

Inauguration of a Research Consortium for the Automated and Digitalized Chemical Synthesis with the University of Cambridge and AstraZeneca.

Osaka, Japan, November, 16, 2020 – Shionogi & Co., Ltd. (Head Office: Osaka, Japan; President & CEO: Isao Teshirogi, Ph.D.; hereafter “Shionogi”) today announced the inauguration of the Innovation Centre in Digital Molecular Technologies (hereafter “iDMT”), an open innovation consortium for the automated and digitalized chemical synthesis of functional molecules, such as drugs, with the University of Cambridge and AstraZeneca plc. in support of the funding from the European Regional Development Fund.

It is essential for the drug discovery practices to synthesize designed chemical compounds in the expected time periods for the efficacy and safety studies. However, it is not always possible to provide the designed compounds in a timely manner, since it requires multi-step processes with scientist’s own hands and experiences. The iDMT will support collaborative projects involving academic and industrial researchers in three key areas with an aim to accelerate the chemical synthesis:

- Acceleration of synthesis through AI and automation
- Equipment for robotic experiments
- Algorithms and tools for digital process development

It is expected that achieving these targets will allow for the faster and timely provision of required compounds and the scientists to focus more on developing new ideas, accelerating the drug discovery research and development.

Professor Alexei Lapkin, Director of iDMT says “Combining cross-disciplinary expertise from several departments at the University, with state-of-the-art facilities and support from two of the leading companies in this area will enable the development of many new solutions for the nascent industry of digital molecular technology.”

Shionogi is committed to provide the best possible medicine that meets the diverse patient needs through the realization of our 2030 vision “Building Innovation Platforms to Shape the Future of Healthcare”. To achieve the goal, we have been working on diverse modalities, namely small molecules, peptides and oligonucleotides, based on the continuous improvement of our chemistry-driven research capability. We will strive to contribute to the people’s health and quality of life around the world.

About Innovation Centre in Digital Molecular Technologies (iDMT)

The iDMT consortium is set up by the University of Cambridge and partner companies with the part funding from the European Regional Development Fund. The iDMT is comprised of multi-disciplinary leading researchers from Department of Chemistry, Physics and Chemical Engineering and Biotechnology from the University of Cambridge and researchers from the two leading pharmaceutical companies, namely Shionogi and AstraZeneca. Its aim is to innovate the chemistry practices by integrating high-throughput synthesis, analytics, chemical informatics, machine learning, robotics and reaction engineering. The collaboration research outcome will be utilized for the partner company's own projects and is further developed for the commercialization in collaboration with small and medium enterprises with an aim to promote the chemical industry evolution in the United Kingdom.

About European Regional Development Fund (ERDF)

The ERDF was set up in 1975 and aims to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions. The ERDF focuses its investments on several key priority areas, namely, Innovation and research, The digital agenda, Support for small and medium-sized enterprises (SMEs), The low-carbon economy. https://ec.europa.eu/regional_policy/en/funding/erdf/

About Shionogi

Shionogi is a major research-driven pharmaceutical company dedicated to placing the highest value on patients based on its corporate philosophy of “supply the best possible medicine to protect the health and wellbeing of the patients we serve.”. We recently announced our 2030 vision “Building Innovation Platforms to Shape the Future of Healthcare” and the medium-term business plan “STS2030” for the realization of the vision. For more information, please visit <https://www.shionogi.com/global/en/>.

Forward-Looking Statements

This announcement contains forward-looking statements. These statements are based on expectations in light of the information currently available, assumptions that are subject to risks and uncertainties which could cause actual results to differ materially from these statements. Risks and uncertainties include general domestic and international economic conditions such as general industry and market conditions, and changes of interest rate and currency exchange rate. These risks and uncertainties particularly apply with respect to product-related forward-looking statements. Product risks and uncertainties include, but are not limited to, completion and discontinuation of clinical trials; obtaining regulatory approvals; claims and concerns about product safety and efficacy; technological advances; adverse outcome of important litigation; domestic and foreign healthcare reforms and changes of laws and regulations. Also, for existing products, there are manufacturing and marketing risks, which include, but are not limited to, inability to build production capacity to meet demand, unavailability of raw materials and entry of competitive products. The company disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events

Press Release



or otherwise.

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