Pieris and Pepscan to identify GPCR-specific Anticalins® using CLIPS™ protein mimicry technology

October 30th 2007. Pieris AG (Munich, Germany) and Pepscan Therapeutics (Lelystad, Netherlands) today announced the commencement of a research collaboration aimed at identifying Anticalins® specific for G-Protein Coupled Receptors (GPCRs) and their development as therapeutic candidates.

Pieris has pioneered Anticalins® as next generation targeted therapeutics with clear advantages over monoclonal antibodies, while Pepscan has developed CLIPS™ technology to yield immunogens targeting functional epitopes on proteins. Through this newly announced collaboration, the companies aim to combine and apply their respective technologies to the discovery and development of novel Anticalins® able to modulate GPCR function in disease.

GPCRs form one of the most important classes of drug targets, yet for many of these receptors, no pharmacologically active small molecule drugs have been identified. Biotherapeutics provide an intriguing alternative if they can be selectively targeted to functional epitopes, yet monoclonal antibodies modulating GPCR action have to date proven technically challenging. Pepscan's CLIPS™ technology has the distinct advantage of selectively identifying functional mimics of the extracellular portions of GPCRs which are fundamental in biology. Such mimics will be used by Pieris to select Anticalins® with disease modifying potential.

"Pieris has successfully isolated and characterised high potency Anticalins® against structurally diverse functional epitopes on a wide range of medically relevant proteins", said Dr Andreas Hohlbaum, Director of Science and Preclinical Development at Pieris. "Incorporating Pepscan's CLIPS™ technology into our selection and screening process now allows us to discover Anticalins® with high affinity and selectivity for specific GPCRs".

Dr Rob Meloen, Chief Scientific Officer of Pepscan Therapeutics commented: "Functional binding proteins directed against GPCRs are in great demand as disease-targeting agents. This collaboration allows Pepscan to apply its protein mimicry technology to GPCRs for the identification of Anticalins® with therapeutic potential".

ENDS

For further information, please contact:

Pieris AG **Phone** +49 (0) 8161 1411 400
Dr Birgit Zech, Senior Manager Business Development

Pepscan Therapeutics **Phone** +31 (0) 320 237200
Peter van Dijken, Chief Commercial Officer

Notes to editors

About Pieris AG

Pieris is a biopharmaceutical company engaged in the discovery and development of Anticalins®, a novel class of targeted human proteins designed to diagnose and treat serious human disorders. Exploiting extensive know-how in protein engineering as part of a broad intellectual property portfolio, the Company applies a balanced risk business model to the development of Anticalin product candidates.

About Anticalin® Technology

Anticalins are engineered by Pieris from the scaffold of human lipocalins, a family of natural ligand binding proteins. Anticalins are selected to have prescribed binding properties with selectivity and affinity fundamentally similar to that of monoclonal antibodies. Being human in origin, Anticalins are predicted to have minimal immunogenicity in man. Where Anticalins benefit compared to conventional antibodies is in their small size (20 kDa), their robust physicochemical properties and their simple composition that together allow highly soluble, predictably stable products to be manufactured from bacteria. Anticalins are amenable to further engineering to balance their favorable tissue penetration with adjustable serum clearance. Moreover, Anticalins have been developed as Duocalins®, whose dual targeting format allows multiple targets to be bound and modulated through a single molecule.

Further information is available at http://www.pieris-ag.com

About Pepscan Therapeutics

Pepscan Therapeutics is a product focused immunotherapy company based in the Netherlands. It has developed a pipeline of therapeutic vaccines of which the most advanced is in Phase II clinical testing. Pepscan's proprietary **CLIPS™** technology has been proven to yield functional antibodies reactive with a range of complex proteins, including GPCRs.

About CLIPS™ Technology

Chemically Linked Immunogenic Peptides on Scaffolds (CLIPS™) is a technology to present one or more peptides in a structurally constrained configuration. These molecules behave as functional mimics of complex protein domains that serve as superior immunogens in the induction and selection of antibodies against disease relevant protein targets. This is especially valuable in the case of proteins that are inaccessible as recombinant proteins (e.g GPCRs, ion channels, patented proteins).

Further information is available at http://www.pepscan.com