

News Release

June 26, 2023

Taiho Pharmaceutical Co., Ltd.

Kyushu University

Taiho Pharmaceutical and Kyushu University Launch Joint Research for the Development of Novel Covalent Reactive Groups with a view to advance Covalent Drugs

Taiho Pharmaceutical Co., Ltd. (hereinafter “Taiho”) and Kyushu University announced today that they have commenced a joint research initiative aimed at developing novel reactive groups for the discovery of covalent drugs targeting specific proteins.

Covalent drugs, due to their mechanism of action, can offer advantages such as enhanced efficacy and extended duration of action compared to traditional reversible drugs. Taiho has been pioneering the development of Cysteinomix, a drug discovery technology platform for creating drugs that form covalent bonds with a specific amino acid (cysteine) present in target proteins. This technology platform has led to the creation of multiple in-house pipelines, including an FGFR inhibitor approved in the U.S. in 2022.

Kyushu University, a pioneering advocate of covalent drugs, has simultaneously been working on the development of proprietary novel covalent reactive groups. Its researchers have been developing agents for the treatment of cancer and infectious diseases using these reactive groups, and have succeeded in identifying multiple covalent inhibitors that combine strong efficacy with excellent target selectivity.

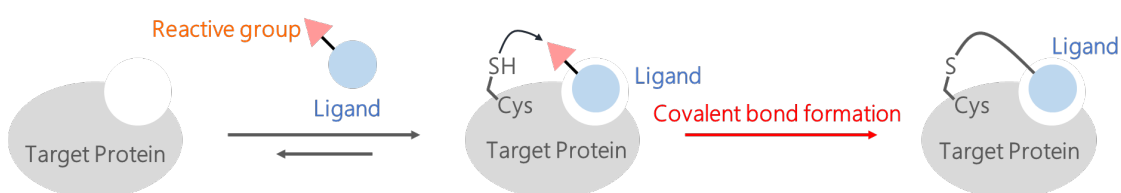
In March 2023, Taiho and Kyushu University concluded a joint research agreement aimed at developing novel covalent reactive groups for specific amino acids by merging drug discovery techniques in which each institution excels. This collaboration is expected to expand the range of target proteins and contribute to the provision of new covalent drugs.

Takeshi Sagara, Executive Director, Board Member, Clinical Development Medical Affairs Division, Discovery and Preclinical Research Division at Taiho commented, “We believe that the expansion of Cysteinomix drug discovery in partnership with Kyushu University will enable the creation of drugs for diseases previously considered challenging in drug discovery. We will continue to advance Cysteinomix to bring new drugs to areas with high unmet medical needs.”

Akio Ojida, Professor at the Graduate School of Pharmaceutical Sciences, Kyushu University, noted, “We believe that our collaboration with Taiho will further advance our research in the medicinal chemistry of covalent drugs. We will leverage the innovative ideas of academic researchers and work collaboratively with Taiho to contribute to the creation of superior pharmaceuticals.”

About Cysteinomix Drug Discovery

Cysteinomix drug discovery is Taiho’s proprietary drug discovery technology designed to continuously produce covalent drugs¹ for a variety of cysteine-containing target proteins. The Cysteinomix drug discovery platform consists of a target protein database, a covalent binder library, and various compound evaluation systems. It has a proven track record of creating multiple pipelines.



¹ Covalent drugs: Pharmaceuticals that irreversibly control the function of a target protein by forming a covalent bond with it. They are composed of a ligand, the part that binds to the pocket of the protein, and a reactive group, the part that covalently binds to a specific amino acid.