



PRESS RELEASE

Acceleration of the development of to-BBB's brain cancer treatment Manufacturing collaboration with TTY Biopharm

Leiden, The Netherlands, and Taipei, Taiwan, August 20th 2009

TTY Biopharm, the Taiwanese biotech manufacturer of Lipo-Dox®, will become a co-development partner of to-BBB, the Dutch brain drug delivery company, for the manufacturing of brain-targeted doxorubicin liposomes. These liposomes are essential for the clinical development of to-BBB's lead product for the treatment of brain cancer.

Werner Gladdines, Head of Clinical Operations at to-BBB, is very pleased with this agreement: "TTY Biopharm is highly specialized in the preparation of doxorubicin PEG-liposomes and will thus be able to efficiently manufacture brain-targeted doxorubicin liposomes with the same precision within a short timeframe. Working with TTY Biopharm, therefore, greatly accelerates our clinical development of our lead product for brain cancer".

Brain cancer affects up to 200,000 patients annually in the United States and similar numbers in Europe. Treatment options for this devastating disease are limited and overall prognoses are poor. The neuroprotective blood-brain barrier (BBB) is limiting the delivery of many anti-cancer drugs to tumors in the brain, especially to micrometastases and invasively growing tumor sprouts. to-BBB's proprietary G-Technology™ is a safe technology for enhanced drug delivery to the brain.

Based on its proprietary G-Technology, discovered by the Industrial Technology Research Institute (ITRI) in Taiwan, to-BBB is developing its lead compound, brain-targeted doxorubicin liposomes. These liposomes are coated with the tripeptide glutathione at the tips of polyethylene glycol (PEG) to safely enhance the delivery of free drug to the brain. Doxorubicin glutathione-PEG liposomes have shown a reduced brain tumor growth in proof-of-concept studies, which provides a strong basis for clinical development. For this development, to-BBB requires clinical scale batches of the brain-targeted doxorubicin liposomes, produced according to cGMP standards. TTY Biopharm will provide these liposomes in a timely manner.

The TTY Biopharm Formulation Team is focused on the development and commercialization of oral and injectable controlled-release and liposomal pharmaceuticals. TTY Biopharm currently sells Lipo-Dox®, an internally developed pegylated liposomal doxorubicin, similar to Doxil®/Caelyx®, for multiple systemic cancer types for the Taiwanese and Asian market. With a similar technology in their development process, TTY Biopharm will be able to manufacture the brain-targeted version of these doxorubicin liposomes in the shortest possible timeframe. With the EMEA approved facility in ChangLi, Taiwan, TTY Biopharm currently collaborates with several European pharmaceutical companies to launch generic oncology drugs for the European market. Through the collaboration with to-BBB, TTY Biopharm will demonstrate their capabilities to develop new drug formulations for the worldwide market.

About to-BBB

to-BBB is a Dutch biotechnology company in the field of enhanced drug delivery to the brain. To successfully develop new treatments, to-BBB provides the safest proprietary brain delivery platform in synergy with established and marketed drugs. The company's vision is that the treatment of currently unserved, devastating brain diseases will be best achieved by targeting to endogenous blood-to-brain uptake systems for the delivery of drugs.

to-BBB is headquartered in The Netherlands at the Leiden Bio Science Park and established a fully owned subsidiary, to-BBB Taiwan Ltd., in Taipei, Taiwan.

About TTY Biopharm

Since the establishment in 1960, TTY Biopharm has transformed from a generic drug manufacturer and seller to an international enterprise focusing on the development of new formulas with the marketing orientation. TTY Biopharm is specialized in the research and development of drugs for cancer, anti-infection, cardiovascular disease, and central nerves. The TTY formulation R&D center has the technology to develop oral and injectable controlled-release, liposomal and micro-emulsion formulations. With strict assessment procedures for new products and patent analysis, an outstanding development capability of our formulation R&D center, and the long-term established scientific data on clinical trials, TTY will be the leading drug development company in Taiwan and enter the global market with high-barrier to competition and effective drugs of innovative formulations to become the best partner of the companies that are competitive in drug promotion in the target market.

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