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Proteomics commences Therapeutic Drug Discovery Program

- **PILL to utilise its proprietary disruptive technology platform to assess potential new painkilling and antibiotic drug compounds.**
- **Therapeutic Drug Discovery is one of PILL's core business areas and is a major growth market - peptide therapeutics market estimated value is $17b.**
- **Program is low cost and has potential to deliver major end returns.**
- **PILL's drug discovery process delivers a significant reduction in discovery timeline and a substantial cost advantage relative to traditional drug discovery.**

Life sciences company Proteomics International Laboratories Ltd (ASX: PIQ) (the Company, PILL) is pleased to announce that it has commenced a Therapeutic Drug Discovery program utilising its proprietary proteomics-based technology platform.

The Company is specifically targeting the discovery of new analgesic (painkilling) and antibiotics compounds and will test 50 - 100 venoms in the program. The program is low cost to PILL, with no additional costs incurred apart from the sourcing of venom samples, and has the potential deliver highly significant end returns.

PILL will utilise its state-of-the-art technology platform to assess potential new drug compounds (collected from animal venom). Its drug discovery process results in a significant reduction in the discovery timeline and at substantial cost advantage relative to the traditional drug discovery process (see Figure 1).

Details and anticipated timeline of Therapeutic Drug Discovery program are as follows;

- Analytical work: which will include mass spectrometry proteome mapping to catalogue the peptides from venom – Q1-2, 2016.
- Bioinformatics: utilising PILL's proprietary software algorithm to predict the function and activities of the peptides – Q3, 2016.
- Potential 'Lead' testing: Synthesise of selected peptides for testing using different assays to validate the predicated function and activities – Q4, 2016.

A peptide is a small protein built from amino acids – one of the building blocks of life – and they occur naturally in the body.

The best molecules will then enter pre-clinical development and commence the pathway towards clinical testing and potentially, eventual, commercialisation. After lead compounds have successfully been identified, PILL will seek to engage with pharmaceutical companies to out-license the drug candidate(s). This may include upfront payments or research and development support, plus milestone payments as well as royalties upon commercialisation.

Market opportunity

Therapeutic drug discovery is one of PILL's core business areas – along with its Diagnostics and Analytical Services operations – and represents a major growth market opportunity, with the peptide therapeutics market currently estimated to be worth $17 billion.

Large pharmaceutical companies have major demand for new compounds with the potential to treat diseases and are estimated to spend an average of $4 billion on research and development for every new drug approved drug(according to Forbes). The process is also significantly time consuming and can take up to six years to identify pre-clinical candidates.

Pharmaceutical companies are shifting focus from random direct screening to acquisition of already pre-screened new compounds, such as those produced by PILL's proprietary drug discovery process. There are currently a number of venom-based painkilling and antibiotic drugs on the market. These include high blood pressure and heart medication Captopril (whose brand name Capoten has had peak annual sales of $1.5 billion), diabetes drug Exenatide and pain medication drug Ziconotide.

Background

PILL has developed a proprietary targeted approach to drug discovery. Utilising its protein mapping expertise and proprietary software algorithm, the Company previously conducted an 18-month pilot study, where it pre-screened 10 venoms and 2,000 compounds. From that process, 12 molecules were selectively tested and as result five lead compounds were discovered with the potential to become mainstream drugs in the future. Comparatively, traditional random screening is highly ineffective, requiring hundreds of thousands of starting molecules to produce lead compounds.

The Therapeutic Drug Discovery program will run in parallel with the Company's ongoing diagnostic and analytical services activities, and is entirely complementary with these synergistic business areas.

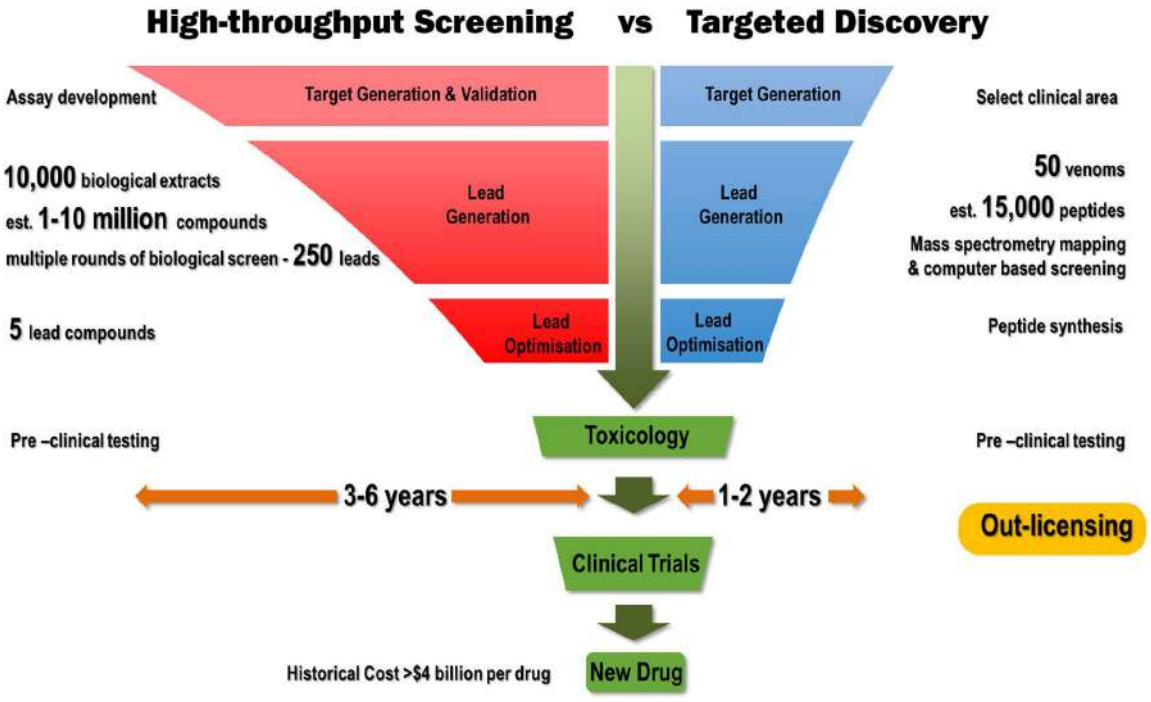

Figure 1: *Approaches to drug discovery.* Traditional high-throughput screening is estimated to cost >$4 billion per new drug approved, and requires testing of hundreds of thousands of compounds [Source: FDA Center for Drug Evaluation and Research]. PILL has developed a disruptive targeted discovery approach which aims to be more cost and time effective. This process is designed to take months as compared to years, and in a pilot study was able to generate leads ready for pre-clinical testing in 12 months.

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For further information please contact:

Dr Richard Lipscombe
Managing Director
Proteomics International Laboratories Ltd
T: +61 8 9389 1992
E: enquiries@proteomicsinternational.com
www.proteomicsinternational.com

Media and Investor Inquiries
James Moses
Director (Head of Business Relations)
T: +61 420 991 574
E: j.moses@proteomicsinternational.com

Greg Wood [Financial Advisor]
Managing Director
K S Capital
T: +61 416 076 377
E: g.wood@kscapital.com.au

About Proteomics International Laboratories (PILL)

PILL is an ASX listed (ASX: PIQ) life science company focused on the area of proteomics – the industrial scale study of the structure and function of proteins. Proteomics is an integral part of the biotechnology and life sciences industries and plays a key role in understanding disease and biological systems.

PILL is recognised as a global leader in its field. It received the world's first ISO 17025 laboratory accreditation for proteomics services, and operates from state-of-the art facilities at the Harry Perkins Institute of Medical Research in Perth, Western Australia. The Company's business model uses its proprietary technology platform which operates across three synergistic areas, each massive growth markets:

1. Diagnostics: Biomarkers of diseases and personalised medicine - focus on diabetic kidney disease and Alzheimer's disease. The biomarkers market is estimated to double in size to $45.6 billion by 2020.
2. Analytical services: Specialist contract research, analytical testing and consultancy - fee for service model. The specialist proteomics market alone represents a massive global market estimated to be worth $20.8 billion by 2018.
3. Drug discovery: Therapeutic drug discovery with a focus on painkillers and antibiotics. The peptide therapeutics market is currently estimated to be worth $17 billion.