



PureTech Initiates Phase 2 trial of LYT-100 (Deupirfenidone) in Long COVID Respiratory Complications and Related Sequelae

December 3, 2020

COVID-19 survivors may be at risk for persistent complications, a condition referred to as Long COVID or Long Haul COVID

LYT-100, an anti-fibrotic and anti-inflammatory agent, holds potential for treating inflammation and fibrosis implicated in a range of respiratory conditions, including those associated with COVID-19

December 03, 2020 07:00 AM Eastern Standard Time

BOSTON--([BUSINESS WIRE](#))--[PureTech Health plc](#) (LSE: PRTC, Nasdaq: PRTC) ("PureTech" or the "Company"), a clinical-stage biotherapeutics company dedicated to discovering, developing and commercializing highly differentiated medicines for devastating diseases, today announced the initiation of its global, Phase 2 trial of LYT-100 (deupirfenidone) in Long COVID respiratory complications and related sequelae. LYT-100 is PureTech's wholly-owned product candidate that is being advanced for the potential treatment of conditions involving inflammation and fibrosis and disorders of lymphatic flow. The initiation follows the completion of a Phase 1 multiple ascending dose and food effect study for LYT-100, which demonstrated favorable proof-of-concept for LYT-100's tolerability and pharmacokinetic (PK) profile.

Fibrosis and inflammation are common mechanisms across several lung diseases, and there is increasing data that respiratory complications of SARS-CoV-2 (COVID-19), including shortness of breath, begin during the acute phase of illness and may persist as lung fibrosis develops. Similar respiratory complications caused by Severe Acute Respiratory Syndrome (SARS) lasted for years in many survivors. According to a research letter published in the *Journal of the American Medical Association (JAMA)*, more than 40 percent of COVID-19 survivors assessed in an Italian study still reported shortness of breath an average of 60 days following symptom onset.¹ These data suggest that a significant percentage of COVID-19 survivors may be at risk for respiratory complications and other sequelae, which is a condition that is now colloquially referred to as "Long COVID."

"COVID-19 is a global public health crisis with severe and long-lasting effects. Patients around the world have reported persistent suffering, including serious respiratory complications that can last for months after the acute infection resolves, and – even with vaccines – there is great a need for treatment options for Long COVID," said Toby Maher, M.D., Ph.D., professor of clinical medicine and director of interstitial lung disease at Keck School of Medicine of the University of Southern California and the principal investigator on PureTech's Long COVID Phase 2 trial. "The anti-fibrotic and anti-inflammatory properties of LYT-100 hold potential for treating a range of respiratory conditions, including the long-lasting health burden associated with post-acute COVID-19. I am encouraged by the data generated with LYT-100 to date, and I am excited to be involved in this trial addressing a critically important public health need in the current COVID-19 pandemic."

LYT-100 is a deuterated, oral small molecule designed to overcome the challenges associated with pirfenidone, an approved and marketed anti-inflammatory and anti-fibrotic drug. Pirfenidone is currently approved for the treatment of idiopathic pulmonary fibrosis (IPF), but it is associated with significant tolerability issues and dose-limiting toxicities. LYT-100, a new chemical entity, retains the pharmacology of pirfenidone but has a differentiated PK profile, which is designed to enable improved tolerability, less frequent dosing and potentially increased efficacy.

PureTech's global, randomized, double-blind, placebo-controlled Phase 2 trial is designed to evaluate the efficacy, safety and tolerability of LYT-100 in adults with post-acute COVID-19 respiratory complications. The primary endpoint of the trial will be the six-minute walk test distance. Secondary endpoints, including pharmacokinetics, inflammatory biomarkers, imaging and patient-reported outcomes including dyspnea and the 36-Item Short Form Health Survey, will also be evaluated. The study has initiated in both the United States and Europe, and results are expected in the second half of 2021.

About LYT-100

LYT-100 is PureTech's most advanced wholly-owned product candidate. A deuterated form of pirfenidone, an approved anti-inflammatory and anti-fibrotic drug, 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, unclassifiable interstitial lung diseases (uILDs), Long COVID respiratory complications and related sequelae) and lymphedema. PureTech completed a Phase 1 multiple ascending dose and food effect trial evaluating LYT-100 in healthy volunteers and found it to be well-tolerated at all doses tested. PureTech has initiated a Phase 2 trial evaluating LYT-100 as a potential treatment for Long COVID respiratory complications and related sequelae. PureTech also intends to initiate a Phase 2a proof-of-concept study evaluating LYT-100 in patients with breast cancer-related, upper limb secondary lymphedema in Q4 2020. PureTech is also advancing LYT-100 for the treatment of IPF and is planning registration-enabling studies.

About PureTech Health

PureTech 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. 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 received FDA clearance and European marketing authorization. All of the underlying programs 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.

Cautionary Note Regarding Forward-Looking Statements

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, our expectations regarding the potential therapeutic benefits of LYT-100, the expected timing of results from our Phase 2 trial of LYT-100, our plans and timing for a Phase 2a proof-of-concept study evaluating LYT-100 in patients with breast cancer-related, upper limb secondary lymphedema and 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.

¹ Carfi, A., Bernabei, R., & Landi, F. (2020). Persistent Symptoms in Patients After Acute COVID-19. *Jama*, 324(6), 603. doi:10.1001/jama.2020.12603

Contacts

Investors

Allison Mead Talbot

+1 617 651 3156

amt@puretechhealth.com

EU media

Ben Atwell, Rob Winder

+44 (0) 20 3727 1000

ben.atwell@FTIconsulting.com

U.S. media

Adam Silverstein

+1 917 697 9313

adam@tenbridgecommunications.com