



## PureTech Founded Entity Akili Announces FDA Clearance of EndeavorRx™ for Children with ADHD, the First Prescription Treatment Delivered Through a Video Game

June 16, 2020

*Shown to improve attention function, EndeavorRx is backed by data from five clinical studies, including a prospective, randomised controlled trial*

*EndeavorRx is the second product developed from PureTech's unique R&D model to achieve FDA clearance*

[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 announce that its Founded Entity, Akili, has been granted US Food and Drug Administration (FDA) clearance for EndeavorRx™ (AKL-T01) as a prescription treatment for children with attention-deficit/hyperactivity disorder (ADHD). Delivered through a captivating video game experience, EndeavorRx is indicated to improve attention function as measured by computer-based testing in children ages 8-12 years old with primarily inattentive or combined-type ADHD, who have a demonstrated attention issue. See full indication below. Persistent attention issues have a significant impact on the daily lives of millions of people. Attention impairments are a key component of ADHD for many children.

Daphne Zohar, founder and chief executive officer of PureTech said: "The FDA clearance of EndeavorRx is a tremendous milestone as it represents an entirely new class of medicine for children and their families. EndeavorRx is the first digital therapeutic intended to improve symptoms associated with ADHD, and it is also the first game-based therapeutic to be granted marketing authorisation by the FDA for any type of condition. EndeavorRx is now the second product developed from PureTech's unique R&D model to receive FDA clearance and is further validation of our approach to inventing, identifying, and advancing truly innovative medicines for patients."

EndeavorRx was granted clearance based on data from five clinical studies in more than 600 children diagnosed with ADHD, including a prospective, randomised, controlled study [published](#) in *The Lancet Digital Health* journal, which showed EndeavorRx improved objective measures of attention in children with ADHD. After four weeks of EndeavorRx treatment, one-third of children no longer had a measurable attention deficit on at least one measure of objective attention. Further, about half of parents saw a clinically meaningful change in their child's day-to-day impairments after one month of treatment with EndeavorRx; this increased to 68% after a second month of treatment. Improvements in ADHD impairments following a month of treatment with EndeavorRx were maintained for up to a month.

EndeavorRx was reviewed through FDA's de novo pathway and its clearance creates a new class of digital therapeutics. EndeavorRx is designed to directly target and activate neural systems through the presentation of sensory stimuli and motor challenges to improve cognitive functioning. The EndeavorRx treatment will be available with a prescription to families soon.

EndeavorRx is the second product developed from PureTech's unique R&D model to achieve FDA clearance. In April 2019, Gelesis announced the FDA clearance of Plenity™ as an aid in weight management in overweight and obese adults with a BMI of 25–40 kg/m<sup>2</sup>, when used in conjunction with diet and exercise. Gelesis also [recently received](#) approval to market Plenity in Europe. For the safe and proper use of Plenity, refer to the [US Instructions for Use](#) or the [EU Instructions for Use](#).

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

### **Akili Announces FDA Clearance of EndeavorRx™ for Children with ADHD, the First Prescription Treatment Delivered Through a Video Game**

*Shown to improve attention function, EndeavorRx is backed by data from five clinical studies, including a prospective, randomised controlled trial*

BOSTON, Mass – June 15, 2020 – [Akili](#) today announced that the U.S. Food and Drug Administration (FDA) has granted clearance for EndeavorRx™ (AKL-T01) as a prescription treatment for children with attention-deficit/hyperactivity disorder (ADHD). Delivered through a captivating video game experience, EndeavorRx is indicated to improve attention function as measured by computer-based testing in children ages 8-12 years old with primarily inattentive or combined-type ADHD, who have a demonstrated attention issue. See full indication below. Persistent attention issues have a significant impact on the daily lives of millions of people. Attention impairments are a key component of ADHD for many children yet are often overshadowed by more overt symptoms of ADHD.

EndeavorRx was reviewed through FDA's de novo pathway and its clearance creates a new class of digital therapeutics. EndeavorRx is designed to directly target and activate neural systems through the presentation of sensory stimuli and motor challenges to improve cognitive functioning.

"We're proud to make history today with FDA's decision, said Eddie Martucci, PhD, chief executive officer of Akili. "With EndeavorRx, we're using technology to help treat a condition in an entirely new way as we directly target neurological function through medicine that feels like entertainment. Families are looking for new ways to help their children with ADHD. With today's decision by FDA, we're excited to offer families a first-of-its-kind non-drug treatment option and take an important first step toward our goal to help all people living with cognitive issues."

EndeavorRx was granted clearance based on data from five clinical studies in more than 600 children diagnosed with ADHD, including a prospective, randomised, controlled study [published](#) in *The Lancet Digital Health* journal, which showed EndeavorRx improved objective measures of attention in children with ADHD. After four weeks of EndeavorRx treatment, one-third of children no longer had a measurable attention deficit on at least one measure of objective attention. Further, about half of parents saw a clinically meaningful change in their child's day-to-day impairments after one

month of treatment with EndeavorRx; this increased to 68% after a second month of treatment. Improvements in ADHD impairments following a month of treatment with EndeavorRx were maintained for up to a month.

"For children living with ADHD, improving their ability to focus and resist distraction is critical to their daily functioning and performance in school," said Elysa Marco, MD, cognitive and behavioural child neurologist and Clinical Executive for Neurodevelopmental Medicine at Cortica Healthcare. "Unlike traditional ADHD medications, EndeavorRx is designed to specifically target inattention. Based on the benefits my research participants and patients have experienced, I am thrilled that EndeavorRx is moving from the lab to the clinic to play an essential role as part of a comprehensive treatment plan for children with ADHD."

The EndeavorRx treatment will be available with a prescription to families soon. Akili believes that cognitive impairments require the same constant attention and care as with any other chronic condition. EndeavorRx will be released as the centrepiece of the Endeavor Care Program, which includes the EndeavorRx treatment and Akili Care,<sup>TM</sup> a mobile tracking app and personal support services for caregivers. Easily accessible from home, EndeavorRx is downloaded from the App Store by families on their mobile devices and does not require any additional equipment.

"The clearance of EndeavorRx marks the culmination of nearly a decade of research and development and was fuelled by the commitment of our team and collaborators to challenge the status quo of medicine. This would not have been possible without the dedication of our clinical research partners and hundreds of families who gave their time and energy to participate in our clinical trials," said Scott Kellogg, senior vice president of medical devices at Akili.

For families who have accessed EndeavorRx through FDA's COVID-19 enforcement discretion [guidance](#), Akili is committed to a seamless transition for them to the prescription program as appropriate.

### **About EndeavorRx**

EndeavorRx is built on the Akili Selective Stimulus Management engine (SSME<sup>TM</sup>) core technology, a proprietary technology designed for the targeted activation of specific neural systems in the brain to treat diseases with associated cognitive dysfunction. SSME presents specific sensory stimuli and simultaneous motor challenges designed to target and activate the neural systems that play a key role in attention function while using adaptive algorithms to personalise the treatment experience for each individual patient. This enables second by second monitoring of patient progress completing the treatment sessions, and continuously challenges each patient to an optimised level, encouraging patients to improve their performance. Driven by the core belief at Akili that effective medicine can also be fun and engaging, EndeavorRx is delivered through an action video game experience. The captivating experience of EndeavorRx is designed to drive engagement and compliance.

### **Clinical Evidence Supporting EndeavorRx**

The EndeavorRx research program includes three studies in ADHD (STARS-ADHD, STARS-Adjunct and [ADHD-POC](#)) and two pilot studies in ADHD with different comorbidities ([Sensory Processing Disorder](#) and [Autism Spectrum Disorder](#)). The pivotal STARS-ADHD study was a multi-centre, randomised, blinded, controlled study in 348 children diagnosed with ADHD, and results were recently published in [The Lancet Digital Health](#) journal. In the pivotal study, EndeavorRx showed a statistically significant improvement compared to an educational-style video game control (p=0.006) on a change in the Attention Performance Index (API) of the Test of Variables of Attention (TOVA®), a computerised test cleared by FDA to evaluate the effects of interventions in ADHD. In the [STARS-Adjunct](#) open-label study, statistically significant improvement was seen in the IRS (a parent-reported clinician-administered scale of ADHD impairments) from baseline to after 4-weeks of treatment in both children on stimulants and off any ADHD medication. No serious adverse events have been associated with EndeavorRx in any study to date. Some study participants (9.3%) experienced non-serious treatment-related adverse events with EndeavorRx, including frustration, headache, dizziness, emotional reaction, nausea or aggression.

### **EndeavorRx Indication for Use**

EndeavorRx is indicated to improve attention function as measured by computer-based testing in children ages 8-12 years old with primarily inattentive or combined-type ADHD, who have a demonstrated attention issue. Patients who engage with EndeavorRx demonstrate improvements in a digitally assessed measure Tests of Variables of Attention (TOVA) of sustained and selective attention and may not display benefits in typical behavioral symptoms, such as hyperactivity. EndeavorRx should be considered for use as part of a therapeutic program that may include: clinician-directed therapy, medication, and/or educational programs, which further address symptoms of the disorder.

### **About Akili**

Akili is combining scientific and clinical rigor with the ingenuity of the tech and entertainment industries to challenge the status quo of medicine. Akili has pioneered the development of video game-based digital medicine to improve cognitive function. Akili's flagship product, EndeavorRx, is a prescription digital treatment to address inattention in children with attention deficit hyperactivity disorder (ADHD). Akili's patented technology serves as the foundation of its products and is designed to directly activate the networks in the brain responsible for cognitive function. Driven by Akili's belief that effective medicine can also be fun and engaging, Akili's treatments are delivered through captivating action video game experiences that drive engagement and compliance. For more information, please visit [AkiliInteractive.com](#).

EndeavorRx<sup>TM</sup> and Akili Care<sup>TM</sup> are trademarks or registered trademarks of Akili Interactive Labs, Inc.

### **About PureTech 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 22 product candidates and two products 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](http://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.