

## PureTech Founded Entity Seaport Therapeutics Announces the Publication of New Research Demonstrating Increased Lymphatic Transport with up to 55 Percent Drug Absorption via Lymphatics with Glyph™ Platform

February 12, 2025

RNS Number : 7995W  
PureTech Health PLC  
12 February 2025

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*Published data shows new site of Glyph prodrug attachment demonstrated highest reported level of lymphatic transport to date of the studied immunomodulatory drug*

*New linkers display up to two-fold higher release in lymph nodes compared to top-performing previously reported linkers*

*Research builds on prior evidence supporting the versatility of Glyph platform*

PureTech Health plc (Nasdaq: PRTC, LSE: PRTC) ("PureTech" or the "Company"), a clinical-stage biotherapeutics company, noted that its Founded Entity, [Seaport Therapeutics](#), ("Seaport") a clinical-stage biopharmaceutical company that is advancing novel neuropsychiatric medicines with a proven strategy and team, today announced the publication of new data showcasing the Glyph™ platform's unique ability to enhance drug transport through the lymphatic system for increased therapeutic exposure. The paper, published in [Molecular Pharmaceutics](#), is the first to show the impact of changing the drug attachment point of a lymph-directed prodrug on lymphatic drug transport and targeted drug exposure. It also deepens the evidence supporting Glyph's ability to render a wide variety of molecules, including immunomodulators, more amenable to lymphatic transport and thus providing them with direct access to the immune system.

The full text of the announcement from Seaport is as follows:

### **Seaport Therapeutics Announces the Publication of New Research Demonstrating Increased Lymphatic Transport with up to 55 Percent Drug Absorption via Lymphatics with Glyph™ Platform**

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*Research builds on prior evidence supporting the versatility of Glyph platform*

**BOSTON, February 12, 2025** **Ð** [Seaport Therapeutics](#) ("Seaport" or the "Company"), a clinical-stage biopharmaceutical company that is advancing novel neuropsychiatric medicines with a proven strategy and team, today announced the publication of new data showcasing the Glyph™ platform's unique ability to enhance drug transport through the lymphatic system for increased therapeutic exposure. The paper, published in [Molecular Pharmacetics](#), is the first to show the impact of changing the drug attachment point of a lymph-directed prodrug on lymphatic drug transport and targeted drug exposure. It also deepens the evidence supporting Glyph's ability to render a wide variety of molecules, including immunomodulators, more amenable to lymphatic transport and thus providing them with direct access to the immune system.

The study evaluated ways of modifying mycophenolic acid (MPA), an immunomodulatory drug, to improve its absorption through the lymphatic system, and increase its concentration in lymph nodes, shown in preclinical models. Specifically, a comparison between distinct attachment points on the same drug molecule was made. A newly examined phenol attachment point showed the highest lymphatic transport of MPA reported to date - approximately 55 percent - and up to two-fold higher release in lymph nodes compared to the previously reported acid attachment point. The research demonstrated the impact of linker characteristics on the extent of lymphatic transport and release in the lymph nodes. Overall, these results help to underscore the benefits of a tailored lymphatic-targeting prodrug design approach.

"This research expands our understanding of lymphatic delivery and offers new insights for more effectively designing drugs with higher exposures at their intended targets, including immunomodulatory drugs used to treat a wide range of diseases," said Christopher Porter, Ph.D., an original Co-inventor of the Glyph technology and Director of the Monash Institute of Pharmaceutical Sciences at Monash University in Melbourne. "This study highlights the importance of integrating a careful and individualized balance of intestinal stability, transport efficiency and release in the mesenteric lymph nodes to maximize therapeutic exposures as part of a tailored prodrug design approach."

With the Glyph platform, drugs are absorbed like dietary fats through the intestinal lymphatic system and transported into circulation. The Glyph platform has the potential to be widely applied to many therapeutic molecules that have high first-pass metabolism leading to low bioavailability and/or side effects, including liver enzyme elevations or hepatotoxicity. Seaport exclusively licensed this technology from Monash University based on the pioneering research of the Porter Research Group, including co-inventors Professor Porter and Jamie Simpson, Ph.D., who is now Head of Chemistry at Seaport Therapeutics.

"Our Glyph platform allows for a bespoke design approach, and this research reinforces the significance of the innovation behind our prodrug chemistry technology," said Daniel Bonner, Ph.D., Co-founder, Senior Vice President, Platform, at Seaport Therapeutics. "Most importantly, Glyph has been clinically validated with demonstrated proof-of-concept data in humans and is being applied across Seaport's pipeline of novel neuropsychiatric medicines, with enormous potential across a broad range of applications beyond CNS and neuropsychiatry."

#### **About the Glyph™ Platform**

Glyph™ is Seaport's proprietary technology platform which uses the lymphatic system to enable and enhance the oral administration of drugs. With the Glyph platform, drugs are absorbed like dietary fats through the intestinal lymphatic system and transported into circulation. The Glyph platform has the potential to be widely applied to many therapeutic molecules that have high first-pass metabolism leading to low bioavailability and/or side effects, including liver enzyme elevations or hepatotoxicity. Seaport exclusively licensed this technology from Monash University based on the pioneering research of the Porter Research Group. Advanced initially at PureTech Health and now at Seaport, Glyph has been applied to create therapeutic candidates for the Company's pipeline resulting in new intellectual property, including composition of matter. The group and its collaborators have published research in [Nature Metabolism](#), [Frontiers in Pharmacology](#), [Journal of Controlled Release](#) and [Molecular Pharmacetics](#) supporting the Glyph platform's capabilities. See Glyph in action [here](#).

#### **About Seaport Therapeutics**

Seaport Therapeutics is a clinical-stage biopharmaceutical company advancing the development of novel neuropsychiatric medicines in areas of high unmet patient needs. The Company has a proven strategy of advancing clinically validated mechanisms previously held back by limitations that are overcome with its proprietary Glyph™ technology platform. All the therapeutic candidates in its pipeline of first and best-in-class medicines are based on the Glyph platform, which is uniquely designed to enable oral bioavailability, bypass first-pass metabolism and reduce liver enzyme elevations or hepatotoxicity and other side effects. Seaport is led

by an experienced team that invented and advanced important neuropsychiatric medicines and are guided by an extensive network of renowned scientists, clinicians and key opinion leaders. For more information, please visit [www.seaporttx.com](http://www.seaporttx.com).

### **About PureTech Health**

PureTech is a clinical-stage biotherapeutics company dedicated to giving life to new classes of medicine to change the lives of patients with devastating diseases. The Company has created a broad and deep pipeline through its experienced research and development team and its extensive network of scientists, clinicians and industry leaders that is being advanced both internally and through its Founded Entities. PureTech's R&D engine has resulted in the development of 29 therapeutics and therapeutic candidates, including three that have been approved by the U.S. Food and Drug Administration. A number of these programs are being advanced by PureTech or its Founded Entities in various indications and stages of clinical development, including registration enabling studies. All of the underlying programs and platforms that resulted in this pipeline of therapeutic candidates were initially identified or discovered and then advanced by the PureTech team through key validation points.

For more information, visit [www.puretechhealth.com](http://www.puretechhealth.com) or connect with us on X (formerly Twitter) @puretechh.

### **Cautionary Note Regarding Forward-Looking Statements**

This press release contains statements that are or may be forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this press release that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation those related to Seaport's development plans for its pipeline of neuropsychiatric therapeutics based on the Glyph Platform, the applicability of the platform beyond neuropsychiatry, potential benefits to patients, and Seaport's and our future prospects, developments and strategies. The forward-looking statements are based on current expectations and are subject to known and unknown risks, uncertainties and other important factors that could cause actual results, performance and achievements to differ materially from current expectations, including, but not limited to, those risks, uncertainties and other important factors described under the caption "Risk Factors" in our Annual Report on Form 20-F for the year ended December 31, 2023, filed with the SEC and in our other regulatory filings. These forward-looking statements are based on assumptions regarding the present and future business strategies of the Company and the environment in which it will operate in the future. Each forward-looking statement speaks only as at the date of this press release. Except as required by law and regulatory requirements, we disclaim any obligation to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise.

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