

## BioBusiness Asia 2009

Company Name	to-BBB technologies BV		
Presenter	P.J. Gaillard	Title	CSO
Address	to-BBB technologies BV, Niels Bohrweg 11, 2333 CA, Leiden , The Netherlands		
Website	www.toBBB.com		
No. of employee	12	Year of foundation	2003
Company Categories	<input checked="" type="checkbox"/> Novel Therapeutics <input type="checkbox"/> Genomics <input type="checkbox"/> Pharmaceuticals <input type="checkbox"/> R&D Service <input type="checkbox"/> Medical Devices <input type="checkbox"/> Other _____		
Paid-in Capital			
Company Stage	<input type="checkbox"/> Seed <input checked="" type="checkbox"/> Start up <input type="checkbox"/> Expansion <input type="checkbox"/> Mezzanine		
Company Overview	to-BBB is a Dutch biotechnology company in the field of drug delivery to the brain which uses its platform technologies to synergize with established and marketed drugs.		
Company History	<p>The founding fathers of to-BBB were Pieter Gaillard, Alfred Nijkerk, Bert de Boer and Leiden University who set up the company in 2003 as a spin-off from the renowned Blood-Brain Barrier Research Group of the Leiden/Amsterdam Center for Drug Research from Leiden University in The Netherlands.</p> <p>In addition to its internally developed patent estate, to-BBB signed an exclusive license agreement with the Industrial Technology Research Institute (ITRI) of Taiwan in November 2008, granting to-BBB the worldwide rights for development and commercialization of G-Technology™ that enables potential treatments for devastating brain diseases like Alzheimer's Disease, Parkinson's Disease, Stroke and Brain Tumors, to safely cross the neuroprotective Blood-Brain Barrier.</p>		
Main Products/ Service & Niche of Products/ Service	<p>to-BBB is developing two platform technologies, the G-Technology™ and the HB-EGF-Technology™, which enable site-specific targeting of drugs or imaging labels. The technologies are based on the proprietary use of well-characterized transport receptors and known receptor-specific and human applicable ligands.</p> <p>In to-BBB's innovative approach, the ligands serve as drug-targeting moieties. Therapeutic compounds, which by themselves cannot enter the brain in meaningful amounts, are conjugated directly or indirectly via liposomes to these ligands. And since the receptors for these ligands are highly expressed on the Blood-Brain Barrier the conjugates are preferentially targeted to the brain.</p> <p>to-BBB is pursuing the pre-clinical development of brain-targeted chemotherapy for the treatment of Brain Tumors (2B3-101), a disease-modifying approach to target Alzheimer's Disease (2B3-201), and targeted biologicals for treating the neurological symptoms of Lysosomal Storage Diseases (2B3-301).</p>		

<p>Market Potentials</p>	<p>The CNS market has become one of the largest and fastest growing markets in the pharmaceutical industry with worldwide sales of \$109 billion in 2007 and a growth rate of 8%, over twice the overall pharmaceutical market.</p> <p>In selected conditions within this market to-BBB leverages its technology platform by developing products internally while actively pursuing collaborations with potential partners in a broader number of CNS diseases. The company pipeline contains products for the treatment of Brain Tumors, Alzheimer’s Disease and Lysosomal Storage Disease. Whereas the market for Alzheimer’s Disease is enormous and easily accommodates any innovative drug, to-BBB’s products for Brain Tumors and Lysosomal Storage Disease target underserved niche markets.</p>
<p>Company Core Competence or Competitive Advantage</p>	<p>No other technology is able to achieve the transport across the Blood-Brain Barrier with the favorable pharmacokinetic and safety profile of the G-Technology™.</p>
<p>Partnering Objectives</p>	<p>In addition to this internal development program to-BBB is pursuing several research collaborations for specific product – indication combinations with partners in academia and industry.</p>