



PureTech Health Announces Collaboration with Roche to Advance Technology for Oral Administration of Antisense Oligonucleotides

July 20, 2018

PureTech Health to receive up to \$36 million in upfront payments, research support, and early preclinical milestones and is eligible to potentially receive over \$1 billion in development milestones

PureTech Health plc (LSE: PRTC) ("PureTech Health"), a clinical-stage biopharmaceutical company developing novel medicines focused on the Brain-Immune-Gut (BIG) Axis, today announced that it has entered into a multiyear collaboration with F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc., to advance PureTech's milk-derived exosome platform technology for the oral administration of Roche's antisense oligonucleotide platform. Under the terms of the agreement, PureTech Health will receive up to \$36 million, including upfront payments, research support, and early preclinical milestones. PureTech Health will be eligible to potentially receive development milestone payments of over \$1 billion and additional sales milestones and royalties for an undisclosed number of products.

PureTech's milk exosome-based technology is uniquely designed to facilitate the oral administration of complex payloads such as nucleic acids, peptides, and small molecules. These exosomes are believed to traffic via lymphatic circulation and could potentially enable the targeting of immune cells in novel ways.

Daphne Zohar, Co-founder and Chief Executive Officer of PureTech Health, said: "We are excited to accelerate the development of this promising technology from our internal lymphatic and immune cell trafficking programmes. The expertise and resources that Roche is bringing to the collaboration will help us to potentially address one of the biggest challenges in oligonucleotide-based therapeutic development: oral administration of nucleic acids."

PureTech Health has been advancing internal research and development projects that focus on the Brain-Immune-Gut (BIG) Axis, with an emphasis on lymphatics and immune cell trafficking to modulate immunity in a tissue-specific manner. These internal pipeline programmes are being consolidated into a separate division of PureTech Health called Ariya. PureTech's Internal division, which includes the milk-derived exosome technology, has generated compelling pre-clinical data and secured key intellectual property for its lymphatic and immune cell trafficking programmes.

About PureTech's Milk Exosomes Technology

Milk exosomes represent a significant opportunity to potentially resolve the long-standing challenge of oral bioavailability of macromolecules and complex small molecules. Exosomes, which contain mixtures of lipids, proteins and nucleic acids, play a critical physiologic role in intercellular communication and the transport of macromolecules between cells and tissues. Mammalian-derived exosomes have attractive potential as vehicles for the administration of a variety of drug payloads, especially nucleic acids, since their natural composition will likely provide superior tolerability over the variety of synthetic polymers currently in use. Most sources of mammalian exosomes are not suitable or viable as vehicles for oral administration of drugs due to their lack of stability under the harsh physiologic conditions associated with transit through the stomach and small intestine; however, the milk-derived exosomes that form the basis for PureTech's internally-developed technology have evolved naturally and specifically to accomplish the task of oral transport of complex biological molecules. The technology is based on research conducted by PureTech Health and its academic collaborators, including Ramesh Gupta, PhD, Agnes Brown Duggan Chair in Oncological Research at the James Graham Brown Cancer Center, and Professor in the Department of Pharmacology and Toxicology at University of Louisville, and exclusively licensed to PureTech Health.

About PureTech Health

PureTech Health (LSE: PRTC) is an advanced, clinical-stage biopharmaceutical company developing novel medicines around the Brain-Immune-Gut (BIG) Axis. The Company has developed deep insight into the connection between these systems and the resulting role in many chronic diseases, which represent the majority of healthcare spend and have proven resistant to established therapeutic approaches. By harnessing this emerging field of human biology, PureTech Health has developed new categories of medicines with the potential to have great impact on people with serious diseases.

PureTech Health is advancing a rich pipeline of innovative therapies across two divisions. Its Affiliates division includes two product candidates that are preparing for potential regulatory approval in the United States and Europe and a number of clinical and pre-clinical programmes. These affiliates have developed ground-breaking platforms and therapeutic candidates in collaboration with some of the world's leading scientific experts.

PureTech's Internal division is advancing a pipeline fuelled by recent discoveries in lymphatics and immune cell trafficking to modulate disease in a tissue-specific manner. These programmes build on a new understanding of the trafficking and biodistribution of various immune system components in order to develop targeted therapies for diseases with major unmet needs including cancer and autoimmune and neuroimmune disorders.

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

Forward Looking Statement

This press release contains statements that are or may be forward-looking statements, including statements that relate to the company's future prospects, developments and strategies. The forward-looking statements are based on current expectations and are subject to known and unknown risks and uncertainties that could cause actual results, performance and achievements to differ materially from current expectations, including, but not

limited to, those risks and uncertainties described in the risk factors included in the regulatory filings for PureTech Health plc. 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, neither the company nor any other party intends to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise.

This announcement contains inside information for the purposes of Article 7 of Regulation (EU) 596/2014.