

Shionogi Announces Agreements on Collaborative Research with PeptiDream for New Peptide Drug Conjugate(PDC) Discovery

OSAKA, Japan, January 23 , 2019 - Shionogi & Co., Ltd. (Head Office: Osaka, Japan; President and CEO: Isao Teshirogi, Ph.D.; hereafter "Shionogi") announced today that it has entered into multi-program collaborative research agreement with PeptiDream Inc. (Head Office: Kanagawa, Japan; CEO and President: Patrick Reid, Ph.D.; hereafter "PeptiDream") for the discovery and development of multiple peptide drug-conjugates(PDCs) including cargo peptides to improve the migration of drugs to the brain.

The purpose of the collaborative research under this agreement is to develop a new PDC medicines in a cooperative framework wherein PeptiDream explores cargo peptides for target molecules that are known to be related to the migration of medicines to the brain using its own peptide discovery platform system (PDPS), while Shionogi explores how to link the cargo peptide to medicines or candidate medicinal compounds.

When developing brain-targeted drugs, stricter conditions are imposed with respect to the molecular mass and physical properties of candidate medicinal compounds. This is partly accounted for by a mechanism of the brain that is known and described as Blood Brain Barrier (BBB) which strictly restricts foreign matters in blood vessels from migration into brain tissues. In the collaborative research, we will aim to build a platform for delivery of chemical compounds to the brain that will be designed to improve the migration of medicines through the BBB up to the brain, thereby establishing a new approach to developing brain-targeting drugs.

Shionogi has its vision, "Grow sustainably as a drug discovery-based pharmaceutical company contributing to a more vigorous society through improving healthcare", and is striving to contribute to the better health and QOL of people all over the world by promoting open innovation with creative companies such as PeptiDream in addition to our own R&D activities.

About Peptide Drug Conjugate(PDC)

Peptide Drug Conjugate is a complex formed by chemically bonding a special peptide with a high bonding power and preference for specific cells and tissues to medicinal substances intended for delivery to specific cells and tissues. What is meant by this approach in the use of PDC is that the special peptide does not serve as a medicinal drug per se but as a carrier which enables the medicinal substance to be selectively delivered to specific cells and tissues. This approach will enable medicinal substances to be selectively delivered to cells and tissues in need of treatment, thereby solving problems associated with existing medicines, including the need for safeguards against toxicity and pharmacokinetic monitoring.

About Cargo Peptide

Cargo Peptide is a special peptide and an associated linker that specifically bonds to target molecules and enables the target compounds to be delivered into tissues in an active manner.

Press Release



About Linker

Linker is the part of the cargo peptide which links the carrier peptide and the medicinal substance to be selectively delivered to specific cells and tissues.

Forward Looking Statement

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 or otherwise.

Contacts:

Corporate Communications, Shionogi & Co., Ltd.

Telephone: +81-6-6209-7885