



Phylogica and Isogenica target peptide drugs for inflammatory disease

Perth and London: January 18, 2010

Phylogica and Isogenica today announce that they have entered into an agreement to use Isogenica's CIS display technology to optimize the performance of three of Phylogica's lead compounds targeting CD40 ligand (CD40L), a key protein involved in many inflammatory diseases.

Phylogica has already demonstrated lead peptide compounds that bind with high affinity and are biologically active against CD40L. Isogenica's CIS display technology allows a comprehensive search process to optimize the exact chemical and three dimensional structure required to further enhance the properties of the Phylomer peptides, improving drug properties such as affinity, stability and potency.

"We believe that the use of CIS display will accelerate the rapid entry of Phylogica drug candidates into preclinical development programs and increase their commercial value", said Professor Paul Watt, Phylogica's VP, Corporate Development. "Phylomers are sourced from the most structurally diverse peptide libraries in the world which translates into exceptionally high bioactive hit rates, including primary hits with picomolar affinities for their targets", Prof Watt added.

"Isogenica is focused on servicing the protein engineering needs of the pharmaceutical and biotech industries and is delighted to have the opportunity to work with Phylogica, combining technologies that have the potential to discover novel and potent therapeutic peptides", said Kevin Matthews, CEO of Isogenica.

Notes for Editors

CD40 ligand

The CD40 ligand has been validated in multiple models of inflammatory diseases including Rheumatoid Arthritis, Inflammatory Bowel Disease (IBD), Systemic Lupus Erythematosus (SLE) and in reduction of transplant rejection. Blockade of CD40L with antibodies has also shown therapeutic benefit in humans although this was associated with adverse side effects, which are now thought to be antibody-related and which peptides such as Phylomers are expected to avoid. In addition, large proteins such as antibodies are normally delivered by injection, while there are a number of approved peptide drugs that can be delivered by patient friendly routes such as intranasal inhalation.

About Isogenica:

Isogenica specialises in providing protein engineering services using its core technology, "CIS display", to pharmaceutical and biotechnology companies for the discovery, identification and design of new peptide, polypeptide and antibody lead compounds.

CIS display can construct within a few hours polypeptide libraries of unprecedented size and complexity *in vitro*, without the need for cloning. These can be processed to identify better products and motifs in just a few days. Active peptides with antibody-like levels of affinity and specificity for target compounds can be isolated and then rapidly matured to optimise desirable qualities. CIS display technology has particular benefits against biological membrane preparations, cells and bacteria. The technology is adaptable for the display of different proteins and has been licenced for the Centyrin scaffold.

About Phylomers

Phylomer[®] peptides are derived from biodiverse natural sequences which have been selected by evolution to form stable structures which can bind tightly and specifically to disease associated target proteins. Suitable targets for Phylomer[®] blockade include protein interactions that promote multiple diseases, such as infections, cancer, autoimmunity and heart disease. Phylomer[®] peptides can have drug-like properties including specificity, potency and thermal stability, and are capable of being produced by synthetic or recombinant manufacturing processes. Phylomer[®] peptides are also readily formulated for administration by a number of means, including parenteral or intranasal delivery. Phylogica has recently initiated a collaboration with Aegis Therapeutics LLC (www.aegisthera.com) to develop the delivery of Phylomer[®] peptides by their formulation using Intravall[®] for transmucosal delivery.

About Phylogica (www.phylogica.com)

Phylogica is a biopharmaceutical company focusing on the discovery, development and commercialization of Phylomer[®] peptides, especially for inflammatory diseases. Phylogica engages in the discovery and validation of Phylomer[®] peptides for the development of innovative therapeutic products, through relationships with commercial partners and its in house drug discovery programmes. Phylogica's discovery platform uses its proprietary Phylomer[®] libraries, a highly diverse and complex collection of billions of Phylomer[®] peptides, to provide a rich source of potent drug leads for a broad range of disease targets. Over the past few years, Phylogica has gained significant leverage in the area of peptide drug discovery by establishing proprietary rights for their Phylomer[®] libraries and screening methods which when combined with Phylogica's significant know-how in the field of drug discovery, constitutes a powerful drug discovery platform, which offers the highest hit-rates for bioactive peptides.

Phylogica[®] and Phylomer[®] are registered service marks of the company in Australia and USA, and Phylomer[®] is also a registered goods mark of the company in Australia.

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