



PureTech Founded Entity Karuna Announces Positive Outcome of End-of-Phase 2 Meeting with the FDA for KarXT for the Treatment of Acute Psychosis in Patients with Schizophrenia

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Karuna on track to initiate Phase 3 programme, including efficacy and open-label long-term safety trials, by the end of 2020

[PureTech Health plc](#) (LSE: PRTC) ("PureTech" or the "Company"), a clinical-stage biotherapeutics company dedicated to discovering, developing and commercialising highly differentiated medicines for devastating diseases, is pleased to note that its Founded Entity, Karuna, today announced next steps in the clinical programme evaluating KarXT for the treatment of acute psychosis in patients with schizophrenia following the completion of a successful End-of-Phase 2 meeting with the US Food & Drug Administration (FDA). The outcome of the meeting supports the progression of KarXT into Phase 3 development. Karuna remains on track to initiate the Phase 3 programme by the end of 2020.

The End-of-Phase 2 discussion was supported by pre-clinical and clinical efficacy data, including results from the previously completed positive Phase 2 trial evaluating KarXT in patients with schizophrenia. In the Phase 2 trial, KarXT demonstrated robust efficacy on primary and key secondary outcome measures and was generally safe and well tolerated.

A founder of Karuna and co-inventor of the KarXT programme, PureTech now holds 4,739,897 shares of Karuna common stock, which is equal to 18.1% of Karuna's outstanding shares, and has a right to royalty payments on net sales of any commercialised product covered by a license granted by PureTech to Karuna.

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

Karuna Therapeutics Announces Positive Outcome of End-of-Phase 2 Meeting with the FDA for KarXT for the Treatment of Acute Psychosis in Patients with Schizophrenia

One additional Phase 3 trial, along with previously completed Phase 2 trial, would be acceptable to support an efficacy claim for a New Drug Application filing

Company on track to initiate Phase 3 programme, including efficacy and open-label long-term safety trials, by the end of 2020

BOSTON – Jun. 23, 2020 – Karuna Therapeutics, Inc. (NASDAQ: KRTX), an innovative clinical-stage biopharmaceutical company committed to developing novel therapies with the potential to transform the lives of people with disabling and potentially fatal neuropsychiatric disorders and pain, today announced next steps in the clinical programme evaluating KarXT for the treatment of acute psychosis in patients with schizophrenia following the completion of a successful End-of-Phase 2 meeting with the US Food & Drug Administration (FDA). The outcome of the meeting supports the progression of KarXT into Phase 3 development. The Company remains on track to initiate the Phase 3 programme by the end of 2020.

"We look forward to progressing KarXT into Phase 3 clinical development for the treatment of schizophrenia following a constructive End-of-Phase 2 meeting with the FDA," said Andrew Miller, Ph.D., chief operating officer and founder of Karuna Therapeutics. "Our team is dedicated to truly advancing the standard of care in schizophrenia, and we believe our planned Phase 3 programme sets us on course to potentially offer a new, unique and mechanistically differentiated treatment option relative to current therapies. We are pleased to be working closely with the FDA as we prepare to advance our lead clinical programme into Phase 3 by the end of the year."

The End-of-Phase 2 discussion was supported by pre-clinical and clinical efficacy data, including results from the previously completed positive Phase 2 trial evaluating KarXT in patients with schizophrenia. In the Phase 2 trial, KarXT demonstrated robust efficacy on primary and key secondary outcome measures and was generally safe and well tolerated.

The Company and FDA aligned on key elements of the Phase 3 programme to support a New Drug Application (NDA) filing, including the initiation of additional trials evaluating the efficacy and long-term safety of KarXT. The formal minutes from the meeting confirmed that the completed Phase 2 trial, along with one successful Phase 3 efficacy and safety trial, and additional safety data to meet regulatory requirements, would be acceptable to support an NDA filing.

The Company 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. Both trials will share key characteristics of the completed Phase 2 trial, such as duration of treatment, patient population and primary outcome measure, among other aspects. The first Phase 3 trial is expected to commence by the end of 2020. This five-week, 1:1 randomised, flexible-dose, double-blind, placebo-controlled, inpatient trial will enrol approximately 250 adults in the US 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 will be finalised by the end of 2020, with initiation expected in the first half of 2021.

In conjunction with the short-term efficacy and safety trials, the Company will collect long-term, open-label data to assess the safety and tolerability of KarXT in patients for up to one year in an outpatient setting. Following the five-week, double-blind, inpatient phase in both efficacy trials, patients may enter a 52-week open-label safety and tolerability extension in which all patients will receive active treatment. The Company currently plans to also conduct a separate 52-week open-label trial evaluating the long-term safety of KarXT in adults with schizophrenia who have not been enrolled in the inpatient trials. This trial is expected to begin the first half of 2021. Data from these trials will be used to support regulatory safety requirements for an NDA filing.

As previously shared, the Company is well capitalised, with sufficient funding to support development activities for the NDA filing. Additional details regarding the development plan, including anticipated completion timelines, will be shared in the second half of 2020.

About KarXT

KarXT, a proprietary oral modulator of muscarinic cholinergic receptors, is Karuna's lead product candidate that combines xanomeline, a novel muscarinic agonist, with trospium, an FDA-approved muscarinic antagonist that does not appreciably cross the blood-brain-barrier, to preferentially stimulate muscarinic receptors in the central nervous system (CNS). This novel product candidate, if approved, has the potential to usher in a new treatment paradigm and dramatically impact patients with schizophrenia and other psychotic disorders by providing a differentiated mechanism of action relative to current D2 dopamine and serotonin receptor-targeting antipsychotic drugs.

About Schizophrenia

Schizophrenia is a chronic, disabling disorder typically diagnosed in late teenage years or early adulthood. Characterised by recurring episodes of psychosis requiring long-term treatment with antipsychotic drugs in most patients, it affects more than 21 million people worldwide and 2.7 million Americans (0.5% - 1.0% of US population).

At least one-third of patients with schizophrenia fail to respond to current treatments, with 74% of patients discontinuing within 18 months of initiation. People with schizophrenia have a 10- to 15-year reduction in life expectancy and struggle to maintain meaningful interpersonal relationships. The World Health Organization ranks psychosis as the third-most disabling medical condition in the world.

About Karuna

Karuna is a clinical-stage biopharmaceutical company committed to developing and delivering first-in-class therapies with the potential to transform the lives of people with CNS disorders – which remain among the most disabling and potentially fatal disorders worldwide. Galvanised by the understanding that today's neuropsychiatric and pain management patients deserve better, Karuna's mission is to harness the untapped potential of the brain's complex biology in pursuit of novel therapeutic pathways that will advance the standard of care. For more information, please visit karunatx.com.

About PureTch Health

PureTech is a clinical-stage biotherapeutics company dedicated to discovering, developing and commercialising highly differentiated medicines for devastating diseases, including intractable cancers, lymphatic and gastrointestinal diseases, central nervous system disorders and inflammatory and immunological diseases, among others. The Company has created a broad and deep pipeline through the expertise of its experienced research and development team and its extensive network of scientists, clinicians and industry leaders. This pipeline, which is being advanced both internally and through PureTech's Founded Entities, is comprised of 24 products and product candidates, including two that have been cleared by the US Food and Drug Administration (FDA). All of the underlying programmes and platforms that resulted in this pipeline of product candidates were initially identified or discovered and then advanced by the PureTech team through key validation points based on the Company's unique insights into the biology of the brain, immune and gut, or BIG, systems and the interface between those systems, referred to as the BIG Axis.

For more information, visit www.puretechhealth.com or connect with us on Twitter @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.