

LiberoThera and Biocytogen Enter into Strategic Collaboration Agreement

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LiberoThera Co., Ltd.

CEO Toru Kanke, Ph.D.

Tokyo, Japan and Beijing, China – LiberoThera Co.,Ltd (“LiberoThera”) and Biocytogen Pharmaceuticals (Beijing) Co., Ltd. (“Biocytogen”) announced dated on 22nd January 2021 that they have entered into an agreement for strategic collaboration, on fully human therapeutic GPCR antibody development incorporating Biocytogen’s world-class antibody discovery expertise based on its fully human antibody RenMab™ mouse platform with LiberoThera’s state-of-the-art antigen preparation capabilities.

The collaboration is expected to yield fully human GPCR antibodies for therapeutic use. Under the terms of the agreement, the companies will jointly work on the discovery research targeting an oncology-related GPCR until completion of *in vivo* evaluation studies as a first step. LiberoThera will provide antigens and assistance on *in vitro* screening while Biocytogen commits to use its RenMab™ mouse platform for the GPCR antibody generation and lead the *in vitro* and *in vivo* evaluation.

”GPCR monoclonal antibodies have great potential in various therapeutic areas. However, development of GPCR antibodies remains challenging due to the lack of understanding of the targets their biology and structure plus the technical hurdles in antigen design, preparation, modification, etc. With LiberoThera’s unique GPCR antigen preparation platform and its in-depth understanding of the target structure, we believe this strategic collaboration can break bottlenecks through leveraging the strengths of both ends to propel therapeutic GPCR antibody development forward.” said Yuelel Shen, Ph.D., president and CEO of Biocytogen.

“We are excited about this strategic collaboration as we see a great potential and synergy of Biocytogen’s innovative humanized models and streamlined antibody development platform together with LiberoThera’s membrane protein technologies.” said Toru Kanke, Ph.D., CEO of LiberoThera. “The fully human antibody RenMab™ Mouse developed by Biocytogen together with the target knock-out strategy and single-cell screening platform will increase the fully human antibody repertoire against the targets. In combination with our structural antigen, discovery of antibodies with functional properties are highly expected. In addition, it is more likely to discover antibodies cross-reacting to orthologs of other species for convenient downstream evaluation in animal models. With its established *in vivo* testing capabilities, altogether, Biocytogen’s platform allows for a streamlined solution to improve the productivity of GPCR therapeutic antibody drug development. Collaboration between LiberoThera and Biocytogen would be a good match on confronting the challenges in the field.”

Company Profile

About Biocytogen Pharmaceuticals (Beijing) Co., Ltd.

Biocytogen is a global biotech company that drives the research and development of new drugs with innovative technologies. The company is committed to becoming a global headstream of new drugs and bringing the benefits to the patients around the world as its mission. Based on the fully human antibody RenMab™, RenLite™ and RenNano™ mice for fully human antibodies production with robust humoral responses, highly diverse antibody repertoire and superior affinity, Biocytogen has integrated its platforms in single-cell antibody discovery, gene editing, large-scale animal model supply, and screening to form a new approach to streamline the entire drug development process.

Biocytogen has launched a pioneering antibody drug development plan (Project Integrum <https://renmab.com/ko-library/>) to tackle difficult targets based on the

immunization of RenMab™ knockout mice. More than 1,000 targets knockout mouse strains will be generated within 2 years for antibody discovery. Moreover, with the knockout immunization strategy, antibody hits cross-reacting with different species shall be more likely to be generated for better translational efficacy and toxicity evaluation.

Biocytogen collaborates with global partners to accelerate new drug discovery and development. For more information, please visit <http://www.biocytogen.com/>.

About LiberoThera Co., Ltd.

LiberoThera is an early-stage drug discovery company targeting GPCRs (<https://www.liberothera.com/>). The company was established in 2018 aiming to contribute to medical care through innovative drug discovery utilizing the novel membrane protein technologies invented at RIKEN. Based on its unique cell-free membrane protein synthesis and non-canonical amino acid incorporation technologies, membrane proteins with complexed multiple membrane spanning structures, such as GPCRs, can be prepared in natural forms with structural and functional integrity. LiberoThera has established antibody generation and characterization platform with best use of the membrane protein technologies and is tackling to develop novel therapeutic candidates targeting physiologically important GPCRs in collaboration with multiple biotech companies.

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