

Ad Scientiam and Ceres Brain Therapeutics Launch Joint Research Program to Develop New Digital Biomarkers for the Creatine Transporter Deficiency syndrome

Paris, October 23, 2023 – Ad Scientiam, a global leader in digital biomarkers and Ceres Brain Therapeutics, a biotech company developing a drug candidate for a rare neurological disease, the Creatine Transporter Deficiency syndrome, join forces to develop new digital biomarkers to optimize future clinical trials. The two companies originate from the Paris Brain Institute's incubator dedicated to brain diseases in France.

Creatine Transporter Deficiency (CTD) is a rare X-linked disorder resulting in a cerebral creatine deficiency. Clinical characteristics include significant developmental delays, intellectual disability, autistic spectrum disorders, epileptic seizures, and motor dysfunction. With creatine transporter deficit, creatine cannot pass the blood brain barrier nor the neurons membranes and thus oral creatine treatment is not effective. To address this issue, Ceres Brain Therapeutics is developing a creatine-prodrug candidate, CBT101, with an innovative mode of administration to increase creatine levels in brain neurons: the Creatine-to-Neurons™ solution. Biomarkers are needed for evaluating the potential effects of this therapeutic innovation and those to come in future CTD clinical trials in order to obtain reliable data.

In this context, Ad Scientiam and Ceres Brain Therapeutics have decided to collaborate on an ambitious research project, with the aim to identify new outcome measurement approaches with relevant digital biomarkers, tailored to the specificities of CTD patients, in preparation for future clinical studies. Ad Scientiam will leverage its expertise in the development of smartphone-based digital biomarkers for neurological diseases such as multiple sclerosis with MSCopilot®, neuromuscular diseases, and severe psychiatric disorders.

"Innovative in its approach, this cutting-edge methodology brings a level of objectivity and precision to the collection of data within the patient's own environment, potentially serving as a pivotal factor in determining therapeutic outcomes," noted Dr. Saad Zinaï, Chief Medical Officer at Ad Scientiam.

"Exploring the realm of possibilities through digital biomarkers represents a fantastic opportunity for Ceres Brain and its drug candidate, CBT101" explains Dr. Thomas Joudinaud, MD, PhD, CEO at Ceres Brain Therapeutics.

In 2023, Ceres Brain Therapeutics and Ad Scientiam will study the feasibility of such a project, with an initial campaign dedicated to assessing the usability of Ad Scientiam's technology with patients with CTD and their caregivers.

About MSCopilot®

MSCopilot® is a CE-marked software medical device for the self-assessment of MS patients in their daily lives. It captures over 350 digital biomarkers that provide objectivity to MS-related symptoms



recorded through the patients' smartphones. The results generated are shared with their healthcare providers and provide valuable information for their clinical decision-making. The patient remains in control of their data. MSCopilot®, which currently has over 3,500 users, is also used in several clinical studies.

For more information, follow the MSCopilot® [Facebook](#) page or visit mscopilot.com

About Ad Scientiam

We strongly believe that continuously monitoring the progression of severe and disabling diseases in real-life is crucial for delivering better care.

To achieve this, we create and clinically validate digital biomarkers that make these previously undetectable changes visible. These biomarkers are developed from data collected by digital tools such as smartphones and are transformed using proprietary algorithms.

We have gained the trust of research organizations such as the Paris Brain Institute (ICM) and pharmaceutical companies including Janssen, Sanofi, Pfizer, Vertex, and Novartis. In 2019, we launched [MSCopilot®](#), the first CE-marked software medical device for self-assessment of patients with multiple sclerosis. We are currently validating new devices in neuroscience, rare diseases, and mental disorders. Ad Scientiam's Quality Management System is in compliance with ISO 13485.

Check our [LinkedIn](#), our [Facebook page](#), our [Instagram](#) or visit adscientiam.com

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About CBT101

CBT101 is a creatine prodrug that originated from CEA, a leading French R&D center of excellence. Ceres team developed a highly innovative formulation that ensures CBT101 stability over time and its ability to be sprayed. Therefore, CBT101 is designed as a smart and easy to administer "creatine to neurons™" solution leveraging the Nose-to-Brain pathway. After administration in the nasal cavity, CBT101 enters the olfactory and trigeminal nerves, reaches their origins, and diffuses from neurons to neurons delivering the creatine into all areas of the brain.

About Ceres Brain Therapeutics

Ceres Brain Therapeutics is a biotech company dedicated to developing innovative drugs in the field of neurologic diseases. Its first program focuses on developing a creatine prodrug to address primary neuronal creatine deficiency, specifically Creatine Transporter Deficiency, and secondarily, a societal disease for which creatine supplementation is beneficial. Ceres Brain introduces the concept of Creatine-to-Neurons™.

Check our [LinkedIn](#) or visit our [Web site](#)

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