



BREAKTHROUGH PEPTIDES FOR THERAPEUTICS

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## SHAREHOLDER UPDATE

Perth, Australia: 7<sup>th</sup> April 2014 – Leading peptide drug discovery company Phylogica Ltd (ASX:PYC, XETRA:PH7) provides this update to shareholders covering:

- Capital Raising
- Latest progress on Janssen collaboration and Phylogica's novel Endosomal Escape Trap development – potential to make some existing treatments 25-50 times more effective

### ***Successful Completion of Non-Renounceable Rights Offer***

In January Phylogica was delighted with the successful non-renounceable rights offer that raised \$6.1 million. The offer was fully underwritten by Bernard Hockings, our largest shareholder, and Patersons Securities. In a show of strong support 87% of the entitlement offer was taken-up by existing shareholders. The capital provides Phylogica with a cash runway of about two years, which will be used to commercialise our unique drug discovery platform.

### ***Janssen Collaboration Progress – EET potential to make existing drugs 25-50x more effective***

In conjunction with Janssen, Phylogica has been making significant progress towards validation of one of its proprietary technology – the Endosomal Escape Trap (EET), to discover novel cell penetrating peptides. The EET is a unique technology that enables Phylogica to screen billions of Phylomers for the relatively rare peptide that can escape from endosomes to deliver its cargo more efficiently into cells. This is a critical first step towards identifying peptides that can deliver drugs against intracellular targets.

The compelling value of EET is that testing so far reveals it can potentially make some existing major drug treatments 25-50 times more effective.

This important discovery followed Phylogica's expansion of its Janssen collaboration last July after successfully delivering on a major project milestone. The overall aim was to identify Phylomer-drug conjugates used to deliver therapeutic payloads into specific cell types with high efficiency.



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In February 2014, Phylogica highlighted several key milestones achieved with the Endosomal Escape Trap. These included;

- Identification of Phylomers that improved delivery of a protein cargo inside cells by 25-50 times.
- Establishing that the EET yielded an unprecedented hit-rate for functionally active peptides
- Observed high sequence and structural diversity in the pool of validated hits suggesting a range of cell-uptake mechanisms
- Phylomers shown to deliver a range of therapeutic cargoes inside cells including toxins and the Janssen cargo
- Information collected across populations of novel cell penetrating peptides provides Phylogica with unique insight and hence intellectual property into the requirements for cell penetration.

These exciting data firmly establish Phylogica as a global leader in the field of intracellular drug delivery. Having validated its novel platform for discovery of functionally active delivery reagents the company is actively pursuing expressions of interest from multiple potential partners.

Discussions are underway with Janssen to determine next steps beyond our existing two-year collaboration. Phylogica has also been encouraged by interest shown from other well-recognised companies in the sector that are exploring novel antimicrobial applications of the EET. We look forward to updating shareholders with progress and more detail on these discussions in due course.

**-ends-**

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### **About Phylogica**

Phylogica Limited (ASX: PYC) is a biotechnology company based in Perth, Australia with a world-class drug discovery platform harnessing the rich biodiversity of nature to discover novel peptide therapeutics. The Company was incorporated in 2001 as a spin out from the Telethon Institute for Child Health Research (Perth, Australia) and the Fox Chase Cancer Centre (Philadelphia, USA). The Company's drug discovery platform is based on its proprietary Phylomer<sup>®</sup> libraries containing over 400 billion unique natural peptides, which have been optimised by evolutionary selection to have stable drug-like structures. Phylogica offers fully integrated drug discovery services to the pharmaceutical industry utilising its Phylomer<sup>®</sup> libraries and proprietary screening technologies. Its current partners include Genentech (a member of the Roche Group), MedImmune (the worldwide biologics arm of AstraZeneca), Pfizer and Janssen (the pharmaceutical arm of Johnson & Johnson).



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**About Phylomer® Peptides**

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, both inside and outside cells. Suitable targets for blockade by Phylomers include protein interactions that promote multiple diseases, such as infectious diseases, 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 approaches.