PureTech Health's Akili and Pfizer Present Positive Data from Digital Biomarker Study to Detect Subtle Cognitive Changes in Healthy Subjects at Risk of Developing Alzheimer's Disease

December 9, 2016
PureTech Health plc ("PureTech", LSE: PRTC), a cross-disciplinary biotech company developing 21st century medicines, is pleased to note that Pfizer Inc. today presented positive topline data showing that PureTech's Akili technology differentiated between older healthy subjects positive for amyloid deposits in their brains (the primary biomarker for Alzheimer's risk) versus an age-matched comparison group of amyloid-negative subjects, both in change over time (p=0.04) and at the completion visit after 28-day remote self-administration protocol (p<0.008). The collaboration with Pfizer was established to assess the potential for Akili's proprietary digital biomarkers to serve as non-invasive proxies for screening procedures in Alzheimer's drug research and treatment.

Joe Bolen, PhD, Chief Scientific Officer for PureTech Health, said: "These results are exciting given the current emphasis on Alzheimer's treatment research, which could potentially benefit from a non-invasive, easy-to-administer assessment tool for early patient identification. The Akili technology that powers both our potential treatments as well as our assessment product may have broader application across a variety of patient populations, so we look forward to continuing to explore its potential use cases."

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

Akili and Pfizer Present Positive Data from Digital Biomarker Study to Detect Subtle Cognitive Changes in Healthy Subjects at Risk of Developing Alzheimer's Disease

Digital platform may represent new, non-invasive method to screen for amyloid deposits in asymptomatic and early disease populations for Alzheimer's drug research and treatment

Data presented at the International Conference on Clinical Trials for Alzheimer's Disease

Boston, Massachusetts, December 9, 2016 – Akili Interactive Labs, Inc. and Pfizer Inc. (NYSE: PFE) today presented positive topline data showing that Akili's proprietary technology platform detected a statistically significant difference between subjects with and without brain amyloidosis, the primary biomarker for Alzheimer's risk. The study was part of a collaborative trial designed by Pfizer and Akili, and topline results were presented at the International Conference on Clinical Trials for Alzheimer's Disease in San Diego, CA.

The technology, derived from the company's patent-pending cognitive measurement platform, differentiated between older healthy subjects positive for amyloid deposits in their brains versus an agematched comparison group of amyloid-negative subjects, both in change over time (p=0.04) and at the completion visit after 28-day remote self-administration protocol (p<0.008). All metrics were obtained from study participant interaction with the cognitive assessment tool, which is designed to operate as a fast-paced action video game on a tablet. Importantly, compliance with the tool was high, and no safety concerns were reported during the study.

"These initial results suggest that our digital biomarkers may have the potential to serve as non-invasive options to screening procedures such as PET imaging scans requiring the administration of radioactive ligands or lumbar punctures," said Eddie Martucci, President and CEO of Akili. "We're also excited by the potential for early detection of neurological dysfunction, and we're looking forward to further exploring that potential on our own and with strategic partners."

"We are encouraged by the results of this trial, and we look forward to exploring ways that we might be able to implement innovative new technologies like the Akili platform into the clinical trial process," said Ole Isacson, Senior Vice President and Chief Scientific Officer, Neuroscience, Pfizer. "Alzheimer's disease is a particularly complex disease about which we still have much to learn. These results are a step in the right direction in our mission of making a difference in the lives of Alzheimer's patients and their families."

The non-exclusive collaboration between Akili and Pfizer was established in 2014 to assess the potential correlation between Akili's proprietary digital biomarkers and one or more of the accepted neurological markers for asymptomatic Alzheimer's Disease.

The double-blind study was conducted as a parallel protocol where individuals were accepted into the study only if they were judged healthy by screening criteria. All accepted individuals were then given a quantitative PET scan to determine brain amyloid presence, as amyloid accumulation is generally considered to be a biomarker and risk factor for eventual development of Alzheimer's disease. All participants also received a full neurological work-up including magnetic resonance imaging (MRI) and non-Akili cognitive endpoints including measures of memory and attention. Further analyses of a variety of digital metrics from this study that correlate with the PET, MRI and other patient data are underway.

About Alzheimer's Disease
Alzheimer's Disease is a chronic, progressive, neurodegenerative disorder characterized by loss of memory and other important mental functions. The

type, severity, sequence, and progression of mental changes vary widely, and it represents an enormous burden on victims of the disease and their family. Alzheimer’s is the most common form of dementia in people over the age of 65, and it is estimated to affect more than 5 million Americans. It is the sixth leading cause of death in the United States, and there is currently no cure.

About Akili’s Technology
Akili's technologies are based on a proprietary neuroscience approach developed to target specific neurological systems through sensory and digital mechanics. The company's lead, patent-pending technology platform (used in this trial) is based on cognitive science exclusively licensed from the lab of Dr. Adam Gazzaley at the University of California, San Francisco, and proprietary adaptive algorithms developed at Akili, all built into action video game interfaces. The platform powers both assessment and treatment products, which deploy real-time, adaptive cognitive challenges and interventions, respectively. Both products target the brain's interference processing system (an individual's core ability to process multiple streams of information), a key function underlying cognitive control.

Akili is currently conducting multiple clinical trials of its leading digital medicine platform across a variety of patient populations, including paediatric ADHD, autism spectrum disorder (in collaboration with Autism Speaks), depression, Alzheimer’s disease and traumatic brain injury.

About Akili Interactive Labs, Inc.
Akili is building clinically validated cognitive treatments and assessments that are delivered in an action video game interface. Leveraging medical-grade science and consumer-grade software technology, the company is seeking to produce a new type of medical product that can offer safe and effective scalable treatment and better monitoring for patients across a range of mental health and neurological conditions. The company was founded by PureTech Health (PRTC.L), together with leading neuroscientists and game designers. Akili has garnered investment from Shire PLC, Amgen Ventures and Merck Ventures BV, Amsterdam, The Netherlands, a subsidiary of Merck KGaA, Darmstadt, Germany (known as M Ventures in the United States and Canada), and it has strategic partnerships with Pfizer Inc. and Autism Speaks.

About PureTech Health
PureTech Health (PureTech Health plc, PRTC.L) is a cross-disciplinary biotech company creating 21st century medicines that modulate the adaptive human systems. Our therapies target the immune, nervous, and gastro-intestinal systems by addressing the underlying pathophysiology of disease from a systems perspective rather than through a single receptor or pathway. We are advancing more than 20 clinical studies across our pipeline, with five human proof-of-concept studies and multiple pivotal or registration studies expected to read out in the next two years. PureTech Health’s rich and growing research and development pipeline has been developed in collaboration with some of the world’s leading scientific experts, who along with PureTech's experienced team and board analyse more than 650 scientific discoveries per year to identify and advance the opportunities we believe hold the most promise for patients. This process places PureTech Health on the cutting edge of ground-breaking science and technological innovation and leads the Company between and beyond existing disciplines. For more information, visit www.puretechhealth.com or connect with us on Twitter.

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 forwardlooking 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.