

FOR IMMEDIATE RELEASE

Hitachi and Axcelead have agreed to start joint development of solutions contributing on more efficient creation of next-generation biopharmaceuticals

Supporting R&D optimization of next-generation biopharmaceuticals with digital technology and drug discovery platform

Tokyo, April 7, 2021 --- Hitachi, Ltd. (TSE:6501, "Hitachi") and Axcelead, Inc. (President: Tomoyuki Fujisawa, "Axcelead") today announced that they have agreed on a comprehensive collaborative partnership to develop solutions contributing on more efficient creation of next-generation biopharmaceuticals with digital technology and drug discovery platform. Hitachi has also made investment to Drug Discovery Gateway Fund ("DDG Fund") managed by Whiz Partners Inc. (President: Atsushi Matsumura, "Whiz"). Axcelead is the flagship portfolio company of DDG Fund.

With continuous progress of life science, practical applications of next-generation biopharmaceuticals with new therapeutics modalities*¹ demonstrating better balance of efficacy and side-effect, such as genes-, cell-, and mRNA*²- therapeutics, have been recognized. Those new drug discovery modalities are also contributing to the speedy and variety development of vaccines and therapeutics for COVID-19.

On the other hand, next-generation biopharmaceuticals are more expensive to develop and manufacture than low-molecular-weight pharmaceuticals, and due to their nature, the product stability and effective period and product life are shorter, and it would be better to develop and manufacture products with small quantity and high variety. Manufacturing costs and risks tend to be high.

Through this collaboration, Hitachi and Axcelead will develop solutions that support the more efficient creation of next-generation biopharmaceuticals with digital technology and drug discovery platforms, and also support entities that participate in this field. In addition, the both companies will jointly promote the development of specialized human resources who are familiar with the development and manufacturing of next-generation biopharmaceuticals.

Hitachi, with over 100 years deep experience in manufacturing industry, has provided many companies with variety of solutions utilizing Lumada, which accelerates digital innovation by combining OT, IT, and products. In the field of regenerative medicine, Hitachi provides automated cell culture equipment for iPS cells, cell processing facilities, manufacturing execution systems, biosafety cabinets, etc., to pharmaceutical companies and research institutes according to customer needs.

Axcelead is a drug descovery platform company group, having its core company,

Axcelead Drug Discovery Partners, Inc. (“ADDP”), which took over the drug discovery platform business of Takeda Pharmaceutical Co., Ltd. (“Takeda”) and started Japan's first integrated drug discovery solution provider business in 2017. With the investments from DDG Fund, Axcelead sees the horizontal division of labor of pharmaceutical companies as a business opportunity, and has decided to entered the mRNA therapeutics CDMO*³ busienss, DDS*⁴ technology development business, and drug development business. Axcelead by themselves are going to build ecosystem in this field.

Hitachi and Axcelead aim to contribute to improving QoL (Quality of Life) for human through medical innovation with next-generation biopharmaceuticals.

*1 Therapeutics modality: A general term for the mechanism of action, materials, and treatment methods of drugs.

*2 mRNA: Abbreviation for messenger RNA, a blueprint for making proteins. It is made from DNA in the cell's nucleus and is degraded shortly after it is used to make proteins.

*3 CDMO (Contract Development Manufacturing Organization): A pharmaceutical contract manufacturing and development organization that is entrusted by a customer and makes into practice on behalf of, which are not only pharmaceutical manufacturing but also development.

*4 DDS (Drug Delivery System): A technology aimed at maximizing the effects of drugs and minimizing side effects by controlling the distribution of drugs in the body.

About Hitachi, Ltd.

Hitachi, Ltd. (TSE: 6501), headquartered in Tokyo, Japan, is focused on its Social Innovation Business that combines information technology (IT), operational technology (OT) and products. The company’s consolidated revenues for fiscal year 2019 (ended March 31, 2020) totaled 8,767.2 billion yen (\$80.4 billion), and it employed approximately 301,000 people worldwide. Hitachi drives digital innovation across five sectors – Mobility, Smart Life, Industry, Energy and IT – through Lumada, Hitachi's advanced digital solutions, services, and technologies for turning data into insights to drive digital innovation. Its purpose is to deliver solutions that increase social, environmental and economic value for its customers. For more information on Hitachi, please visit the company's website at <https://www.hitachi.com>.

About Axcelead, Inc.

Axcelead is a group of companies that develops a drug discovery platform business centered on ADDP, Japan's first integrated drug discovery solution provider, which took over Takeda's drug discovery platform business in 2017. Axcelead, is the flagship portfolio company of DDG Fund, which was jointly established by Whiz and Takeda in 2018, with the aim of promoting the drug discovery ecosystem in Japan, and will make various contributions to healthcare broadly and globally.

###