



PureTech Health Affiliate Karuna Therapeutics Completes Extended \$80 Million Series B Financing

April 1, 2019

Total includes newly announced \$12 million in extension funding

Funding to drive investigation of further potential indications for lead product candidate, KarXT

First US Patent awarded for KarXT

PureTech Health plc (LSE: PRTC) ("PureTech Health"), an advanced biopharmaceutical company developing novel medicines for dysfunctions of the Brain-Immune-Gut (BIG) axis, today announced that its affiliate Karuna Therapeutics, Inc. ("Karuna") has raised an additional \$12 million as an extension of its Series B financing announced in March 2019. This brings the round total to \$80 million, including the issuance of \$5 million in shares upon conversion of debt into equity. The extension funding is provided by Sofinnova Investments, which will also hold an observer seat on the Company's board of directors.

Additionally, Karuna recently was awarded its first US patent for its lead product candidate, KarXT, currently being evaluated in a Phase 2 clinical trial as a potential treatment for acute psychosis in patients with schizophrenia.

Eric Elenko, PhD, chief innovation officer at PureTech Health, said: "Top tier investors have responded strongly to the promise of Karuna's KarXT and its underlying muscarinic receptor-targeting approach to neuropsychiatric disorders. We welcome their support in driving the expansion of this platform's potential to address a number of underserved patient populations."

The full text announcement from Karuna Therapeutics is as follows:

Karuna Completes \$80 Million Series B Financing

\$12 million in extension funding announced

Karuna awarded US Patent covering lead product candidate, KarXT

BOSTON, April 1, 2019 – [Karuna Therapeutics, Inc.](#) ("Karuna") focused on targeting muscarinic receptors for the treatment of neuropsychiatric disorders, including psychosis in schizophrenia, psychosis in Alzheimer's disease, and pain, has raised an additional \$12 million of funding as an extension of its Series B financing previously announced in March 2019. This brings the total Series B financing round to \$80 million, including the issuance of \$5 million in shares upon conversion of debt into equity. In addition, Karuna was recently awarded its first US patent for its proprietary [KarXT](#) technology.

The new investment comes from Sofinnova Investments, which joins initial Series B financing participants ARCH Venture Partners, Fidelity Management & Research Company, Eventide Asset Management, Pivotal bioVenture Partners, Partner Fund Management, Wellcome Trust, Sands Capital, Alexandria Venture Investments, and founder PureTech Health. Sofinnova Investments will hold an observer seat on Karuna's board of directors.

"We are grateful for the support of all our investors who share our commitment to developing and delivering novel therapies to patients with disabling neuropsychiatric disorders," said Steve Paul, MD, Karuna's chairman and chief executive officer. "The significant funding of Karuna's Series B will allow our team to further explore KarXT's therapeutic benefit in new indications outside of our ongoing Phase 2 clinical trial for the treatment of acute psychosis in patients with schizophrenia, including geriatric psychosis and pain and advance development of novel KarXT formulations and our early stage discovery pipeline."

"The Karuna team has developed a novel muscarinic receptor programme which we believe offers exciting potential for treating several neuropsychiatric indications where demand for new therapies remains largely unmet," said James Healey, MD, PhD, general partner of Sofinnova Investments. "I look forward to helping the company in its efforts to realize the full potential of KarXT and potentially expanding its pipeline for multiple differentiated programmes targeting neuropsychiatric disorders affecting millions of patients worldwide."

KarXT, Karuna's lead product candidate, is currently being evaluated in a Phase 2 clinical trial as a potential treatment for acute psychosis in patients with schizophrenia. Proceeds from the financing will be used to advance the development of KarXT into several new indications, including geriatric psychosis and pain, progress new formulations of KarXT, expand the pipeline, and continue to build company infrastructure.

On March 26, 2019 the United States Patent and Trademark Office (USPTO) issued US Patent No. 10,238,643, that covers the combination of xanomeline and trospium (known as KarXT), where the use of trospium is designed to alleviate the side effects of xanomeline. This intellectual property forms the basis of Karuna's KarXT programme being evaluated across a variety of diseases in ongoing and planned clinical work. Karuna co-founder and chief operating officer, Andrew Miller, PhD, is a named inventor on the KarXT patent.

About KarXT

[KarXT](#) (Karuna-Xanomeline-Trospium), Karuna's lead product candidate for the treatment of psychosis in schizophrenia, consists of xanomeline, a novel muscarinic cholinergic receptor agonist that has demonstrated therapeutic benefit in placebo-controlled human trials in schizophrenia and Alzheimer's disease, and trospium chloride, an FDA-approved and well-established muscarinic receptor antagonist that has been shown to not

meaningfully enter the central nervous system (CNS). KarXT is designed to preferentially target and stimulate M1/M4 muscarinic receptors in the brain while inhibiting their stimulation in peripheral tissues to improve tolerability. Karuna has completed two Phase 1 clinical trials in which clinically meaningful reductions in side effects were observed compared to xanomeline alone and in which KarXT was well tolerated in healthy volunteers. A proprietary co-formulation of xanomeline and trospium in a single capsule was used in the second Phase 1 clinical trial and is now being evaluated in an ongoing Phase 2 clinical trial in patients with schizophrenia experiencing acute psychosis. Preliminary results from this trial are anticipated by late 2019. A Phase 1b experimental pain trial in healthy volunteers and clinical work towards geriatric psychosis are expected to begin later this year.

About Karuna Therapeutics

Karuna is an innovative clinical-stage biopharmaceutical company primarily focused on developing novel therapies to address disabling neuropsychiatric conditions characterised by significant unmet medical need. Karuna is currently conducting a Phase 2 clinical trial of its lead product candidate, KarXT (Karuna-Xanomeline-Trospium), for the treatment of acute psychosis in patients with schizophrenia and expects preliminary results in late 2019. Karuna also plans to initiate clinical trials of KarXT to evaluate its potential therapeutic benefit in other CNS disorders, including psychosis in Alzheimer's disease, or AD, as well as pain. Karuna, which was founded by [PureTech Health](#) (LSE: PRTC), has a worldwide exclusive license for xanomeline and has a patent portfolio more broadly covering selective muscarinic targeting enabled by the KarXT approach. For more information, visit karunatx.com.

About PureTech Health

PureTech Health (LSE: PRTC) is an advanced biopharmaceutical company developing BIG medicines for dysfunctions of the Brain-Immune-Gut axis. The Company has gained deep insights into the connection between these systems and the resulting role in diseases that have proven resistant to established therapeutic approaches. By harnessing this emerging field of human biology, PureTech Health is developing 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 with an unbiased, non-binary, and capital efficient R&D model across its affiliates and its internal labs. PureTech's affiliates include seven clinical-stage platforms with two product candidates that have been filed with the US Food and Drug Administration (FDA) for review and other novel pre-clinical programmes. The PureTech Health pipeline includes ground-breaking platforms and therapeutic candidates that were developed in collaboration with some of the world's leading experts.

PureTech's internal research and development is centred on tissue-selective immunomodulation for the treatment of oncology, autoimmune, and CNS-related disorders, with a near-term focus on targeting newly-discovered, foundational immunosuppressive mechanisms in oncology and novel approaches that harness the lymphatic infrastructure.

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

Ownership Information

PureTech's percentage ownership of Karuna Therapeutics following the financing is approximately 36.2% on a diluted basis. This calculation of PureTech's holding includes issued and outstanding shares as well as options and warrants to purchase shares, but excludes unallocated shares authorised to be issued pursuant to equity incentive plans.

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.