



LUCA Science and Kyowa Kirin announce joint research agreement on mitochondrial disease treatment with novel mitochondria modality

TOKYO, May 18, 2022 — LUCA Science Inc. (LUCA Science, Tokyo, Japan) and Kyowa Kirin Co., Ltd. (Kyowa Kirin, Tokyo, Japan, TSE:4151) are pleased to announce they have entered into a research collaboration agreement on the treatment of mitochondrial diseases using platform of an innovative mitochondrial modality.

Through this research collaboration, Kyowa Kirin, a leading specialty pharmaceutical company with deep disease science research knowledge based on diverse experiences in biopharmaceutical drug discovery, will leverage LUCA Science's proprietary functional mitochondria therapy platform to develop an innovative treatment for mitochondrial diseases.

Mitochondria are organelles known as "intracellular power plants" that produce more than 90% of the body's energy. Mitochondrial disease, which occurs when mitochondria function is impaired due to a genetic abnormality, has been designated an intractable disease by the Ministry of Health, Labour and Welfare in Japan. Mitochondrial disease has a variety of pathological conditions, but it is known that symptoms are particularly strong in organs with high energy requirements, such as brain, heart, muscles, and eyes. Currently, only symptomatic treatment is available for each condition, and no definitive cure has yet been found.

LUCA Science is a preclinical stage biopharmaceutical company pioneering a new class of mitochondrial therapy to restore cellular bioenergetics in dysfunctional or damaged tissues and organs. LUCA Science will use its proprietary platform technology to manufacture, store and deliver innovative mitochondrial drugs to research and development of therapeutics for unmet medical needs in a wide range of diseases for which there have been no effective treatments.

Kyowa Kirin is a Japan-based Global Specialty Pharmaceutical Company, focused



LUCA Science Inc.



on research and development of innovative drug discovery driven by state-of-the-art antibody technologies, in the core therapeutic areas of oncology, nephrology, central nervous system and immunology.

“Collaborating with Kyowa Kirin provides us an opportunity to work with Japan's leading global specialty pharmaceutical company and shares our focus on pursuing innovative, life-changing medicines for patients with diseases where there are no therapeutic options,” said Rick Tsai, LUCA Science’s Chief Executive Officer. “LUCA Science has a deep-rooted commitment to finding a cure for mitochondrial disease. We are excited to collaborate with Kyowa Kirin to advance research in mitochondrial disease treatment with our novel modality to further demonstrate the potential of mitochondria as a biopharmaceutical agent.”

Yoshifumi Torii, Ph.D., Executive Officer, Vice President, Head of R&D Division of Kyowa Kirin, said, "We are very pleased to have this opportunity to promote mitochondrial drug discovery with LUCA Science, a company with proprietary technology that enables the isolation of highly functional mitochondria. One of Kyowa Kirin's most important R&D strategies is to create “Only-one value” by flexibly linking technology, disease biology, and open innovation activities. We are looking forward to leveraging the strengths of both companies to further promote the development of the innovative technology of mitochondrial therapies and to validate the utility of this technology as a pharmaceutical product."