

## PRESS RELEASE

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### **ProBioGen and Merus Sign Deal on GlymaxX<sup>®</sup> ADCC Enhancement Technology**

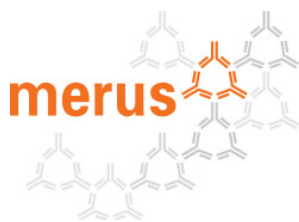
#### ***- GlymaxX<sup>®</sup> Manufacturing Technology Improves Bispecific Antibody Activity for Solid Tumor Treatment -***

*Berlin, Germany, and Utrecht, The Netherlands - March 4, 2014* - ProBioGen AG and Merus B.V. today announced that the companies have signed a non-exclusive commercial option and license agreement on ProBioGen's GlymaxX<sup>®</sup> fucose-engineering technology. Under the terms of the agreement, ProBioGen is granting Merus the non-exclusive right to use the GlymaxX<sup>®</sup> technology to enhance the ADCC (Antibody-Dependent Cell-Mediated Cytotoxicity) activity of one of its lead products, a bispecific anti-cancer antibody. The license is covering clinical development and production. Financial details have not been disclosed.

The GlymaxX<sup>®</sup> technology for the production of afucosylated antibodies and proteins is based on the stable integration of a heterologous enzyme into any antibody producer cell line, leading to the interference with the cells' intracellular fucose biosynthesis pathway. As a unique feature differentiating it from other approaches, the GlymaxX<sup>®</sup> technology can be applied to both novel and already existing antibody producer cell lines and entire antibody expression and discovery platforms without negatively affecting their productivity. Moreover, it is simple, rapid, potent and universally applicable.

"We are very satisfied to see our GlymaxX technology being applied to Merus' promising bispecific cancer antibody candidate. This underlines the superiority of our ADCC enhancement technology and its ability to deliver smart and flexible solutions for optimized biopharmaceutical products," commented Volker Sandig, Chief Scientific Officer of ProBioGen AG. "We are convinced that our GlymaxX technology will make a significant contribution to develop powerful new antibodies against any diseases in which enhanced ADCC activity translates into therapeutic benefit."

"The GlymaxX technology substantially improves the ADCC activity of one of our lead bispecific antibodies for the treatment of solid tumors so that it further enhances the tumor cell killing capacity of an already very potent molecule," said Mark Throsby, Chief Scientific Officer of Merus B.V.



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## ADCC

ADCC (Antibody-Dependent Cell-Mediated Cytotoxicity) activity is an important antibody function leading to selectively killing target cells, i.e. cancerous cells or pathogen-infected cells. Several therapeutic antibody drugs on the market rely on ADCC as a mechanism of action. ADCC enhancement has the potential to increase the therapeutic effect and/or to greatly reduce antibody dosage requirements, resulting in fewer side-effects and treatment costs.

### About GlymaxX<sup>®</sup> - [www.glymaxx.com](http://www.glymaxx.com)

The GlymaxX<sup>®</sup> technology, developed by ProBioGen, prevents the addition of the sugar “fucose” to the N-linked antibody carbohydrate part by antibody producing cells. The absence of fucose is known to greatly enhance ADCC. The GlymaxX<sup>®</sup> technology is based on the introduction of a gene for an enzyme which deflects the producer cells’ pathway of fucose biosynthesis. GlymaxX<sup>®</sup> is universally applicable to different CHO hosts and other eukaryotic cell species, and it is simple and potent. GlymaxX<sup>®</sup> can be rapidly applied in a few weeks to any existing antibody producer cell line, or can be introduced into entire animal cell expression platforms by modifying the host cell line.

ProBioGen offers this technology royalty-free as service or as licence to third parties.

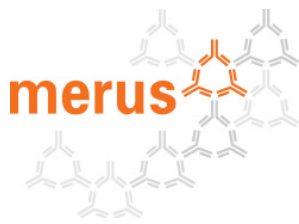
### About ProBioGen - [www.probiogen.de](http://www.probiogen.de)

ProBioGen is an internationally operating Contract Development and Manufacturing Organization (CDMO) with almost 20 years of experience in mammalian cell culture, process development and GMP-manufacturing. ProBioGen, with its scientific excellence and strong intellectual property base, is a competent and reliable CDMO partner, offering customized solutions for even the most challenging development and manufacturing requirements. This is backed by the companies’ established, fee-for-service-based CHO cell and media platform, its GlymaxX<sup>®</sup> ADCC enhancement technology and its AGE1 family of animal and human designer cell lines. All services and technologies are embedded in a total quality management system to assure compliance with international ISO and GMP standards (EMA/FDA).

ProBioGen was founded 1994 and is located in Berlin, Germany.

### About Merus B.V. - [www.merus.nl](http://www.merus.nl)

Merus is a fully-integrated biotechnology company developing cancer therapeutics that combine the benefits of monoclonal antibodies with the ability of simultaneously addressing multiple targets. Merus has two lead programs in development, MCLA-128 for the treatment of solid tumors and MCLA-117 for the treatment of hematological malignancies. The company is also developing a broad pipeline of preclinical programs that are available for partnering. Merus’ technologies encompass the proprietary



MeMo® transgenic mouse for common light-chain human antibodies and the CH3 heterodimerization technology for the production of full-length IgG Biclomics™. These Biclomics™ are robustly produced from a single clonal manufacturing cell line, using industry-standard systems. Merus' Biclomics™ bind to multiple disease-associated targets, thereby eliminating tumor cells more efficiently and preventing treatment escape. In Merus' Biclomics™-ENGAGE approach used in the MCLA-117 program, bispecific antibodies are used to induce the cytotoxic activity of T cells to kill cancer cells. All of Merus' technologies are available for licensing.

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