
Quarterly Newsletter - April 2006

CEO's Message



Probiomix CEO
Mr Kim Slatyer

Probiomix has made significant progress on many fronts, following a challenging year in terms of share price, capital management and improving our distribution agreements for proTract®. With our new business model and management team in place, we believe the other areas will regain momentum as we continue to grow the business on a global scale.

We are now focused on a single technology platform - Probiotics - having completed the divestment of the diagnostic and vaccines projects. We are developing healthcare applications for our proprietary probiotic strain. PCC® is a superior probiotic strain that has been shown to systemically modulate the body's immune system and to provide health benefits in a range of disorders including gastrointestinal, dermatological, allergic, respiratory and inflammatory conditions.

Our new business model focuses on licensing our technology to experienced marketing and distribution companies and providing ongoing product development support through an R&D program which is driven by our partners' identification of product targets. Professor Ron Penny, immunologist and non-executive director has also inspired a number of new R&D projects such as the Molecular Discovery Program (refer to page 4).

The new management team has responded to the current challenges and developed solid strategies to move the company forward and we are starting to see the outcomes of these efforts. The half year accounts to 31st December 06 (released to ASX, 9 March 06) reported 10 % higher sales and 40 % lower expenditure over the corresponding period for 2004. Capital management remains a high priority for Probiomix but not to the detriment of the marketing and distribution activity required to achieve revenue growth globally for our products.

We have reviewed our distribution agreements and recently signed a new marketing and distribution contract with Pharmanex to distribute PCC®-based products in the US. The agreement will increase our profit margin by over 350%. Other distribution agreements for PCC® are being re-negotiated with the aim of securing improved terms for the Company, in particular higher margins. We have initiated legal action against one distributor for breach of contract and we are confident this matter will settle in our favour. We are already in active discussions with replacement global distributors and expect Australian proTract® sales to rebound later this year.

Highlights:

- Pharmanex deal to distribute PCC® products in the US has been renegotiated with increased profit margins of 350 %
 - ProTract® IBS was awarded the prestigious Australian Journal of Pharmacy's Best Complementary Medicines Health Product for 2005
 - Children's proTract® for Atopic Dermatitis is now available over the counter following independent clinical trials by Professor Susan Prescott in Perth that proved its efficacy
 - South-East Asian market sales of PCC® products exceeded expectations when Probiomix partnered with Nuvanta and entered the new market ten months ago
 - Flu Vaccine clinical trials using PCC® as an immune booster will commence next month in Sydney with results expected by September 2005. The results should be of interest to the world health authorities in the context of PCC® being used as a booster for the HN51 bird flu vaccine.
 - The Molecular Discovery Program aimed at isolating unique anti-inflammatory molecules from the PCC® lactobacillus strain has reported promising preliminary results.
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Childhood Eczema improved using PCC® *L.fermentum*

Daily doses of PCC® significantly decrease the symptoms of severe eczema in young infants according to an independent study recently published in the international peer-reviewed journal, *Archive of Disease in Childhood* (Sept 2005 issue, p892-7).

Children 6 to 18 months who were suffering from severe eczema (Atopic Dermatitis) were given PCC® twice a day in the study of 56 children by Professor Susan Prescott, School of Paediatrics and Child Health at University of Western Australia.

In the study, PCC® reduced the severity of Atopic Dermatitis over a 8-week treatment period and the effect was sustained for a further 8 weeks after the treatment was stopped.

These results have received international recognition, with a review of the study by US expert, Dr Kelly McClean from the Department of Dermatology, University of Michigan, in the *Journal of Paediatrics* (Jan 2006 issue, p144).

"If the initial results found in this study can be replicated in larger numbers, then probiotics may become an inexpensive, effective adjunct to other treatments for Atopic Dermatitis," says Dr Kelly.

PCC® is the only strain of probiotic that has demonstrated a reduction in moderate to severe eczma symptoms. Other independent clinical studies conducted on different probiotic strains including *L. reuteri* have failed to show



Infant suffering from severe eczema

Did you know?

Probiotics are health-promoting 'good' bacteria that work with the body's system to promote a range of health benefits

Flu Vaccine PCC® *L.fermentum* Booster

Probiomix is ready to start a clinical trial to see if PCC® is effective in boosting the immune response to flu vaccines. This is an exciting trial for the company, and a successful outcome could result in PCC® being considered as a co-therapy with vaccines to improve their effectiveness. An example of this is the avian flu H5N1 vaccine. Avian flu is considered a major direct threat to humans because it mutates so rapidly.

New H5N1 vaccines produced by pharmaceutical companies are due to begin clinical trials as early as this year, however it is predicted by world health authorities, that H5N1 vaccine will not produce specific protective immunity as efficiently as that provided by existing vaccines used for influenza. The Deputy Director of the World Health Collaborating Centre on Influenza has reported that "if adjuvants were proven to work well with flu vaccine they might be expected to boost the performance of H5N1 vaccines between two to ten fold, significantly improving manufacturing efficiency. It may also enable a lower dose of the vaccines to be used."

Professor Ron Penny, one of Australia's leading immunologists believes that, on the basis of scientific data produced by Professor Susan Prescott, Probiomix's PCC® is an adjuvant that could boost the immune response to flu vaccination (see p4).

Clinical trials using PCC® in conjunction with the influenza vaccines will begin in Sydney at the Good Health Solutions Clinic in 300 healthy volunteer recruits aged 18 - 49 years. Ethics approval for these trials has been received from St Vincent's Hospital this month and trials are planned to begin early April.

Fast Facts:

U.S. sales of probiotics are estimated at \$764 million in 2005 and are expected to rise at an average annual growth rate of 7.1% to \$1.1 billion in 2010.

UPDATE : Global marketing and distribution of PCC® *L.fermentum*

One of Probiomics' goals is to market and distribute its PCC® products on a global scale.

The company's probiotic can be used as a supplement sold over-the-counter in pharmacies (as demonstrated by proTract®) for a range of conditions including irritable bowel syndrome, intestinal health and eczema. It could also be incorporated as a nutritional ingredient in a range of foods and beverages.

Sales of functional health products targeting gut health totalled \$389 million in 2003, according to Datamonitor, and this figure is expected to more than double by 2008. At the same time, spending on immunity-boosting functional ingestibles reached \$644 million in 2003 and will grow nearly 50% by 2008 (Source: Nutraceuticals World).

Probiomics is well placed to benefit from this growing industry with its proprietary probiotic strain, PCC®-based products. This was demonstrated with the recent strong demand for shares in Spanish public company Puvela Biotech (www.pulevabiotech.com) when it recently launched the first consumer product containing a probiotic strain derived from human milk. Shares jumped significantly and have sustained good volumes since the announcement.

"It is clear that the international investment community is very interested in probiotics," says Mr Kim Slatyer, CEO of Probiomics. "We anticipate that the Australian investment community will follow," he adds.

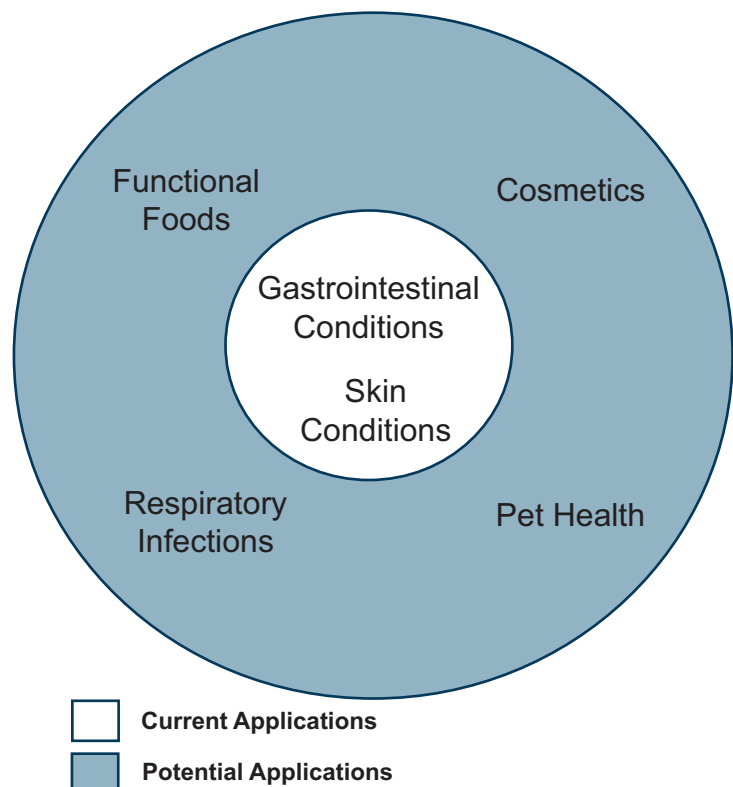
Following Probiomics' requirement to appoint a new Australian distributor, the company has been in active discussions with potential collaborative partners for product development and marketing and distribution of a range of PCC®-based health products. The strategy is to enter into partnerships that will provide joint funding for research and development on agreed projects with strong commercial focus. The aim is to mirror some of the strong agreements already in place internationally, such as that with Nuvanta.

"Sales of PCC® products in the South-East Asian market over the past 10 months have exceeded company expectations following the licensing agreement with Nuvanta last year" says Mr Slatyer.

Probiomics South-East Asian partner, Nuvanta Pte Ltd, have been marketing and selling proTract® in Malaysia since May 2005 and introduced proTract® into Singapore late last year. Geographical expansion is planned in two more South-East Asian countries.

The target groups have been pharmacists, doctors and the general public in South East Asia, with very positive feedback from each of the groups about the efficacy of Protract," said Mr Slatyer.

We have certainly identified a solid market for PCC® products in South-East Asia and now we are developing strategies to maintain this increased level of demand," he says. This will be a challenge for the next 12 months.



Probiomics' Expanding Commercial Applications



Perspective: Professor Ron Penny, AO

When a vacant position came up on the board of directors last year, this was a long awaited opportunity for me to become more involved in the company. As an active member of the scientific advisory board, I understood the value of Probiomix's PCC®-based products and the untapped potential for this unique probiotic.

Interestingly, I had been very sceptical about products in the complementary health area, before joining the company. As an experienced scientist and immunologist it seemed to me that probiotics being sold to the public, in general, made claims on testimonials and anecdotes without evidence rather than on solid scientific data.

Non-executive Director

Professor Ron Penny PCC® however was different to other probiotics on the market as there was scientific data relating to biological and clinical activity. After showing me the existing scientific data, my colleague and peer scientist Dr Peter French invited me to join the scientific advisory board of Probiomix, which I did in mid-2004.

It was refreshing that Probiomix's board was prepared to listen to the scientific advisory group and look seriously at how a PCC®-product might work rather than having an exclusive focus on sales and marketing. In 2005, Probiomix initiated an independent study in Perth to determine the benefits of using PCC® to alleviate the symptoms of moderate to severe eczema in young children. The results were extremely positive, and proved that PCC® initiates a strong systemic immune response - unlike other probiotic strains where trials have failed in this area.

Probiomix launched "proTract® for Atopic Dermatitis" later in the year, and followed up with further studies to identify the immunological basis for PCC®'s clinical activity. This activity by Probiomix has prompted several global pharmaceutical companies to investigate marketing opportunities for PCC®. A positive outcome with at least one of these companies is likely during calendar 2006.

The company's anticipated evidence-based medicine approach with rapid turn-around times for clinical results, is what makes the company so promising. Already, the company has clinical evidence showing PCC® is beneficial. Apart from the benefit for eczema in children, it showed that PCC® significantly reduced the occurrence of respiratory infection in athletes and other clinical trials showed benefits for gastrointestinal conditions such as irritable bowel syndrome.

One of my initiatives has been to look at the potential for PCC® to boost the human body's immune response to influenza vaccines. When a person is immunised with influenza vaccines each individual will respond differently, from a high to low response, depending on characteristics such as genetics, age and health status. PCC® may boost the immune response for those who do not respond effectively to vaccines. This booster is particularly important for the new avian flu, H5N1 vaccines that are reported to have a low immune response.

This influenza vaccine trial will be a randomised, double-blinded placebo controlled study beginning early next month with results expected within six months. Ideally, PCC® could be on the market as a flu vaccine booster later this year, if the clinical trial results are as good as expected.

One other key project with huge potential involves the molecular studies of our unique probiotic strain, PCC®. We are looking to identify novel molecules in PCC® that may have anti-inflammatory effects and may potentially be used to treat a range of inflammatory diseases including asthma and psoriasis. These studies have been initiated following work done by a group at the Rowett Institute in Aberdeen, that showed probiotics can influence the immune response resulting in anti-inflammatory effects in the gastro-intestinal tract.

In my view, Probiomix is an exciting company in a clinical area that is likely to attract increasing awareness from the investment community. Watch this space.

If you would like to receive electronic shareholder updates please register by sending an email entitled "registration: information update" to Probiomix email: info@protract.info

For more information, please contact us:
Probiomix Ltd
Suite G09, Australian Technology Park
1 Central Avenue, Eveleigh NSW 1430
Tel: (02) 9209 4268 Fax: (02) 9209 4256
www.probiomix.com.au