be Delivered in accordance with the terms hereof, and shall, at the discretion of the Depositary, either (i) return to the person surrendering such ADSs the number of ADSs representing any remaining fractional Share, or (ii) sell or cause to be sold the fractional Share represented by the ADSs so surrendered and remit the proceeds of such sale (net of (a) applicable fees and charges of, and expenses incurred by, the Depositary and (b) applicable taxes required to be withheld as a result of such sale) to the person surrendering the ADSs.

Notwithstanding anything else contained in this ADR or the Deposit Agreement, the Depositary may make delivery at the Principal Office of the Depositary of Deposited Property consisting of (i) any cash dividends or cash distributions, or (ii) any proceeds from the sale of any non-cash distributions, which are at the time held by the Depositary in respect of the Deposited Securities represented by the ADSs surrendered for cancellation and withdrawal. At the request, risk and expense of any Holder so surrendering ADSs represented by this ADR, and for the account of such Holder, the Depositary shall direct the Custodian to forward (to the extent permitted by law) any Deposited Property (other than Deposited Securities) held by the Custodian in respect of such ADSs to the Depositary for delivery at the Principal Office of the Depositary. Such direction shall be given by letter or, at the request, risk and expense of such Holder, by cable, telex or facsimile transmission.

(3) Transfer, Combination and Split-up of ADRs. The Registrar shall register the transfer of this ADR (and of the ADSs represented hereby) on the books maintained for such purpose and the Depositary shall (x) cancel this ADR and execute new ADRs evidencing the same aggregate number of ADSs as those evidenced by this ADR canceled by the Depositary, (y) cause the Registrar to countersign such new ADRs, and (z) Deliver such new ADRs to or upon the order of the person entitled thereto, if each of the following conditions has been satisfied: (i) this ADR has been duly Delivered by the Holder (or by a duly authorized attorney of the Holder) to the Depositary at its Principal Office for the purpose of effecting a transfer thereof, (ii) this surrendered ADR has been properly endorsed or is accompanied by proper instruments of transfer (including signature guarantees in accordance with standard securities industry practice), (iii) this surrendered ADR has been duly stamped (if required by the laws of the State of New York or of the United States), and (iv) all applicable fees and charges of, and expenses incurred by, the Depositary and all applicable taxes and governmental charges (as are set forth in Section 5.9 of, and Exhibit B to, the Deposit Agreement) have been paid, *subject, however, in each case*, to the terms and conditions of this ADR, of the Deposit Agreement and of applicable law, in each case as in effect at the time thereof.

The Registrar shall register the split-up or combination of this ADR (and of the ADSs represented hereby) on the books maintained for such purpose and the Depositary shall (x) cancel this ADR and execute new ADRs for the number of ADSs requested, but in the aggregate not exceeding the number of ADSs evidenced by this ADR canceled by the Depositary, (y) cause the Registrar to countersign such new ADRs, and (z) Deliver such new ADRs to or upon the order of the Holder thereof, if each of the following conditions has been satisfied: (i) this ADR has been duly Delivered by the Holder (or by a duly authorized attorney of the Holder) to the Depositary at its Principal Office for the purpose of effecting a split-up or combination hereof, and (ii) all applicable fees and charges of, and expenses incurred by, the Depositary and all applicable taxes and governmental charges (as are set forth in Section 5.9 of, and Exhibit B to, the Deposit Agreement) have been paid, *subject, however, in each case*, to the terms and conditions of this ADR, of the Deposit Agreement and of applicable law, in each case as in effect at the time thereof.

(4) Pre-Conditions to Registration, Transfer, Etc. As a condition precedent to the execution and Delivery, the registration of issuance, transfer, split-up, combination or surrender, of any ADS, the delivery of any distribution thereon, or the withdrawal of any Deposited Property, the Depositary or the Custodian may require (i) payment from the depositor of Shares or presenter of ADSs or of this ADR of a sum sufficient to reimburse it for any tax or other governmental charge and any stock transfer or registration fee with respect thereto (including any such tax or charge and fee with respect to Shares being deposited or withdrawn) and payment of any applicable fees and charges of the Depositary as provided in Section 5.9 and Exhibit B to the Deposit Agreement and in this ADR, (ii) the production of proof reasonably satisfactory to it as to the identity and genuineness of any signature or any other matter contemplated by Section 3.1 of the Deposit Agreement, and (iii) compliance with (A) any laws or governmental regulations relating to the execution and Delivery of this ADR or ADSs or to the withdrawal of Deposited Securities and (B) such reasonable regulations as the Depositary and the Company may establish consistent with the provisions of this ADR, if applicable, the Deposit Agreement and applicable law.

The issuance of ADSs against deposits of Shares generally or against deposits of particular Shares may be suspended, or the deposit of particular Shares may be refused, or the registration of transfer of ADSs in particular instances may be refused, or the registration of transfer of ADSs generally may be suspended, during any period when the transfer books of the Company, the Depositary, a Registrar or the Share Registrar are closed or if any such action is deemed necessary or advisable by the Depositary or the Company, in good faith, at any time or from time to time because of any requirement of law or regulation, any government or governmental body or commission or any securities exchange on which the ADSs or Shares are listed, or under any provision of the Deposit Agreement or this ADR, if applicable, or under any provision of, or governing, the Deposited Securities, or because of a meeting of shareholders of the Company or for any other reason, subject, in all cases to Section 7.8 (a) of the Deposit Agreement and paragraph (25) of this ADR. Notwithstanding any provision of the Deposit Agreement or this ADR to the contrary, Holders are entitled to surrender outstanding ADSs to withdraw the Deposited Securities associated therewith at any time subject only to (i) temporary delays caused by closing the transfer books of the Depositary or the Company or the deposit of Shares in connection with voting at a shareholders' meeting or the payment of dividends, (ii) the payment of fees, taxes and similar charges, (iii) compliance with any U.S. or foreign laws or governmental regulations relating to the ADSs or to the withdrawal of the Deposited Securities, and (iv) other circumstances specifically contemplated by Instruction I.A.(l) of the General Instructions to Form F-6 (as such General Instructions may be amended from time to time).

(5) Compliance With Information Requests. Notwithstanding any other provision of the Deposit Agreement or this ADR, each Holder and Beneficial Owner of the ADSs represented hereby agrees to comply with requests from the Company pursuant to applicable law, the rules and requirements of any stock exchange on which the Shares or ADSs are, or will be, registered, traded or listed, or the Articles of Association of the Company, which are made to provide information, *inter alia*, as to the capacity in which such Holder or Beneficial Owner owns ADSs (and the Shares represented by such ADSs, as the case may be) and regarding the identity of any other person(s) interested in such ADSs and the nature of such interest and various other matters, whether or not they are Holders and/or Beneficial Owners at the time of such request. The Depositary agrees to use its reasonable efforts to forward, upon the request of the Company and at the Company's expense, any such request from the Company to the Holders and to forward to the Company, as promptly as practicable, any such responses to such requests received by the Depositary.

(6) Ownership Restrictions. Notwithstanding any other provision contained in this ADR or of the Deposit Agreement, the Company may restrict transfers of the Shares where such transfer might result in ownership of Shares exceeding limits imposed by applicable law or the Articles of Association of the Company. The Company may also restrict, in such manner as it deems appropriate, transfers of the ADSs where such transfer may result in the total number of Shares represented by the ADSs owned by a single Holder or Beneficial Owner to exceed any such limits. The Company may, in its sole discretion but subject to applicable law, instruct the Depositary to take action with respect to the ownership interest of any Holder or Beneficial Owner in excess of the limits set forth in the preceding sentence, including but not limited to, the imposition of restrictions on the transfer of ADSs, the removal or limitation of voting rights or the mandatory sale or disposition on behalf of a Holder or Beneficial Owner of the Shares represented by the ADSs held by such Holder or Beneficial Owner in excess of such limitations, if and to the extent such disposition is permitted by applicable law and (if required) the Articles of Association of the Company. Nothing herein or in the Deposit Agreement shall be interpreted as obligating the Depositary or the Company to ensure compliance with the ownership restrictions described herein or in Section 3.5 of the Deposit Agreement.

Notwithstanding any provision of the Deposit Agreement or of the ADRs and without limiting the foregoing, by being a Holder or Beneficial Owner of an ADS, each such Holder and Beneficial Owner agrees to provide such information as the Company may request in a disclosure notice (a "Disclosure Notice") given pursuant to the U.K. Companies Act 2006 (as amended from time to time and including any statutory modification or re-enactment thereof, the "Companies Act") or the Articles of Association of the Company. By accepting or holding an ADS, each Holder and Beneficial Owner acknowledges that it understands that failure to comply with a Disclosure Notice may result in the imposition of sanctions against the holder of the 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 of Association 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.

In addition, by accepting or holding an ADR, each Holder and Beneficial Owner agrees to comply with the provisions of the DTRs, which as of the date of this Deposit Agreement provide, *inter alia*, that a person must notify the Company of the percentage of its voting rights which such person holds as a shareholder or is deemed to hold through such person's direct or indirect holding of certain financial instruments (as defined in the DTRs) (or a combination of such holdings) if the percentage of such voting rights (i) reaches, exceeds or falls below 3% and each 1% threshold thereafter up to 100% as a result of an acquisition or disposal of Shares or certain financial instruments, or (ii) reaches, exceeds or falls below such applicable thresholds as a result of events changing the breakdown of voting rights and on the basis of information disclosed by the Company in accordance with the DTRs. Such notification must be effected as soon as possible, but not later than two trading days after the date on which the Holder or Beneficial Owner (as the case may be) (a) learns of the acquisition or disposal or of the possibility of exercising voting rights, or on which, having regard to the circumstances, should have learned of it, regardless of the date on which the acquisition, disposal or possibility of exercising voting rights takes effect, or (b) is informed of the event mentioned in (ii) above.

The Company reserves the right to instruct Holders and Beneficial Owners to deliver their ADSs for cancellation and withdrawal of the Deposited Securities so as to permit the Company to deal directly with the Holder and Beneficial Owner thereof as a holder of Shares and Holders agree to comply with such instructions. The Depositary agrees to cooperate with the Company in its efforts to inform Holders and Beneficial Owners of the Company's exercise of its rights under this paragraph and agrees to consult with, and provide reasonable assistance without risk, liability or expense on the part of the Depositary, to the Company on the manner or manners in which it may enforce such rights with respect to any Holder or Beneficial Owner.

(7) Reporting Obligations and Regulatory Approvals. Applicable laws and regulations may require holders and beneficial owners of Shares, including the Holders and Beneficial Owners of ADSs, to satisfy reporting requirements and obtain regulatory approvals in certain circumstances. Holders and Beneficial Owners of ADSs are solely responsible for determining and complying with such reporting requirements and obtaining such approvals. Each Holder and each Beneficial Owner hereby agrees to make such determination, file such reports, and obtain such approvals to the extent and in the form required by applicable laws and regulations as in effect from time to time. Neither the Depositary, the Custodian, the Company or any of their respective agents or affiliates shall be required to take any actions whatsoever on behalf of Holders or Beneficial Owners to determine or satisfy such reporting requirements or obtain such regulatory approvals under applicable laws and regulations.

(8) Liability for Taxes and Other Charges. Any tax or other governmental charge payable by the Custodian or by the Depositary with respect to any Deposited Property, ADSs or this ADR shall be payable by the Holders and Beneficial Owners to the Depositary. The Company, the Custodian and/or the Depositary may withhold or deduct from any distributions made in respect of Deposited Property held on behalf of such Holder and/or Beneficial Owner, and may sell for the account of a Holder and/or Beneficial Owner any or all of the Deposited Property and apply such distributions and sale proceeds in payment of, any taxes (including applicable interest and penalties) or charges that are or may be payable by Holders or Beneficial Owners in respect of the ADSs, Deposited Property and this ADR, the Holder and the Beneficial Owner hereof remaining liable for any deficiency. The Custodian may refuse the deposit of Shares and the Depositary may refuse to issue ADSs, to deliver ADRs, register the transfer of ADSs, register the split-up or combination of ADRs and (subject to paragraph (25) of this ADR and Section 7.8(a) of the Deposit Agreement) the withdrawal of Deposited Property until payment in full of such tax, charge, penalty or interest is received. Every Holder and Beneficial Owner agrees to indemnify the Depositary, the Company, the Custodian, and any of their agents, officers, employees and Affiliates for, and to hold each of them harmless from, any claims with respect to taxes (including applicable interest and penalties thereon) arising from (i) any ADSs held by such Holder and/or owned by such Beneficial Owner, (ii) the Deposited Property represented by the ADSs, and (iii) any transactions entered into by such Holder and/or Beneficial Owner in respect of the ADSs and/or the Deposited Property represented thereby. Notwithstanding anything to the contrary contained in the Deposit Agreement or any ADR, the obligations of Holders and Beneficial Owners under Section 3.2 of the Deposit Agreement shall survive any transfer of ADSs, any cancellation of ADSs and withdrawal of Deposited Securities, and the termination of the Deposit Agreement.

(9) Representations and Warranties on Deposit of Shares. Each person depositing Shares under the Deposit Agreement shall be deemed thereby to represent and warrant that (i) such Shares and the certificates therefor are duly authorized, validly allotted and issued, fully paid, not subject to any call for the payment of further capital and legally obtained by such person, (ii) all preemptive (and similar) rights, if any, with respect to such Shares have been validly waived, disapplied or exercised, (iii) the person making such deposit is duly authorized so to do, (iv) the Shares presented for deposit are free and clear of any lien, encumbrance, security interest, charge, mortgage or adverse claim, (v) the Shares presented for deposit are not, and the ADSs issuable upon such deposit will not be, Restricted Securities (except as contemplated in Section 2.14 of the Deposit Agreement), and (vi) the Shares presented for deposit have not been stripped of any rights or entitlements and (vii) the deposit of the Shares does not violate any applicable provisions of English law. Such representations and warranties shall survive the deposit and withdrawal of Shares, the issuance and cancellation of ADSs in respect thereof and the transfer of such ADSs. If any such representations or warranties are false in any way, the Company and the Depositary shall be authorized, at the cost and expense of the person depositing Shares, to take any and all actions necessary to correct the consequences thereof.

(10) Proofs, Certificates and Other Information. Any person presenting Shares for deposit, any Holder and any Beneficial Owner may be required, and every Holder and Beneficial Owner agrees, from time to time to provide to the Depositary and the Custodian such proof of citizenship or residence, taxpayer status, payment of all applicable taxes or other governmental charges, exchange control approval, legal or beneficial ownership of ADSs and Deposited Property, compliance with applicable laws, the terms of the Deposit Agreement or this ADR evidencing the ADSs and the provisions of, or governing, the Deposited Property, to execute such certifications and to make such representations and warranties, and to provide such other information and documentation (or, in the case of Shares in registered form presented for deposit, such information relating to the registration on the books of the Company or of the Share Registrar) as the Depositary or the Custodian may deem necessary or proper or as the Company may reasonably require by written request to the Depositary consistent with its obligations under the Deposit Agreement and this ADR. The Depositary and the Registrar, as applicable, may, and at the reasonable request of the Company, shall, to the extent practicable and subject to applicable law, withhold the execution or delivery or registration of transfer of any ADR or ADS or the distribution or sale of any dividend or distribution of rights or of the proceeds thereof or, to the extent not limited by paragraph (25) and Section 7.8 (a) of the Deposit Agreement, the delivery of any Deposited Property until such proof or other information is filed or such certifications are executed, or such representations and warranties are made or such other documentation or information provided, in each case to the Depositary's, the Registrar's and the Company's satisfaction. The Depositary shall provide the Company, in a timely manner, with copies or originals if necessary and appropriate of (i) any such proofs of citizenship or residence, taxpayer status, or exchange control approval or copies of written representations and warranties which it receives from Holders and Beneficial Owners, and (ii) any other information or documents which the Company may reasonably request and which the Depositary shall request and receive from any Holder or Beneficial Owner or any person presenting Shares for deposit or ADSs for cancellation, transfer or withdrawal. Nothing herein shall obligate the Depositary to (i) obtain any information for the Company if not provided by the Holders or Beneficial Owners, or (ii) verify or vouch for the accuracy of the information so provided by the Holders or Beneficial Owners.

(11) ADS Fees and Charges. The following ADS fees are payable under the terms of the Deposit Agreement:

(i) ADS Issuance Fee: by any person for whom ADSs are issued (*e.g.*, an issuance upon a deposit of Shares, upon a change in the ADS(s)-to-Share(s) ratio, or for any other reason), excluding issuances as a result of distributions described in paragraph (iv) below, a fee not in excess of U.S. $5.00 per 100 ADSs (or fraction thereof) issued under the terms of the Deposit Agreement;

(ii) ADS Cancellation Fee: by any person for whom ADSs are being cancelled (*e.g.*, a cancellation of ADSs for Delivery of deposited Shares, upon a change in the ADS(s)-to-Share(s) ratio, or for any other reason), a fee not in excess of U.S. $5.00 per 100 ADSs (or fraction thereof) cancelled;

(iii) Cash Distribution Fee: by any Holder of ADSs, a fee not in excess of U.S. $5.00 per 100 ADSs (or fraction thereof) held for the distribution of cash dividends or other cash distributions (*e.g.*, upon a sale of rights and other entitlements);

(iv) Stock Distribution /Rights Exercise Fee: by any Holder of ADS(s), a fee not in excess of U.S. $5.00 per 100 ADSs (or fraction thereof) held for the distribution of ADSs pursuant to (a) stock dividends or other free stock distributions, or (b) an exercise of rights to purchase additional ADSs;

(v) Other Distribution Fee: by any Holder of ADS(s), a fee not in excess of U.S. $5.00 per 100 ADSs (or fraction thereof) held for the distribution of securities other than ADSs or rights to purchase additional ADSs (*e.g.*, spin-off shares);

(vi) Depositary Services Fee: by any Holder of ADS(s), a fee not in excess of U.S. $5.00 per 100 ADSs (or fraction thereof) held on the applicable record date(s) established by the Depositary;

(vii) Registration of ADS Transfer Fee: by any Holder of ADS(s) being transferred or by any person to whom ADSs are transferred, a fee not in excess of U.S. $5.00 per 100 ADSs (or fraction thereof) transferred (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); and

(viii) ADS Conversion Fee: by any Holder of ADS(s) being converted or by any person to whom the converted ADSs are delivered, a fee not in excess of U.S. $5.00 per 100 ADSs (or fraction thereof) converted from one ADS series to another ADS series (*e.g.*, upon conversion of Partial Entitlement ADSs for Full Entitlement ADSs, or upon conversion of Restricted ADSs into freely transferrable ADSs, and *vice versa*).

The Company, Holders, Beneficial Owners, persons depositing Shares or withdrawing Deposited Securities in connection with ADS issuances and cancellations, and persons for whom ADSs are issued or cancelled shall be responsible for the following ADS charges under the terms of the Deposit Agreement:

(a) taxes (including applicable interest and penalties) and other governmental charges;

(b) such registration fees as may from time to time be in effect for the registration of Shares or other Deposited Securities on the share register and applicable to transfers of Shares or other Deposited Securities to or from the name of the Custodian, the Depositary or any nominees upon the making of deposits and withdrawals, respectively;

(c) such cable, telex and facsimile transmission and delivery expenses as are expressly provided in the Deposit Agreement to be at the expense of the person depositing Shares or withdrawing Deposited Property or of the Holders and Beneficial Owners of ADSs;

(d) in connection with the conversion of Foreign Currency, the fees, expenses, spreads, taxes and other charges of the Depositary and/or conversion service providers (which may be a division, branch or Affiliate of the Depositary). Such fees, expenses, spreads, taxes and other charges shall be deducted from the Foreign Currency;

(e) any reasonable and customary out-of-pocket expenses incurred in such conversion and/or on behalf of the Holders and Beneficial Owners in complying with currency exchange control or other governmental requirements; and

(f) the fees, charges, costs and expenses incurred by the Depositary, the Custodian, or any nominee in connection with the ADR program.

All ADS fees and charges so payable may be deducted from distributions or must be remitted to the Depositary, or its designee, and may, at any time and from time to time, be changed by agreement between the Depositary and Company but, in the case of ADS fees and charges payable by Holders and Beneficial Owners, only in the manner contemplated by paragraph (23) of this ADR and as contemplated in Section 6.1 of the Deposit Agreement. The Depositary shall provide, without charge, a copy of its latest ADS fee schedule to anyone upon request.

ADS fees and charges for (i) the issuance of ADSs and (ii) the cancellation of ADSs will be payable by the person for whom the ADSs are so issued by the Depositary (in the case of ADS issuances) and by the person for whom ADSs are being cancelled (in the case of ADS cancellations). In the case of ADSs issued by the Depositary into DTC or presented to the Depositary via DTC, the ADS issuance and cancellation fees and charges will be payable by the DTC Participant(s) receiving the ADSs from the Depositary 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(s) of the applicable Beneficial Owner(s) in accordance with the procedures and practices of the DTC Participant(s) as in effect at the time. ADS fees and charges in respect of distributions and the ADS service fee are payable by Holders as of the applicable ADS Record Date established by the Depositary. 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, the applicable Holders as of the ADS Record Date established by the Depositary will be invoiced for the amount of the ADS fees and charges and such ADS fees may be deducted from distributions made to Holders. 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 from time to time 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.

The Depositary may reimburse the Company for certain expenses incurred by the Company in respect of the ADR program established pursuant to the Deposit Agreement, by making available a portion of the ADS fees charged in respect of the ADR program or otherwise, upon such terms and conditions as the Company and the Depositary agree from time to time. The Company shall pay to the Depositary such fees and charges, and reimburse the Depositary for such out-of-pocket expenses, as the Depositary and the Company may agree from time to time. Responsibility for payment of such fees, charges and reimbursements may from time to time be changed by agreement between the Company and the Depositary. Unless otherwise agreed, the Depositary shall present its statement for such fees, charges and reimbursements to the Company once every three months. The charges and expenses of the Custodian are for the sole account of the Depositary.

The obligations of Holders and Beneficial Owners to pay ADS fees and charges shall survive the termination of the Deposit Agreement. As to any Depositary, upon the resignation or removal of such Depositary as described in Section 5.4 of the Deposit Agreement, the right to collect ADS fees and charges shall extend for those ADS fees and charges incurred prior to the effectiveness of such resignation or removal.

(12) Title to ADRs. Subject to the limitations contained in the Deposit Agreement and in this ADR, it is a condition of this ADR, and every successive Holder of this ADR by accepting or holding the same consents and agrees, that title to this ADR (and to each Certificated ADS evidenced hereby) shall be transferable upon the same terms as a certificated security under the laws of the State of New York, provided that, in the case of Certificated ADSs, this ADR has been properly endorsed or is accompanied by proper instruments of transfer. Notwithstanding any notice to the contrary, the Depositary and the Company may deem and treat the Holder of this ADR (that is, the person in whose name this ADR is registered on the books of the Depositary) as the absolute owner thereof for all purposes. Neither the Depositary nor the Company shall have any obligation nor be subject to any liability under the Deposit Agreement or this ADR to any holder of this ADR or any Beneficial Owner unless, in the case of a holder of ADSs, such holder is the Holder of this ADR registered on the books of the Depositary or, in the case of a Beneficial Owner, such Beneficial Owner, or the Beneficial Owner's representative, is the Holder registered on the books of the Depositary.

(13) Validity of ADR. The Holder(s) of this ADR (and the ADSs represented hereby) shall not be entitled to any benefits under the Deposit Agreement or be valid or enforceable for any purpose against the Depositary or the Company unless this ADR has been (i) dated, (ii) signed by the manual or facsimile signature of a duly-authorized signatory of the Depositary, (iii) countersigned by the manual or facsimile signature of a duly-authorized signatory of the Registrar, and (iv) registered in the books maintained by the Registrar for the registration of issuances and transfers of ADRs. An ADR bearing the facsimile signature of a duly-authorized signatory of the Depositary or the Registrar, who at the time of signature was a duly authorized signatory of the Depositary or the Registrar, as the case may be, shall bind the Depositary, notwithstanding the fact that such signatory has ceased to be so authorized prior to the delivery of such ADR by the Depositary.

(14) Available Information; Reports; Inspection of Transfer Books. The Company is subject to the periodic reporting requirements of the Exchange Act and, accordingly, is required to file or furnish certain reports with the Commission. These reports can be retrieved from the Commission's website (www.sec.gov) and can be inspected and copied at the public reference facilities maintained by the Commission located (as of the date of the Deposit Agreement) at 100 F Street, N.E., Washington D.C. 20549. The Depositary shall make available for inspection by Holders at its Principal Office, as promptly as practicable after receipt thereof, any reports and communications, including any proxy soliciting materials, received from the Company which are both (a) received by the Depositary, the Custodian, or the nominee of either of them as the holder of the Deposited Property and (b) made generally available to the holders of such Deposited Property by the Company. The Depositary shall also provide or make available to Holders copies of such reports when furnished by the Company pursuant to Section 5.6 of the Deposit Agreement.

The Registrar shall keep books for the registration of ADSs which at all reasonable times shall be open for inspection by the Company and by the Holders of such ADSs, provided that such inspection shall not be, to the Registrar's knowledge, for the purpose of communicating with Holders of such ADSs in the interest of a business or object other than the business of the Company or other than a matter related to the Deposit Agreement or the ADSs.

The Registrar may close the transfer books with respect to the ADSs, at any time or from time to time, when deemed necessary or advisable by it in good faith in connection with the performance of its duties hereunder, or at the reasonable written request of the Company subject, in all cases, to paragraph (25) and Section 7.8 (a) of the Deposit Agreement.

Dated:

CITIBANK, N.A.
Transfer Agent and Registrar

By: _____
Authorized Signatory

CITIBANK, N.A.
as Depositary

By: _____
Authorized Signatory

The address of the Principal Office of the Depositary is 388 Greenwich Street, New York, New York 10013, U.S.A.

(15) Dividends and Distributions in Cash, Shares, etc.

(a) ***Cash Distributions***: Upon the timely receipt by the Depositary of a notice from the Company that it intends to make a distribution of a cash dividend or other cash distribution, the Depositary shall establish the ADS Record Date upon the terms described in Section 4.9 of the Deposit Agreement. Upon receipt of confirmation of the receipt of (x) any cash dividend or other cash distribution on any Deposited Securities, or (y) proceeds from the sale of any Deposited Property held in respect of the ADSs under the terms of the Deposit Agreement, the Depositary will (i) if any amounts are received in a Foreign Currency, promptly convert or cause to be converted such cash dividend, distribution or proceeds into Dollars (subject to the terms and conditions described in Section 4.8 of the Deposit Agreement), (ii) if applicable and unless previously established, establish the ADS Record Date upon the terms described in Section 4.9 of the Deposit Agreement, and (iii) distribute promptly the amount thus received (net of (a) the applicable fees and charges described in the Fee Schedule attached as Exhibit B to the Deposit Agreement and (b) applicable taxes required to be withheld as a result of the distribution) to the Holders entitled thereto as of the ADS Record Date in proportion to the number of ADSs held as of the ADS Record Date. The Depositary shall distribute only such amount, however, as can be distributed without attributing to any Holder a fraction of one cent, and any balance not so distributed shall be held by the Depositary (without liability for interest thereon) and shall be added to and become part of the next sum received by the Depositary for distribution to Holders of ADSs outstanding at the time of the next distribution. If the Company, the Custodian or the Depositary is required to withhold and does withhold from any cash dividend or other cash distribution in respect of any Deposited Securities, or from any cash proceeds from the sales of Deposited Property, an amount on account of taxes, duties or other governmental charges, the amount distributed to Holders on the ADSs shall be reduced accordingly. Such withheld amounts shall be forwarded by the Company, the Custodian or the Depositary to the relevant governmental authority. Evidence of payment thereof by the Company shall be forwarded by the Company to the Depositary upon request. The Depositary 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 holds must be escheated as unclaimed property in accordance with the laws of the relevant states of the United States. Notwithstanding anything contained in the Deposit Agreement to the contrary, in the event the Company fails to give the Depositary timely notice of the proposed distribution provided for in Section 4.1 of the Deposit Agreement, the Depositary agrees to use commercially reasonable efforts to perform the actions contemplated in Section 4.1 of the Deposit Agreement, and the Company, the Holders and the Beneficial Owners acknowledge that the Depositary shall have no liability for the Depositary's failure to perform the actions contemplated in Section 4.1 of the Deposit Agreement where such notice has not been so timely given, other than its failure to use commercially reasonable efforts, as provided herein.

(b) ***Share Distributions***: Upon the timely receipt by the Depositary of a notice from the Company that it intends to make a distribution that consists of a dividend in, or free distribution of Shares, the Depositary shall establish the ADS Record Date upon the terms described in Section 4.9 of the Deposit Agreement. Upon receipt of confirmation from the Custodian of the receipt of the Shares so distributed by the Company, the Depositary shall either (i) subject to Section 5.9 of the Deposit Agreement, distribute to the Holders as of the ADS Record Date in proportion to the number of ADSs held as of the ADS Record Date, additional ADSs, which represent in the aggregate the number of Shares received as such dividend, or free distribution, subject to the other terms of the Deposit Agreement (including, without limitation, (a) the applicable fees and charges of, and expenses incurred by, the Depositary and (b) applicable taxes required to be withheld), or (ii) if additional ADSs are not so distributed, take all actions necessary so that each ADS issued and outstanding after the ADS Record Date shall, to the extent permissible by law, thenceforth also represent rights and interests in the additional integral number of Shares distributed upon the Deposited Securities represented thereby (net of (a) the applicable fees and charges of, and expenses incurred by, the Depositary, and (b) applicable taxes). In lieu of delivering fractional ADSs, the Depositary shall sell the number of Shares or ADSs, as the case may be, represented by the aggregate of such fractions and distribute the net proceeds upon the terms described in Section 4.1 of the Deposit Agreement.

In the event that the Depositary determines that any distribution in property (including Shares) is subject to any tax or other governmental charges which the Depositary is obligated to withhold, or, if the Company in the fulfillment of its obligations under Section 5.7 of the Deposit Agreement, has furnished an opinion of U.S. counsel determining that Shares must be registered under the Securities Act or other laws in order to be distributed to Holders (and no such registration statement has been declared effective), the Depositary, after consultation with the Company to the extent reasonably practicable, may dispose of all or a portion of such property (including Shares and rights to subscribe therefor) in such amounts and in such manner, including by public or private sale, as the Depositary deems necessary and practicable, and the Depositary shall distribute the net proceeds of any such sale (after deduction of (a) applicable taxes required to be withheld and (b) fees and charges of, and the expenses incurred by, the Depositary) to Holders entitled thereto upon the terms of Section 4.1 of the Deposit Agreement. The Depositary shall hold and/or distribute any unsold balance of such property in accordance with the provisions of the Deposit Agreement. Notwithstanding anything contained in the Deposit Agreement to the contrary, in the event the Company fails to give the Depositary timely notice of the proposed distribution provided for in Section 4.2 of the Deposit Agreement, the Depositary agrees to use commercially reasonable efforts to perform the actions contemplated in Section 4.2 of the Deposit Agreement, and the Company, the Holders and the Beneficial Owners acknowledge that the Depositary shall have no liability for the Depositary’s failure to perform the actions contemplated in Section 4.2 of the Deposit Agreement where such notice has not been so timely given, other than its failure to use commercially reasonable efforts, as provided herein.

(c) ***Elective Distributions in Cash or Shares***: Upon the timely receipt of a notice indicating that the Company wishes an elective distribution in cash or Shares to be made available to Holders of ADSs upon the terms described in the Deposit Agreement, the Depositary shall consult with the Company to determine, and the Company shall assist the Depositary in its determination, whether it is lawful and reasonably practicable to make such elective distribution available to the Holders of ADSs. The Depositary shall make such elective distribution available to Holders only if (i) the Company shall have timely requested that the elective distribution be made available to Holders, (ii) the Depositary shall have determined that such distribution is reasonably practicable and (iii) the Depositary shall have received satisfactory documentation within the terms of Section 5.7 of the Deposit Agreement. If the above conditions are satisfied, the Depositary shall, subject to the terms and conditions of the Deposit Agreement, establish the ADS Record Date according to paragraph (16) and Section 4.9 of the Deposit Agreement and establish procedures to enable the Holder hereof to elect the receipt of the proposed distribution in cash or in additional ADSs. If a Holder elects to receive the distribution in cash, the distribution shall be made as in the case of a distribution in cash. If the Holder hereof elects to receive the distribution in additional ADSs, the distribution shall be made as in the case of a distribution in Shares upon the terms described in the Deposit Agreement. If such elective distribution is not reasonably practicable or if the Depositary did not receive satisfactory documentation set forth in the Deposit Agreement, the Depositary shall establish an ADS Record Date upon the terms of Section 4.9 of the Deposit Agreement and, to the extent permitted by law, distribute to Holders, on the basis of the same determination as is made in England and Wales in respect of the Shares for which no election is made, either (x) cash upon the terms described in Section 4.1 of the Deposit Agreement or (y) additional ADSs representing such additional Shares, upon the terms described in Section 4.2 of the Deposit Agreement. Nothing herein or in the Deposit Agreement shall obligate the Depositary to make available to the Holder hereof a method to receive the elective distribution in Shares (rather than ADSs). There can be no assurance that the Holder hereof or Holders generally will be given the opportunity to receive elective distributions on the same terms and conditions as the holders of Shares. Notwithstanding anything contained in the Deposit Agreement to the contrary, in the event the Company fails to give the Depositary timely notice of the proposed distribution provided for in Section 4.3 of the Deposit Agreement, the Depositary agrees to use commercially reasonable efforts to perform the actions contemplated in Section 4.3 of the Deposit Agreement, and the Company, the Holders and the Beneficial Owners acknowledge that the Depositary shall have no liability for the Depositary's failure to perform the actions contemplated in Section 4.3 of the Deposit Agreement where such notice has not been so timely given, other than its failure to use commercially reasonable efforts, as provided herein.

(d) ***Distribution of Rights to Purchase Additional ADSs***: Upon the timely receipt by the Depositary of a notice indicating that the Company wishes rights to subscribe for additional Shares to be made available to Holders of ADSs, the Depositary upon consultation with the Company, shall determine, whether it is lawful and reasonably practicable to make such rights available to the Holders. The Depositary shall make such rights available to any Holders only if (i) the Company shall have timely requested that such rights be made available to Holders, (ii) the Depositary shall have received satisfactory documentation within the terms of Section 5.7 of the Deposit Agreement, and (iii) the Depositary shall have determined that such distribution of rights is reasonably practicable. If such conditions are not satisfied or if the Company requests that the rights not be made available to Holders of ADSs, the Depositary shall proceed with the sale of the rights as described below. In the event all conditions set forth above are satisfied, the Depositary shall establish the ADS Record Date (upon the terms described in Section 4.9 of the Deposit Agreement) and establish procedures to (x) distribute rights to purchase additional ADSs (by means of warrants or otherwise), (y) enable the Holders to exercise such rights (upon payment of the subscription price and of the applicable (a) fees and charges of, and expenses incurred by, the Depositary and (b) taxes), and (z) deliver ADSs upon the valid exercise of such rights. The Company shall assist the Depositary to the extent necessary in establishing such procedures. Nothing herein or in the Deposit Agreement shall obligate the Depositary to make available to the Holders a method to exercise rights to subscribe for Shares (rather than ADSs). If (i) the Company does not timely request the Depositary to make the rights available to Holders or requests that the rights not be made available to Holders, (ii) the Depositary fails to receive satisfactory documentation within the terms of Section 5,7 of the Deposit Agreement or determines it is not reasonably practicable to make the rights available to Holders, or (iii) any rights made available are not exercised and appear to be about to lapse, the Depositary shall determine whether it is lawful and reasonably practicable to sell such rights, in a riskless principal capacity, at such place and upon such terms (including public and private sale) as it may deem practicable. The Depositary shall, upon such sale, convert and distribute proceeds of such sale (net of applicable (a) fees and charges of, and expenses incurred by, the Depositary and (b) taxes) upon the terms hereof and of Section 4.1 of the Deposit Agreement. If the Depositary is unable to make any rights available to Holders upon the terms described in Section 4.4(a) of the Deposit Agreement or to arrange for the sale of the rights upon the terms described in Section 4.4(b) of the Deposit Agreement, the Depositary shall allow such rights to lapse. The Depositary shall not be liable for (i) any failure to accurately determine whether it may be lawful or practicable to make such rights available to Holders in general or any Holders in particular, (ii) any foreign exchange exposure or loss incurred in connection with such sale, or exercise, or (iii) the content of any materials forwarded to the Holders on behalf of the Company in connection with the rights distribution.

Notwithstanding anything herein or in Section 4.4 of the Deposit Agreement to the contrary, if registration (under the Securities Act or any other applicable law) of the rights or the securities to which any rights relate may be required in order for the Company to offer such rights or such securities to Holders and to sell the securities represented by such rights, the Depositary will not distribute such rights to the Holders (i) unless and until a registration statement under the Securities Act (or other applicable law) covering such offering is in effect or (ii) unless the Company furnishes the Depositary opinion(s) of counsel for the Company in the United States and counsel to the Company in any other applicable country in which rights would be distributed, in each case reasonably satisfactory to the Depositary, to the effect that the offering and sale of such securities to Holders and Beneficial Owners are exempt from, or do not require registration under, the provisions of the Securities Act or any other applicable laws. In the event that the Company, the Depositary or the Custodian shall be required to withhold and does withhold from any distribution of Deposited Property (including rights) an amount on account of taxes or other governmental charges, the amount distributed to the Holders of ADSs shall be reduced accordingly. In the event that the Depositary reasonably determines that any distribution of Deposited Property (including Shares and rights to subscribe therefor) is subject to any tax or other governmental charges which the Depositary is obligated to withhold, the Depositary may dispose of all or a portion of such Deposited Property (including Shares and rights to subscribe therefor) in such amounts and in such manner, including by public or private sale, as the Depositary deems necessary and practicable to pay any such taxes or charges.

There can be no assurance that Holders generally, or any Holder in particular, will be given the opportunity to receive or exercise rights on the same terms and conditions as the holders of Shares or be able to exercise such rights. Nothing herein or in the Deposit Agreement shall obligate the Company to file any registration statement in respect of any rights or Shares or other securities to be acquired upon the exercise of such rights.

(e) ***Distributions other than Cash, Shares or Rights to Purchase Shares***: Upon receipt of a notice indicating that the Company wishes property other than cash, Shares or rights to purchase additional Shares to be made to Holders of ADSs, the Depositary shall determine whether such distribution to Holders is lawful and reasonably practicable. The Depositary shall not make such distribution unless (i) the Company shall have requested the Depositary to make such distribution to Holders, (ii) the Depositary shall have received satisfactory documentation contemplated in Section 5.7 of the Deposit Agreement, and (iii) the Depositary shall have determined that such distribution is reasonably practicable. Upon satisfaction of such conditions, the Depositary shall distribute the property so received to the Holders of record, as of the ADS Record Date, in proportion to the number of ADSs held by them respectively and in such manner as the Depositary may deem practicable for accomplishing such distribution (i) upon receipt of payment or net of the applicable fees and charges of, and expenses incurred by, the Depositary, and (ii) net of any applicable taxes required to be withheld. The Depositary may dispose of all or a portion of the property so distributed and deposited, in such amounts and in such manner (including public or private sale) as the Depositary may deem practicable or necessary to satisfy any taxes (including applicable interest and penalties) or other governmental charges applicable to the distribution.

If the conditions above are not satisfied, the Depositary shall sell or cause such property to be sold in a public or private sale, at such place or places and upon such terms as it may deem practicable and shall (i) cause the proceeds of such sale, if any, to be converted into Dollars and (ii) distribute the proceeds of such conversion received by the Depositary (net of applicable (a) fees and charges of, and expenses incurred by, the Depositary and (b) taxes) to the Holders as of the ADS Record Date upon the terms hereof and of Section 4.1 of the Deposit Agreement. If the Depositary is unable to sell such property, the Depositary may dispose of such property for the account of the Holders in any way it deems reasonably practicable under the circumstances.

Neither the Depositary nor the Company shall be liable for (i) any failure to accurately determine whether it is lawful or practicable to make the property described in Section 4.5 of the Deposit Agreement available to Holders in general or any Holders in particular, nor (ii) any loss incurred in connection with the sale or disposal of such property.

(16) Redemption. Upon timely receipt of notice from the Company that it intends to exercise its right of redemption in respect of any of the Deposited Securities, and satisfactory documentation, and, after consultation between the Depositary and the Custodian, upon determining that such proposed redemption is practicable, the Depositary shall (to the extent practicable) provide to each Holder a notice setting forth the Company's intention to exercise the redemption rights and any other particulars set forth in the Company's notice to the Depositary. The Depositary shall instruct the Custodian to present to the Company the Deposited Securities in respect of which redemption rights are being exercised against payment of the applicable redemption price. Upon receipt of confirmation from the Custodian that the redemption has taken place and that funds representing the redemption price have been received, the Depositary shall convert, transfer, and distribute the proceeds (net of applicable (a) fees and charges of, and the expenses incurred by, the Depositary, and (b) taxes), retire ADSs and cancel ADRs, if applicable, upon delivery of such ADSs by Holders thereof and the terms set forth in Sections 4.1 and 6.2 of the Deposit Agreement. If less than all outstanding Deposited Securities are redeemed, the ADSs to be retired will be selected by lot or on a pro rata basis, as may be determined by the Depositary after consultation with the Company. The redemption price per ADS shall be the dollar equivalent of the per share amount received by the Depositary (adjusted to reflect the ADS(s)-to-Share(s) ratio) upon the redemption of the Deposited Securities represented by ADSs (subject to the terms of Section 4.8 of the Deposit Agreement and the applicable fees and charges of, and expenses incurred by, the Depositary, and applicable taxes) multiplied by the number of Deposited Securities represented by each ADS redeemed. Notwithstanding anything contained in the Deposit Agreement to the contrary, in the event the Company fails to give the Depositary timely notice of the proposed redemption provided for in Section 4.7 of the Deposit Agreement, the Depositary agrees to use commercially reasonable efforts to perform the actions contemplated in Section 4.7 of the Deposit Agreement, and the Company, the Holders and the Beneficial Owners acknowledge that the Depositary shall have no liability for the Depositary's failure to perform the actions contemplated in Section 4.7 of the Deposit Agreement where such notice has not been so timely given, other than its failure to use commercially reasonable efforts, as provided herein.

(17) Fixing of ADS Record Date. Whenever (a) the Depositary shall receive notice of the fixing of a record date by the Company for the determination of holders of Deposited Securities entitled to receive any distribution (whether in cash, Shares, rights or other distribution), (b) for any reason the Depositary causes a change in the number of Shares that are represented by each ADS, (c) the Depositary shall receive notice of any meeting of, or solicitation of consents or proxies of, holders of Shares or other Deposited Securities, or (d) the Depositary shall find it necessary or convenient in connection with the giving of any notice, solicitation of any consent or any other matter, the Depositary, after consultation with the Company to the extent reasonably practicable, shall fix the record date (the "ADS Record Date") for the determination of the Holders of ADS(s) who shall be entitled to receive such distribution, to give instructions for the exercise of voting rights at any such meeting, to give or withhold such consent, to receive such notice or solicitation or to otherwise take action, or to exercise the rights of Holders with respect to such changed number of Shares represented by each ADS. The Depositary shall make reasonable efforts to establish the ADS Record Date as closely as practicable to the applicable record date for the Deposited Securities (if any) set by the Company in England and Wales and shall not announce the establishment of any ADS Record Date prior to the relevant corporate action having been made public by the Company (if such corporate action affects the Deposited Securities). Subject to applicable law, the terms and conditions of this ADR and Sections 4.1 through 4.8 and to the other terms and conditions of the Deposit Agreement, only the Holders of ADSs at the close of business in New York on such ADS Record Date shall be entitled to receive such distribution, to give such voting instructions, to receive such notice or solicitation, or otherwise take action.

(18) Voting of Deposited Securities. As soon as practicable after receipt of notice of any meeting at which the holders of Deposited Securities are entitled to vote, or of solicitation of consents or proxies from holders of Deposited Securities, the Depositary shall fix the ADS Record Date in respect of such meeting or solicitation of consent or proxy in accordance with Section 4.9 of the Deposit Agreement. The Depositary shall, if requested by the Company in writing in a timely manner (the Depositary having no obligation to take any further action if the request shall not have been received by the Depositary at least thirty (30) days prior to the date of such vote or meeting), at the Company's expense and provided no U.S. legal prohibitions exist, distribute as soon as practicable after receipt thereof to Holders as of the ADS Record Date: (a) such notice of meeting or solicitation of consent or proxy, (b) a statement that the Holders at the close of business on the ADS Record Date will be entitled, subject to any applicable law, the provisions of the Deposit Agreement, the Articles of Association of the Company and the provisions of or governing the Deposited Securities (which provisions, if any, shall be summarized in pertinent part by the Company), to instruct the Depositary as to the exercise of the voting rights, if any, pertaining to the Deposited Securities represented by such Holder's ADSs, and (c) a brief statement as to the manner and timing (such timing to be determined after consultation with the Company) in which such voting instructions may be given to the Depositary or in which voting instructions may be deemed to have been given in accordance with Section 4.10 of the Deposit Agreement if no instructions are received prior to the deadline set for such purposes to the Depositary to give a discretionary proxy to a person designated by the Company.

Notwithstanding anything contained in the Deposit Agreement or any ADR, with the Company's prior written consent, the Depositary may, to the extent not prohibited by law or regulations, or by the requirements of the stock exchange on which the ADSs may be listed, in lieu of distribution of the materials provided to the Depositary in connection with any meeting of, or solicitation of consents or proxies from, holders of Deposited Securities, distribute to the Holders a notice that provides Holders with, or otherwise publicizes to Holders, instructions on how to retrieve such materials or receive such materials upon request (*e.g.*, by reference to a website containing the materials for retrieval or a contact for requesting copies of the materials).

The Depositary has been advised by the Company that the Articles of Association (as in effect on the date hereof), provide that voting at any meeting of shareholders is by show of hands unless a poll is demanded or the Company elects to proceed with the voting by a poll. The Depositary will not join in demanding a poll, whether or not requested to do so by Holders of ADSs. Under the Articles of Association (as in effect on the date hereof) a poll may be demanded by (i) the chairman of the meeting; (ii) by at least two members of the Company present in person (or by proxy), in each case, for the time being entitled to vote at the meeting; (iii) by any member or members of the Company present in person (or by proxy), in each case, for the time being entitled to vote at the meeting representing at least one-tenth of the total voting rights of all the members having the right to vote at the meeting; or (iv) by any member or members of the Company present in person (or by proxy), in each case, holding shares conferring a right to vote at the meeting, being shares on which an aggregate sum has been paid up equal to at least one-tenth of the total sum paid up on all the shares conferring that right.

Voting instructions may be given only in respect of a number of ADSs representing an integral number of Deposited Securities. Upon the timely receipt from a Holder of ADSs as of the ADS Record Date of voting instructions in the manner specified by the Depositary, the Depositary shall endeavor, insofar as practicable and permitted under any applicable law, the provisions of the Deposit Agreement, the Articles of Association of the Company and the provisions of the Deposited Securities, to vote, or cause the Custodian to vote, the Deposited Securities (in person or by proxy) represented by such Holder's ADSs as follows: (i) in the event voting takes place at a shareholders' meeting by a show of hands, the Depositary will instruct the Custodian to vote all Deposited Securities in accordance with the voting instructions received from a majority of Holders of ADSs who provided voting instructions, and (ii) in the event voting takes place at a shareholders' meeting by poll, the Depositary will instruct the Custodian to vote the Deposited Securities in accordance with the voting instructions received from the Holders of ADSs. If voting is by poll and the Depositary does not receive voting instructions from a Holder as of the ADS Record Date on or before the date established by the Depositary for such purpose, such Holder shall be deemed, and the Depositary shall deem such Holder, to have instructed the Depositary to give a discretionary proxy to a person designated by the Company to vote the Deposited Securities; provided, however, that no such discretionary proxy shall be given by the Depositary with respect to any matter to be voted upon as to which the Company informs the Depositary that (a) the Company does not wish such proxy to be given, (b) substantial opposition exists, or (c) the rights of holders of Deposited Securities may be adversely affected.

Deposited Securities represented by ADSs for which no timely voting instructions are received by the Depositary from the Holder shall not be voted (except (a) in the case voting is by show of hands, in which case the Depositary will instruct the Custodian to vote all Deposited Securities in accordance with the voting instructions received from a majority of Holders of ADSs who provided timely voting instructions, and (b) as contemplated in Section 4.10 of the Deposit Agreement). Neither the Depositary nor the Custodian shall under any circumstances exercise any discretion as to voting and neither the Depositary nor the Custodian shall vote, attempt to exercise the right to vote, or in any way make use of, for purposes of establishing a quorum or otherwise, the Deposited Securities represented by ADSs, except pursuant to and in accordance with the voting instructions timely received from Holders or as otherwise contemplated herein. If the Depositary timely receives voting instructions from a Holder which fail to specify the manner in which the Depositary is to vote the Deposited Securities represented by such Holder's ADSs, the Depositary will deem such Holder (unless otherwise specified in the notice distributed to Holders) to have instructed the Depositary to vote in favor of the items set forth in such voting instructions.

Notwithstanding anything else contained herein, the Depositary shall, if so requested in writing by the Company, represent all Deposited Securities (whether or not voting instructions have been received in respect of such Deposited Securities from Holders as of the ADS Record Date) for the sole purpose of establishing quorum at a meeting of shareholders.

Notwithstanding anything else contained in the Deposit Agreement or any ADR, the Depositary shall not have any obligation to take any action with respect to any meeting, or solicitation of consents or proxies, of holders of Deposited Securities if the taking of such action would violate U.S. or English laws. The Company agrees to take any and all actions reasonably necessary and as permitted by the laws of England and Wales to enable Holders and Beneficial Owners to exercise the voting rights accruing to the Deposited Securities and to deliver to the Depositary an opinion of U.S. counsel addressing any actions requested to be taken if so reasonably requested by the Depositary.

There can be no assurance that Holders generally or any Holder in particular will receive the notice described above with sufficient time to enable the Holder to return voting instructions to the Depositary in a timely manner.

(19) Changes Affecting Deposited Securities. Upon any change in nominal or par value, split-up, cancellation, consolidation or any other reclassification of Deposited Securities, or upon any recapitalization, reorganization, merger, consolidation or sale of assets affecting the Company or to which it is a party, any property which shall be received by the Depositary or the Custodian in exchange for, or in conversion of, or replacement of, or otherwise in respect of, such Deposited Securities shall, to the extent permitted by law, be treated as new Deposited Property under the Deposit Agreement, and this ADR shall, subject to the provisions of the Deposit Agreement, this ADR evidencing such ADSs and applicable law, represent the right to receive such additional or replacement Deposited Property. In giving effect to such change, split-up, cancellation, consolidation or other reclassification of Deposited Securities, recapitalization, reorganization, merger, consolidation or sale of assets, the Depositary may, with the Company's approval, and shall, if the Company shall so request, subject to the terms of the Deposit Agreement (including, without limitation, (a) the applicable fees and charges of, and expenses incurred by, the Depositary, and (b) applicable taxes) and receipt of an opinion of counsel to the Company satisfactory to the Depositary that such actions are not in violation of any applicable laws or regulations, (i) issue and deliver additional ADSs as in the case of a stock dividend on the Shares, (ii) amend the Deposit Agreement and the applicable ADRs, (iii) amend the applicable Registration Statement(s) on Form F-6 as filed with the Commission in respect of the ADSs, (iv) call for the surrender of outstanding ADRs to be exchanged for new ADRs, and (v) take such other actions as are appropriate to reflect the transaction with respect to the ADSs. The Company agrees to, jointly with the Depositary, amend the Registration Statement on Form F-6 as filed with the Commission to permit the issuance of such new form of ADRs. Notwithstanding the foregoing, in the event that any Deposited Property so received may not be lawfully distributed to some or all Holders, the Depositary may, with the Company's approval, and shall, if the Company requests, subject to receipt of an opinion of Company's counsel satisfactory to the Depositary that such action is not in violation of any applicable laws or regulations, sell such Deposited Property at public or private sale, at such place or places and upon such terms as it may deem proper and may allocate the net proceeds of such sales (net of applicable (a) fees and charges of, and expenses incurred by, the Depositary and (b) taxes) for the account of the Holders otherwise entitled to such Deposited Property upon an averaged or other practicable basis without regard to any distinctions among such Holders and distribute the net proceeds so allocated to the extent practicable as in the case of a distribution received in cash pursuant to Section 4.1 of the Deposit Agreement. The Depositary shall not be responsible for (i) any failure to determine that it may be lawful or practicable to make such Deposited Property available to Holders in general or to any Holder in particular, (ii) any foreign exchange exposure or loss incurred in connection with such sale, or (iii) any liability to the purchaser of such Deposited Property.

(20) Exoneration. Notwithstanding anything contained in the Deposit Agreement or any ADR, neither the Depositary nor the Company shall be obligated to do or perform any act which is inconsistent with the provisions of the Deposit Agreement or incur any liability (to the extent not limited by paragraph (25) hereof and Section 7.8 (b)) (i) of the Deposit Agreement) (i) if the Depositary, the Custodian, the Company or their respective agents shall be prevented or forbidden from, hindered or delayed in, doing or performing any act or thing required or contemplated by the terms of the Deposit Agreement and this ADR, by reason of any provision of any present or future law or regulation of the United States, England and Wales or any other country, or of any other governmental authority or regulatory authority or stock exchange, or on account of potential criminal or civil penalties or restraint, or by reason of any provision, present or future, of the Articles of Association of the Company or any provision of or governing any Deposited Securities, or by reason of any act of God or war or other circumstances beyond its control (including, without limitation, fire, flood, earthquake, tornado, hurricane, tsunami, explosion, or other natural disaster, nationalization, expropriation, currency restrictions, work stoppage, strikes, civil unrest, acts of war (whether declared or not) or terrorism, revolution, rebellion, embargo, computer failure, failure of public infrastructure (including communication or utility failure), failure of common carriers, nuclear, cyber or biochemical incident, any pandemic, epidemic or other prevalent disease or illness with an actual or probable threat to human life, any quarantine order or travel restriction imposed by a governmental authority or other competent public health authority, or the failure or unavailability of the United States Federal Reserve Bank (or other central banking system) or DTC (or other clearing system)), (ii) by reason of any exercise of, or failure to exercise, any discretion provided for in the Deposit Agreement or in the Articles of Association of the Company or provisions of or governing Deposited Securities, (iii) for any action or inaction in reliance upon the advice of or information from legal counsel, accountants, any person presenting Shares for deposit, any Holder, any Beneficial Owner or authorized representative thereof, or any other person believed by it in good faith to be competent to give such advice or information, (iv) for the inability by a Holder or Beneficial Owner to benefit from any distribution, offering, right or other benefit which is made available to holders of Deposited Securities but is not, under the terms of the Deposit Agreement, made available to Holders of ADSs, (v) for any action or inaction of any clearing or settlement system (any participant thereof) for the Deposited Property or the ADSs, or (vi) for any consequential or punitive damages (including lost profits) for any breach of the terms of the Deposit Agreement. The Depositary, its controlling persons, its agents, any Custodian and the Company, its controlling persons and its agents may rely and shall be protected in acting upon any written notice, request or other document reasonably believed by it to be genuine and to have been signed or presented by the proper party or parties.

(21) Standard of Care. The Company and the Depositary assume no obligation and shall not be subject to any liability under the Deposit Agreement or this ADR to any Holder(s) or Beneficial Owner(s), except that the Company and the Depositary agree to perform their respective obligations specifically set forth in the Deposit Agreement or this ADR without negligence or bad faith. Without limitation of the foregoing, neither the Depositary, nor the Company, nor any of their respective controlling persons, or agents, shall be under any obligation to appear in, prosecute or defend any action, suit or other proceeding in respect of any Deposited Property or in respect of the ADSs, which in its reasonable opinion may involve it in expense or liability, unless indemnity satisfactory to it against all expense (including fees and disbursements of counsel) and liability be furnished as often as may be required (and no Custodian shall be under any obligation whatsoever with respect to such proceedings, the responsibility of the Custodian being solely to the Depositary).

The Depositary and its agents shall not be liable for any failure to carry out any instructions to vote any of the Deposited Securities, or for the manner in which any vote is cast or the effect of any vote, provided that any such action or omission is in good faith and without negligence and in accordance with the terms of the Deposit Agreement. The Depositary shall not incur any liability for any failure to accurately determine that any distribution or action may be lawful or reasonably practicable, for the content of any information submitted to it by the Company for distribution to the Holders or for any inaccuracy of any translation thereof, for any investment risk associated with acquiring an interest in the Deposited Property, for the validity or worth of the Deposited Property, for the value of any Deposited Property or any distribution thereon, for any interest on Deposited Property, for any tax consequences that may result from the ownership of ADSs, Shares or other Deposited Property, for the credit-worthiness of any third party, for allowing any rights to lapse upon the terms of the Deposit Agreement, for the failure or timeliness of any notice from the Company, or for any action of or failure to act by, or any information provided or not provided by, DTC or any DTC Participant.

The Depositary shall not be liable for any acts or omissions made by a successor depositary whether in connection with a previous act or omission of the Depositary or in connection with any matter arising wholly after the removal or resignation of the Depositary, provided that in connection with the issue out of which such potential liability arises the Depositary performed its obligations without negligence or bad faith while it acted as Depositary for the Company.

(22) Resignation and Removal of the Depositary; Appointment of Successor Depositary. The Depositary may at any time resign as Depositary under the Deposit Agreement by written notice of resignation delivered to the Company, such resignation to be effective on the earlier of (i) the 90th day after delivery thereof to the Company (whereupon the Depositary shall be entitled to take the actions contemplated in Section 6.2 of the Deposit Agreement), or (ii) the appointment by the Company of a successor depositary and its acceptance of such appointment as provided in the Deposit Agreement. The Depositary may at any time be removed by the Company by written notice of such removal, which removal shall be effective on the later of (i) the 90th day after delivery thereof to the Depositary (whereupon the Depositary shall be entitled to take the actions contemplated in Section 6.2 of the Deposit Agreement), or (ii) upon the appointment by the Company of a successor depositary and its acceptance of such appointment as provided in the Deposit Agreement. In case at any time the Depositary acting hereunder shall resign or be removed, the Company shall use its best efforts to appoint a successor depositary, which shall be a bank or trust company having an office in the Borough of Manhattan, the City of New York. Every successor depositary shall be required by the Company to execute and deliver to its predecessor and to the Company an instrument in writing accepting its appointment hereunder, and thereupon such successor depositary, without any further act or deed (except as required by applicable law), shall become fully vested with all the rights, powers, duties and obligations of its predecessor (other than as contemplated in Sections 5.8 and 5.9 of the Deposit Agreement). The predecessor depositary, upon payment of all sums due it and on the written request of the Company shall (i) execute and deliver an instrument transferring to such successor all rights and powers of such predecessor hereunder (other than as contemplated in Sections 5.8 and 5.9 of the Deposit Agreement), (ii) duly assign, transfer and deliver all of the Depositary's right, title and interest to the Deposited Property to such successor, and (iii) deliver to such successor a list of the Holders of all outstanding ADSs and such other information relating to ADSs and Holders thereof as the successor may reasonably request. Any such successor depositary shall promptly provide notice of its appointment to such Holders. Any entity into or with which the Depositary may be merged or consolidated shall be the successor of the Depositary without the execution or filing of any document or any further act.

(23) Amendment/Supplement. Subject to the terms and conditions of this paragraph 23, and Section 6.1 of the Deposit Agreement and applicable law, this ADR and any provisions of the Deposit Agreement may at any time and from time to time be amended or supplemented by written agreement between the Company and the Depositary in any respect which they may deem necessary or desirable without the prior written consent of the Holders or Beneficial Owners. Any amendment or supplement which shall impose or increase any fees or charges (other than charges in connection with foreign exchange control regulations, and taxes and other governmental charges, delivery and other such expenses), or which shall otherwise materially prejudice any substantial existing right of Holders or Beneficial Owners, shall not, however, become effective as to outstanding ADSs until the expiration of thirty (30) days after notice of such amendment or supplement shall have been given to the Holders of outstanding ADSs. Notice of any amendment to the Deposit Agreement or any ADR shall not need to describe in detail the specific amendments effectuated thereby, and failure to describe the specific amendments in any such notice shall not render such notice invalid, provided, however, that, in each such case, the notice given to the Holders identifies a means for Holders and Beneficial Owners to retrieve or receive the text of such amendment (*e.g.*, upon retrieval from the Commission's, the Depositary's or the Company's website or upon request from the Depositary). The parties hereto agree that any amendments or supplements which (i) are reasonably necessary (as agreed by the Company and the Depositary) in order for (a) the ADSs to be registered on Form F-6 under the Securities Act or (b) the ADSs to be settled solely in electronic book-entry form and (ii) do not in either such case impose or increase any fees or charges to be borne by Holders, shall be deemed not to materially prejudice any substantial rights of Holders or Beneficial Owners. Every Holder and Beneficial Owner at the time any amendment or supplement so becomes effective shall be deemed, by continuing to hold such ADSs, to consent and agree to such amendment or supplement and to be bound by the Deposit Agreement and this ADR, if applicable, as amended or supplemented thereby. In no event shall any amendment or supplement impair the right of the Holder to surrender such ADS and receive therefor the Deposited Securities represented thereby, except in order to comply with mandatory provisions of applicable law. Notwithstanding the foregoing, if any governmental body should adopt new laws, rules or regulations which would require an amendment of, or supplement to, the Deposit Agreement to ensure compliance therewith, the Company and the Depositary may amend or supplement the Deposit Agreement and this ADR at any time in accordance with such changed laws, rules or regulations. Such amendment or supplement to the Deposit Agreement and this ADR in such circumstances may become effective before a notice of such amendment or supplement is given to Holders or within any other period of time as required for compliance with such laws, rules or regulations.

(24) Termination. The Depositary shall, at any time at the written direction of the Company, terminate the Deposit Agreement by distributing notice of such termination to the Holders of all ADSs then outstanding at least thirty (30) days prior to the date fixed in such notice for such termination. If ninety (90) days shall have expired after (i) the Depositary shall have delivered to the Company a written notice of its election to resign, or (ii) the Company shall have delivered to the Depositary a written notice of the removal of the Depositary, and, in either case, a successor depositary shall not have been appointed and accepted its appointment as provided in Section 5.4 of the Deposit Agreement, the Depositary may terminate the Deposit Agreement by distributing notice of such termination to the Holders of all ADSs then outstanding at least thirty (30) days prior to the date fixed in such notice for such termination. The date so fixed for termination of the Deposit Agreement in any termination notice so distributed by the Depositary to the Holders of ADSs is referred to as the "Termination Date". Until the Termination Date, the Depositary shall continue to perform all of its obligations under the Deposit Agreement, and the Holders and Beneficial Owners will be entitled to all of their rights under the Deposit Agreement. If any ADSs shall remain outstanding after the Termination Date, the Registrar and the Depositary shall not, after the Termination Date, have any obligation to perform any further acts under the Deposit Agreement, except that the Depositary shall, subject, in each case, to the terms and conditions of the Deposit Agreement, continue to (i) collect dividends and other distributions pertaining to Deposited Securities, (ii) sell Deposited Property received in respect of Deposited Securities, (iii) deliver Deposited Securities, together with any dividends or other distributions received with respect thereto and the net proceeds of the sale of any other Deposited Property, in exchange for ADSs surrendered to the Depositary (after deducting, or charging, as the case may be, in each case, the fees and charges of, and expenses incurred by, the Depositary, and all applicable taxes or governmental charges for the account of the Holders and Beneficial Owners, in each case upon the terms set forth in Section 5.9 of the Deposit Agreement), and (iv) take such actions as may be required under applicable law in connection with its role as Depositary under the Deposit Agreement. At any time after the Termination Date, the Depositary may sell the Deposited Property then held under the Deposit Agreement and shall after such sale hold un-invested the net proceeds of such sale, together with any other cash then held by it under the Deposit Agreement, in an un-segregated account and without liability for interest, for the pro rata benefit of the Holders whose ADSs have not theretofore been surrendered. After making such sale, the Depositary shall be discharged from all obligations under the Deposit Agreement except (i) to account for such net proceeds and other cash (after deducting, or charging, as the case may be, in each case, the fees and charges of, and expenses incurred by, the Depositary, and all applicable taxes or governmental charges for the account of the Holders and Beneficial Owners, in each case upon the terms set forth in Section 5.9 of the Deposit Agreement), and (ii) as may be required at law in connection with the termination of the Deposit Agreement. After the Termination Date, the Company shall be discharged from all obligations under the Deposit Agreement, except for its obligations to the Depositary under Sections 5.8, 5.9 and 7.6 of the Deposit Agreement. The obligations under the terms of the Deposit Agreement of Holders and Beneficial Owners of ADSs outstanding as of the Termination Date shall survive the Termination Date and shall be discharged only when the applicable ADSs are presented by their Holders to the Depositary for cancellation under the terms of the Deposit Agreement (except as specifically provided in the Deposit Agreement).

Notwithstanding anything contained in the Deposit Agreement or any ADR, in connection with the termination of the Deposit Agreement, the Depositary may, independently and without the need for any action by the Company, make available to Holders of ADSs a means to withdraw the Deposited Securities represented by their ADSs and to direct the deposit of such Deposited Securities into an unsponsored American depositary shares program established by the Depositary, upon such terms and conditions as the Depositary may deem reasonably appropriate, subject however, in each case, to satisfaction of the applicable registration requirements by the unsponsored American depositary shares program under the Securities Act, and to receipt by the Depositary of payment of the applicable fees and charges of, and reimbursement of the applicable expenses incurred by, the Depositary.

(25) Compliance with, and No Disclaimer under, U.S. Securities Laws. (a) Notwithstanding any provisions in this ADR or the Deposit Agreement to the contrary, the withdrawal or delivery of Deposited Securities will not be suspended by the Company or the Depositary except as would be permitted by Instruction I.A.(1) of the General Instructions to the Form F-6 Registration Statement, as amended from time to time, under the Securities Act.

(b) Each of the parties to the Deposit Agreement (including, without limitation, each Holder and Beneficial Owner) acknowledges and agrees that no provision of the Deposit Agreement or any ADR shall, or shall be deemed to, disclaim any liability under the Securities Act or the Exchange Act, in each case to the extent established under applicable U.S. laws.

(26) No Third Party Beneficiaries/Acknowledgements. The Deposit Agreement is for the exclusive benefit of the parties hereto (and their successors) and shall not be deemed to give any legal or equitable right, remedy or claim whatsoever to any other person, except to the extent specifically set forth in the Deposit Agreement. Nothing in the Deposit Agreement shall be deemed to give rise to a partnership or joint venture among the parties nor establish a fiduciary or similar relationship among the parties. The parties hereto acknowledge and agree that (i) Citibank and its Affiliates may at any time have multiple banking relationships with the Company, the Holders, the Beneficial Owners, and their respective Affiliates, (ii) Citibank and its Affiliates may own and deal in any class of securities of the Company and its Affiliates and in ADSs, and may be engaged at any time in transactions in which parties adverse to the Company, the Holders, the Beneficial Owners or their respective Affiliates may have interests, (iii) the Depositary and its Affiliates may from time to time have in their possession non-public information about the Company, the Holders, the Beneficial Owners, and their respective Affiliates, (iv) nothing contained in the Deposit Agreement shall (a) preclude Citibank or any of its Affiliates from engaging in such transactions or establishing or maintaining such relationships, or (b) obligate Citibank or any of its Affiliates to disclose such information, transactions or relationships, or to account for any profit made or payment received in such transactions or relationships, (v) the Depositary shall not be deemed to have knowledge of any information any other division of Citibank or any of its Affiliates may have about the Company, the Holders, the Beneficial Owners, or any of their respective Affiliates, and (vi) the Company, the Depositary, the Custodian and their respective agents and controlling persons may be subject to the laws and regulations of jurisdictions other than the United States, England, and the authority of courts and regulatory authorities of such other jurisdictions, and, consequently, the requirements and the limitations of such other laws and regulations, and the decisions and orders of such other courts and regulatory authorities, may affect the rights and obligations of the parties to the Deposit Agreement.

(27) Governing Law / Waiver of Jury Trial. The Deposit Agreement, the ADRs and the ADSs shall be interpreted in accordance with, and all rights hereunder and thereunder and provisions hereof and thereof shall be governed by, the laws of the State of New York applicable to contracts made and to be wholly performed in that State. Notwithstanding anything contained in the Deposit Agreement, any ADR or any present or future provisions of the laws of the State of New York, the rights of holders of Shares and of any other Deposited Securities and the obligations and duties of the Company in respect of the holders of Shares and other Deposited Securities, as such, shall be governed by the laws of England and Wales (or, if applicable, such other laws as may govern the Deposited Securities).

EACH OF THE PARTIES TO THE DEPOSIT AGREEMENT (INCLUDING, WITHOUT LIMITATION, EACH HOLDER AND BENEFICIAL OWNER) IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING AGAINST THE COMPANY AND/OR THE DEPOSITARY ARISING OUT OF, OR RELATING TO, THE DEPOSIT AGREEMENT, ANY ADR AND ANY TRANSACTIONS CONTEMPLATED THEREIN (WHETHER BASED ON CONTRACT, TORT, COMMON LAW OR OTHERWISE).

(ASSIGNMENT AND TRANSFER SIGNATURE LINES)

FOR VALUE RECEIVED, the undersigned Holder hereby sell(s), assign(s) and transfer(s) unto _____ whose taxpayer identification number is _____ and whose address including postal zip code is _____, the within ADR and all rights thereunder, hereby irrevocably constituting and appointing _____ attorney-in-fact to transfer said ADR on the books of the Depositary with full power of substitution in the premises.

Dated:

Name: _____

By:
Title:

NOTICE: The signature of the Holder to this assignment must correspond with the name as written upon the face of the within instrument in every particular, without alteration or enlargement or any change whatsoever.

If the endorsement be executed by an attorney, executor, administrator, trustee or guardian, the person executing the endorsement must give his/her full title in such capacity and proper evidence of authority to act in such capacity, if not on file with the Depositary, must be forwarded with this ADR.

_____
SIGNATURE GUARANTEED

All endorsements or assignments of ADRs must be guaranteed by a member of a Medallion Signature Program approved by the Securities Transfer Association, Inc.

Legends

[The ADRs issued in respect of Partial Entitlement American Depositary Shares shall bear the following legend on the face of the ADR: "This ADR evidences ADSs representing 'partial entitlement' Shares of the Company and as such do not entitle the holders thereof to the same per-share entitlement as other Shares (which are 'full entitlement' Shares) issued and outstanding at such time. The ADSs represented by this ADR shall entitle holders to distributions and entitlements identical to other ADSs when the Shares represented by such ADSs become 'full entitlement' Shares."]

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

The Board of Directors PureTech Health plc:

We consent to the use of our report included herein and to the reference to our firm under the heading “Statement by Experts” in Amendment No. 1 to the registration statement on Form 20-F.

/s/ KPMG LLP

15 Canada Square London
E14 5GL United Kingdom
9/11/2020