



## COMPANY NEWSLETTER

EDITION #5 April 2016

### MESSAGE FROM THE MANAGING DIRECTOR

Welcome to our first newsletter for 2016. Regular readers will notice an expanded, redesigned newsletter created to provide additional information on our activities and operations for the benefit of our clients, friends and stakeholders. The first quarter of 2016 has coincided with a period of significant activity across all areas of the business – analytical services, diagnostics and drug discovery – and highlights of each are contained in this newsletter.

Leading the news is our imminent trade visit to India, from the 18-28<sup>th</sup> April. Second only to the USA in the number of US FDA approved manufacturing plants, and with a biotechnology sector forecast to grow at 30% per year to US\$100 billion by 2025, India is an exciting destination. Proteomics International has been operating there since 2004 and will be joined by the Australian Trade Commissioner to host events in the major biotech hubs of Mumbai, Hyderabad and Bangalore.

This trip will target advances in our analytical services portfolio, a flavour of which is introduced in the Biosimilars and Biologics sections.

Equally exciting are new opportunities for biomarker discovery provided by our core proteomics technology platform. We are especially focused on advancing the company's internally developed protein marker panel, PromarkerD, a ground-breaking test for predicting diabetic kidney disease. New figures from the WHO state 422 million people now have diabetes, a four-fold increase in 35 years. Currently one third of diabetics have some form of kidney disease.

To wrap up we feature the launch of an expanded drug discovery programme to identify novel bioactive peptides, again using our core disruptive platform technology.

PILL prides itself on being an innovative company operating in vibrant sectors, and I hope you enjoy this new, expanded newsletter. Your feedback is always welcome as we seek to share news on progress across the business in the months ahead.

Richard Lipscombe, PhD  
Managing Director



Proteomics International  
Laboratories Limited  
Managing Director  
Dr Richard Lipscombe

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For further information on anything in this newsletter please see the Company website;  
[www.proteomics.com.au](http://www.proteomics.com.au) or  
[www.proteomicsinternational.com](http://www.proteomicsinternational.com)



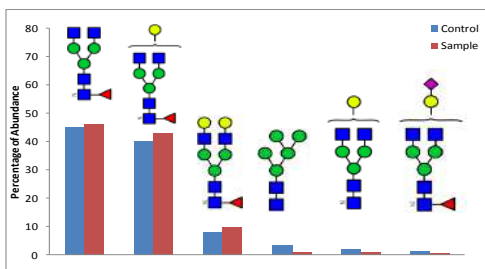
## BIOSIMILARS CASE STUDY: RITUXIMAB ANTIBODY

Proteomics International is releasing a case study for Rituximab (Rituxan®, MabThera®), a chimeric monoclonal antibody.

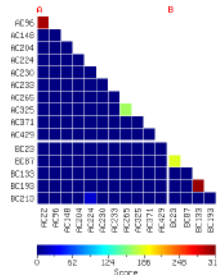
Antibodies are complex. Minor changes to their structures that may take place during the manufacturing process can alter their biological activity. Their efficacy is highly dependent on the correct structure defined by the glycosylation and disulphide bridge patterns.

Proteomics International has extensive experience in providing comprehensive structural analyses of biosimilars such as antibodies. Efficiency of the mass spectrometry based structural analysis has been significantly increased by the use of a new software tool, which automates the verification of the disulphide bridge pattern.

**Please contact the Company to request the Case Study Data Pack:  
info@proteomics.com.au**



Relative glycan abundances detected in the antibody samples.



Heatmap of the identified disulphide linked peptides for the antibody

## Biologics / Biosimilars / Biobetters

### Biologics:

complex medicinal protein drugs manufactured in, or extracted from, biological sources.

### Biosimilars:

protein-based molecules that are made to mimic an original Biologic drug.

### Biobetter:

a biological product related to an already approved drug but superior in one or more product characteristics.

## STAFF PROFILE: ANDREJA LIVK



Andreja has more than 17 years of experience in protein and peptide chemistry, including characterisation of biosimilars and biologics. Her skill set encompasses a number of analytical methods, including the analysis of disulphide linked peptides, pegylation analysis, peptide mapping and *de novo* peptide sequencing. She has extensive experience with a wide range of mass spectrometry systems, liquid chromatography and N-terminal sequencing.

Andreja joined Proteomics International soon after incorporation. Presently, she is a leader of commercial projects in biosimilars and together with her team delivers Proteomics International biosimilars services to clients globally.

## INDIA TRADE VISIT

Proteomics International is pleased to provide details of its upcoming trade visit to India, from the 18<sup>th</sup> to the 28<sup>th</sup> April 2016.

Managing Director Dr Richard Lipscombe, Contract Services Manager Andreja Livk and Computational Proteomics Scientist Dr Javed Khan will visit the major cities of Mumbai, Pune, Ahmedabad, Hyderabad and Bangalore to promote the Company's latest developments in biosimilars analytics and biomarker discovery. The Company will meet and discuss specific project requirements, and explore ways to work together strategically with industry participants.

Proteomics International will also host a series of invitation only evening functions on the following dates;

### Mumbai:

Tuesday 19 April, 7:00pm - 10:00pm  
VITS – Luxury Business Hotel (Emerald Hall), Andheri Kurla Road, International Airport Zone, Andheri (E)

### Hyderabad:

Monday 25 April, 6:30pm - 9:30pm  
Aditya Park – A Sarovar Portico Hotel (Senate 1 Hall), Aditya Trade Centre Satyam Theatre Road, Ameerpet

### Bangalore:

Wednesday 27 April, 6:30pm - 9:30pm  
The Solitaire Hotel (Emerald Hall), 3 Kumara Krupa Road, Madhavanagar

The events will include;

- Introductory remarks by the Australian Trade Commissioner
- Richard Lipscombe, PhD, Proteomics International Managing Director presenting "*Translating biomarker discovery into a diagnostic test*", and
- Andreja Livk, Proteomics International Contract Services Manager presenting "*Accredited biosimilars testing*".

**For further information, inquiry to attend, or meeting request, please email: [events@proteomics.com.au](mailto:events@proteomics.com.au)**

## Biosimilars, Biologics QA & Biomarker Discovery

- LATEST DEVELOPMENTS IN ACCREDITED SERVICES
- SCIENTIFIC DISCUSSIONS WITH BIOPHARMAS
- NETWORKING EVENT IN MUMBAI, HYDERABAD & BANGALORE  
- Opening remarks by Australian Trade Commissioner

**18<sup>th</sup> - 28<sup>th</sup> APRIL 2016**

**MUMBAI**

**PUNE**

**AHMEDABAD**

**HYDERABAD**

**BANGALORE**

For more info, please email [events@proteomics.com.au](mailto:events@proteomics.com.au)



## PromarkerD – PROGRESS CONTINUES ON MULTIPLE DEVELOPMENT PATHWAYS

- **Follow up validation study on 500 patient cohort underway**
- **Program commenced to produce a standard clinical pathology IVD test kit for PromarkerD**

### Licensing & Partnering

PILL is engaged in highly positive discussions with diagnostic and pharmaceutical companies for the commercialisation of PromarkerD in key global markets, including the USA, Europe, Japan and Latin America.

PromarkerD is the world's first proteomics derived predictive test for the diagnosis of Diabetic Kidney Disease. Discussions are ongoing with a major global health care company. As part of this process, the potential partner company has requested follow-up validation studies of PromarkerD to confirm its initial ground-breaking results.

This follow up study, on an independent 500 patient cohort with diabetes, is underway. It is designed to apply the Company's established predictive model to further validate PromarkerD as a predictive test for Diabetic Kidney Disease. The Company's potential partner is also aiming to provide an additional international patient study cohort to demonstrate the robustness of PromarkerD across different geographical regions.

### Developing a PromarkerD IVD test kit

The Company has also commenced its own development pathway for PromarkerD with the aim of producing a commercial-ready clinical pathology In vitro Diagnostic (IVD) test kit. This program that will be developed in parallel with PILL's ongoing partnering and licensing discussions, and will provide multiple complementary commercialisation pathways for PromarkerD as a: Laboratory Developed Test (LDT), Standard clinical pathology IVD test, and Companion Diagnostic (CDx).

The process to source antibodies required for a multiplex ELISA (Enzyme-linked immunosorbent assay), the precursor to an IVD test, is underway, as are discussions with an assay development company to develop the assay. PILL will provide further updates on PromarkerD in due course.



## THERAPEUTIC DRUG DISCOVERY PROGRAM LAUNCHED

- **PILL to assess potential new painkilling & antibiotic drug compounds**
- **Program has potential to deliver major end returns**
- **PILL's drug discovery process delivers a major reduction in discovery timeline & costs relative to traditional drug discovery**

PILL has commenced a Therapeutic Drug Discovery program utilising its proprietary proteomics-based technology platform to target the discovery of new analgesic (painkilling) and antibiotic drug compounds.

Therapeutic drug represents a major growth market opportunity, with the peptide therapeutics market currently estimated to be worth \$17 billion.

PILL will test 50-100 animal venoms using its existing workflows.

The Company's drug discovery process results in a significant reduction in the discovery timeline and costs relative to traditional random direct screening drug discovery – which can take up to six years to identify pre-clinical candidates.

Large pharmaceutical companies have major demand for new drug compounds to treat diseases, and, according to Forbes, are estimated to spend an average of \$4 billion on R&D for each new drug approved. Pharmaceutical companies are now shifting focus to acquiring already pre-screened new compounds, such as those produced by PILL's proprietary drug discovery process.

This is the intent of the Company's drug discovery program – to produce new lead drug compounds that can be out-licensed for development by pharmaceutical companies, and have the potential to deliver highly significant returns.

*The program is expected to be completed this year. The best molecules will then enter pre-clinical development and commence the pathway towards clinical testing and potential commercialisation*

## NEW WEBSITE & CORPORATE VIDEO

The Company recently launched its new company website, which is available at: [www.proteomics.com.au](http://www.proteomics.com.au) or [www.proteomicsinternational.com](http://www.proteomicsinternational.com)

The new website replaces the previous separate business and corporate websites in one comprehensive site designed to provide details of the company's full range of services plus information for investors.

PILL also has a new corporate video describing the Company's PromarkerD predictive test for diabetic kidney disease. **The video is accessible via the Company website.**



## PROTEOMICS – FAST FACT PANEL

### Company Contacts

**Dr Richard Lipscombe**  
Managing Director

**Ms Andreja Livk**  
Contract Services Manager

**Mr Chuck Morrison**  
Head of Business Development

**Mr James Moses**  
Executive Director – Investor Relations

**Dr Scott Bringans**  
Research Manager

**Dr Pearl Tan**  
Product Development

### Agents

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### Listing

Australian Securities Exchange

### Market Capitalisation based on share price of 30 cents

A\$15.18 million

### Stock Code

ASX: PIQ

### Cash Position

A\$1.51 million (@31/12/2015)

### Issued Capital – Ordinary shares

50.6 million


Proteomics International is a wholly owned subsidiary of Proteomics International Laboratories Limited (ASX: PIQ).


## FOR FURTHER INFORMATION PLEASE CONTACT:

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### Forward looking statement

Any forward looking statements in this newsletter have been prepared on the basis of a number of assumptions which may prove incorrect and the current intentions, plans, expectations and beliefs about future events are subject to risks, uncertainties and other factors many of which are outside Proteomics International Laboratories Limited's control. Important factors that could cause actual results to differ materially from any assumptions or expectations expressed or implied in this newsletter include known and unknown risks. As actual results may differ materially to any assumptions made in this newsletter, you are urged to view any forward looking statements contained in this newsletter with caution. This newsletter should not be relied on as a recommendation or forecast by Proteomics International Laboratories Limited, and should not be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.