

## Phosphagenics TPM<sup>®</sup> in Dairy Feed Inclusion Technology Shows Commercial Promise

- *Australian scientists developed new feed inclusion supplement that reduced antibiotic use on-farm*
- *MMA selling Udder-Mate<sup>®</sup> in Australia and New Zealand*

**12 December 2013, Melbourne:** Australian drug delivery technology company Phosphagenics Limited (ASX:POH; OTCQX:PPGNY), with its licensee Mastitis Management Australia (MMA), today announced that MMA's Udder-Mate<sup>®</sup> feed inclusion technology, which includes TPM<sup>®</sup> has provided promising results when fed to cows in an on-farm setting.

The provision of feed inclusion supplementation in cows' diets with the Udder-Mate<sup>®</sup> technology to a commercial dairy cow herd in northern Victoria for three months, enabled the farmer to reduce the use of antibiotics by 50% in cows whose Somatic Cell Count were over one million cells/ml when compared to the same period in the previous year.

MMA has been granted an exclusive license for the use of TPM<sup>®</sup> for cow supplementation in Australia and New Zealand. When administered orally Udder-Mate<sup>®</sup> delivers key antioxidants and nutrients to maintain and support general animal health and wellbeing. Optimum nutrient supplementation, particularly in production animals such as dairy cattle, is a key factor for an animal's general health.

Cow immune systems are constantly challenged by factors such as the demands of producing milk, environmental pathogens and weather conditions. The outcomes reported by MMA were particularly noteworthy given that rainfall was about double compared with the same period last year. Increased rainfall usually results in an increased incidence of mastitis.

Udder-Mate<sup>®</sup> is the first feed inclusion supplement incorporating TPM<sup>®</sup> that targets the bovine market. It is also used in existing equine supplements and feeds that were launched by the Company's partner, Equine Ergogenics Australia (EEA), about 18 months ago and are available in 15 countries.

MMA's recently appointed General Manager, Mr Richard Nevile, BSc, said, "The take home message here for our industry is simply one of pure economics. With the reduction of SCC and antibiotics it's a win/win for the farmer, the cows, dairy processors and the community."

Phosphagenics CEO, Harry Rosen, said "These results provide a degree of confidence in regards to our current collaboration with the USDA for the development of an intra-mammary, non-antibiotic approach to the treatment of mastitis in cows. The program aims to develop a registered product for the treatment of mastitis using protocols developed by scientists at the Ruminant Disease and Cattle Research Unit. These trials are underway and will continue throughout 2014/15."

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With increasing concern about antibiotic use and resistant bacteria, an urgency exists for the development of new, cost effective alternatives. In the meantime, Phosphagenicsq proprietary TPM<sup>®</sup> delivery technology may provide a viable solution with its development of these non-registered feeds and supplements and continuing research into the development of registered treatments for a holistic and efficacious approach to bovine mastitis.

## **Enquiries**

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## **About Phosphagenics**

Phosphagenics Limited is commercialising drug delivery applications based on its novel transdermal (drugs administered via skin) TPM<sup>®</sup> . Targeted Penetration Matrix technology. TPM<sup>®</sup> is a patient friendly and cost effective system used to deliver proven pharmaceutical and nutraceutical products.

The lead products advancing through clinical trials are an oxymorphone and oxycodone matrix system for the relief of chronic pain.

Phosphagenicsqshares are listed on the Australian Securities Exchange (POH) and its ADR . Level 1 program in the US is with The Bank of New York Mellon (PPGNY).

## **Inherent Risks of Investment in Biotechnology Companies**

There are a number of inherent risks associated with the development of pharmaceutical products to a marketable stage. The lengthy clinical trial process is designed to assess the safety and efficacy of a drug prior to commercialisation and a significant proportion of drugs fail one or both of these criteria. Other risks include uncertainty of patent protection and proprietary rights, whether patent applications and issued patents will offer adequate protection to enable product development, the obtaining of necessary drug regulatory authority approvals and difficulties caused by the rapid advancements in technology.

## **Forward-looking Statements**

Certain statements in this ASX announcement may contain forward-looking statements regarding Company business and the therapeutic and commercial potential of its technologies and products in development. Any statement describing Company goals, expectations, intentions or beliefs is a forward-looking statement and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those risks or uncertainties inherent in the process of developing technology and in the process of discovering, developing and commercialising drugs that can be proven to be safe and effective for use as human therapeutics, and in the endeavour of building a business around such products and services.

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