LOTTE Holdings Healthcare and Biopharmaceutical CVC Announces Investment in Metaphore Biotechnologies, Inc.

Metaphore Biotechnologies

TOKYO, JAPAN, August 5, 2026 /EINPresswire.com/ -- LOTTE Holdings Co., Ltd. (Tokyo, Japan; CEO: Genichi Tamatsuka, hereinafter “LOTTE Holdings”) announces an investment in Metaphore Biotechnologies, Inc. (Headquarters: Cambridge, MA, USA; CEO: Angela Hwang; hereinafter "Metaphore"), a preclinical-stage generative AI-based drug discovery company. Established by the prominent venture capital firm Flagship Pioneering in 2021, Metaphore focuses on creating biologics with unique mechanisms of action, including antibody agonists and multi-agonists, by programming complex functions into antibodies.

Metaphore’s integrated experimental and AI/ML-enabled platform generates proprietary functional data in living systems and uses those data to design antibodies with intended activity and drug-like properties from the outset. Unlike conventional approaches that rely on static structural data, this pioneering platform directly learns from protein interactions in living systems to design highly differentiated biologics with unique mechanisms of action. This innovative technology enables the rapid design of high-quality, drug-like molecules in just 8 to 16 weeks.

Using this platform, Metaphore is driving the development of innovative therapeutics for serious unmet medical needs in metabolic disease and immunology, and peripheral artery disease. The company's lead program, a GLP-2R agonist for short bowel syndrome, features a powerful design that requires dosing only once a month, compared to the standard of care which requires daily injections. This is designed to achieve best-in-class efficacy and tolerability, drastically reducing the burden on patients. Furthermore, the company is advancing a multi-target agonist for obesity, demonstrating its potential as a first-in-class antibody therapy.

This investment underscores our commitment to contributing to the resolution of global healthcare challenges through cutting-edge biotechnology. LOTTE Holdings is dedicated to supporting Metaphore's growth as a long-term partner in generating life-saving innovation.

"This investment reflects our strong confidence in Metaphore's pioneering approach to programmable functionality," said Dr. Joon Paek, Managing Partner of LOTTE Holdings Healthcare & Biopharmaceutical CVC. "Metaphore's integration of live-cell experimentation and AI/ML has the potential to create antibodies with differentiated therapeutic actions and address biology that has been difficult to reach through conventional approaches. Driven by our shared mission to improve people's health and well-being through innovative science, we are proud to join forces with the company led by an exceptionally strong management team."

About LOTTE Holdings Co., Ltd.
Company Name: LOTTE HOLDINGDS, CO., LTD..
Headquarters: 3-20-1 Nishi-Shinjuku, Shinjuku-ku, Tokyo 160-0023, Japan
Representative Director: Genichi Tamatsuka
Website: https://lotte-hd.com/
CVC Website: https://lotte-hd.com/bio-cvc/english/

LOTTE Holdings engages in a diverse range of businesses, including its core confectionery and ice cream sectors, professional baseball team management, real estate, finance, CVC, hotels, and healthcare. Looking ahead, the company aims to drive further innovation in the food industry and boldly pursue the creation of new businesses by integrating opportunities from both Japan and South Korea.

Established in Tokyo, Japan, in 1948 with the manufacturing and sale of chewing gum, the LOTTE Group now operates with headquarters in both Japan and South Korea. The group conducts business across approximately 30 countries and regions worldwide, spanning sectors such as food, distribution, retail, biopharmaceuticals, healthcare, data centers, hotels and resorts, entertainment, and construction. Embracing the unified group vision of "Lifetime Value Creator," LOTTE Group is committed to continually providing value throughout every stage of people's lives.

About Metaphore Biotechnologies, Inc.
Metaphore Biotechnologies is creating the next era of antibody medicines. The company's platform integrates a proprietary experimental functional data engine with a mechanism-aware computational engine to design antibodies with new mechanisms to activate, tune and engage biology in entirely new ways. Metaphore's pipeline is focused on high-value disease areas, including metabolic disease and immunology, where treatment requires complex approaches that go beyond blocking biology. The company was founded in 2021 in Flagship Labs, a unit of Flagship Pioneering. For more information,
https://www.metaphorebio.com/

Youhei Kawana, Ryo Nagamine
LOTTE Holdings Co., Ltd.
email us here