



23 February 2017

Cognition Kit Limited
(‘Cognition Kit’ or the ‘Company’)

Takeda and Cognition Kit partner in study to pilot wearable software in patients with Major Depressive Disorder (MDD)

Cambridge, England, and Deerfield, IL, February 23 2017 – Takeda Pharmaceuticals U.S.A., Inc., a wholly-owned subsidiary of Takeda Pharmaceutical Company Limited (TSE:4502) and Cognition Kit Limited, a joint venture between Cambridge Cognition Holdings PLC and Ctrl Group Limited, announced a collaboration to pilot the use of a specially designed app on an Apple Watch wearable to monitor and assess cognitive function in patients with Major Depressive Disorder (MDD).

Depression (MDD) is the leading cause of disability worldwide, affecting an estimated 350 million people of all ages.¹ Cognitive problems are common in major depression and may be under recognized by both patients and clinicians.^{2,3} Cognitive testing provides the opportunity to detect and understand the pattern of cognitive symptoms in patients with MDD. The Cognition Kit app is designed as a step forward in assessing those symptoms, advancing patient assessment and monitoring outside of the lab and into everyday life to help maximize patient engagement and potential treatment.

The study will involve 30 participants, aged 18-65 with a clinical diagnosis of mild to moderate depression who have been prescribed an antidepressant for Major Depressive Disorder. The present study aims to evaluate feasibility, compliance and to understand how measures of mood and cognition on wearable technology compare to more traditional neuropsychological testing and patient reported assessments. The output of the study is expected in the first half of 2017.

The collaboration is part of a shared commitment between Takeda and Cognition Kit to improve mental health worldwide through leading research and innovation.

“By combining wearable technology with world leading neuroscience, we’ve created an app that collects real time passive and active high-frequency mental health data,” said Jenny Barnett, PhD, Cognition Kit. “Being able to access data regularly from daily life can help clinical decision making. Healthcare professionals can obtain patient data and increase patient engagement in their treatment.”

“Takeda is committed to CNS and the mental health community,” said Nicole Mowad-Nassar, Vice President, External Partnerships, at Takeda Pharmaceuticals U.S.A. “This collaboration is part of our strategy to embrace new technology to better understand the patient experience and assist healthcare professionals in creating improved patient care pathways.”

This collaboration is the first contract signed by Cognition Kit Limited, the joint venture of Cambridge Cognition and London based Ctrl Group, since launching the wearable cognitive technology in 2016, with significant interest already gained from a number of commercial partners.

For information about wearable cognitive assessment technology from Cognition Kit visit: www.cognitionkit.com

¹World Health Organization. <http://www.who.int/mediacentre/factsheets/fs369/en/> [last accessed 13 June 2015]

²Conradi HJ, Ormel J, de Jonge P. Presence of individual (residual) symptoms during depressive episodes and periods of remission: a 3-year prospective study. *Psychol Med* 2011;41(6):1165-74.

³Enabling Discovery, Development, and Translation of Treatments for Cognitive Dysfunction in Depression: Workshop Summary. Editors Forum on Neuroscience and Nervous System Disorders; Board on Health Sciences Policy; Institute of Medicine; The National Academies of Sciences, Engineering, and Medicine. Washington (DC): National Academies Press (US); 2015 Oct.

Notes to editors

About Cognition Kit Limited

Cognition Kit is a joint venture between Cambridge Cognition and Ctrl Group formed in 2016 to develop digital health tools on mobile and wearable devices. Cognition Kit software takes research out of the lab and into daily life, enabling doctors, scientists and the public to better understand and manage day-to-day brain health.



About Takeda Pharmaceuticals U.S.A., Inc.

Takeda Pharmaceutical Company Limited is a global, R&D-driven pharmaceutical company committed to bringing better health and a brighter future to patients by translating science into life-changing medicines. Takeda focuses its research efforts on oncology, gastroenterology and central nervous system therapeutic areas. It also has specific development programs in specialty cardiovascular diseases as well as late-stage candidates for vaccines. Takeda conducts R&D both internally and with partners to stay at the leading edge of innovation. New innovative products, especially in oncology and gastroenterology, as well as its presence in emerging markets, fuel the growth of Takeda. More than 30,000 Takeda employees are committed to improving quality of life for patients, working with our partners in health care in more than 70 countries. For more information, visit <http://www.takeda.com/news>.

Takeda Pharmaceuticals U.S.A., Inc. is located in Deerfield, Ill., and is the U.S. commercial organization of Takeda Pharmaceutical Company Limited.

Additional information about Takeda is available through its corporate website, www.takeda.com, and additional information about Takeda Pharmaceuticals U.S.A., Inc. is available through its website, www.takeda.us.

About Cambridge Cognition Holdings PLC

Cambridge Cognition is a neuroscience digital health company specialising in the precise measurement of clinical outcomes in neurological disorders. The Company develops and markets validated near patient assessment products using cognition as a biomarker to improve understanding, diagnosis and treatment in brain health worldwide.

Partners include the world's leading drug development companies, academic institutions and public-private health organisations.

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About Ctrl Group Limited

Ctrl Group believe that new technologies have the potential to transform healthcare and medical research by increasing efficiency and creating more personalised medicine. We are a team of designers, researchers, software developers and healthcare experts who work internationally with healthcare companies and providers who want to use new technology to improve people's health.

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