



PHOSPHAGENICS

29 May 2009

Company Announcement

Phosphagenics Announces Completion of Transdermal Patch Prototypes

- ***Oxycodone Successfully Delivered into the Bloodstream***
- ***Data Demonstrates Sustained Release and Increased Blood Levels of Oxycodone***

Phosphagenics Limited (“Phosphagenics”) (ASX: POH; OTCQX: PPGNY) today announced the successful completion of preclinical studies related to its patented TPM/oxycodone transdermal patch system. The results of the preclinical studies demonstrated that by incorporating TPM/oxycodone into innovative patch systems developed by Phosphagenics, the delivery of oxycodone was significantly increased when compared to the Company’s TPM/oxycodone gel alone.

“The development of the proprietary transdermal patch systems is a major step in advancing the Company’s TPM delivery platform technology”, said Dr Esra Ogru, Phosphagenics’ Chief Operating Officer. “Patch systems extend the duration of drug delivery, improve bioavailability, prevent environmental contamination, increase patient compliance and reduce the risk of potential abuse”, she continued.

Phosphagenics has successfully developed both reservoir and matrix patches that contain TPM and oxycodone and produce sustained delivery. A reservoir patch is characterized by incorporating gels within the membrane, whereas matrix patches contain drugs in a solid form. The matrix patch is ideally suited for opioids such as oxycodone where abuse is an issue, as this makes it difficult to extract out of the matrix.

Oxycodone, a leading pain management drug, is currently administered either orally or intravenously. It is more potent than morphine with fewer side effects. Worldwide sales of oxycodone exceed \$US1.5 billion. Phosphagenics aims to become the first company to provide chronic pain sufferers with a sustained-release transdermal system that delivers oxycodone into the bloodstream.

Previous preclinical and human clinical trials conducted by Phosphagenics have demonstrated that its patented technology can deliver opiates through the skin without causing any skin damage or irritation. Incorporating this technology into a patch will enable a more convenient and effective treatment that is capable of meeting the needs of pain sufferers and addresses the concerns of regulatory authorities regarding potential abuse.

In this most recent preclinical study, oxycodone concentrations produced by the patch reached approximately 160ng/ml and remained significantly elevated ($p<0.01$) and within therapeutic range for the duration of the four hour study. In contrast, the TPM/oxycodone gel produced peak plasma oxycodone concentrations of approximately 80ng/ml 30 minutes after application and declined from that point over the course of the trial.

“The development of our TPM patch has the potential to be a substantial commercial success for Phosphagenics”, said Dr Ogru. Our transdermal patch should increase the amount and duration of oxycodone delivered into the systemic circulation, and could reduce potential opioid

abuse, a major consideration for the FDA when reviewing possibly addictive substances such as oxycodone. In addition, our TPM skin patch should allow us to deliver other opioid based compounds, including morphine and hydromorphone, as well as other products that are targeted for delivery into the systemic circulation, including insulin. Phosphagenics has already completed a human trial that demonstrated that its TPM/insulin formulation safely delivered insulin transdermally into patients with Type 1 diabetes”.

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APPENDIX AND NOTES TO EDITORS

About Phosphagenics Limited

Phosphagenics is a Melbourne-based, globally driven biotechnology company focused on the discovery of new and cost effective ways to enhance the bioavailability, activity, safety and delivery of proven pharmaceutical and nutraceutical products.

Phosphagenics' core technology is built around the science and application of phosphorylation, a process where the addition of a phosphate group has been found to enhance the bioavailability, activity and safety of existing pharmaceuticals and nutraceuticals, as well as to assist in the production of drug delivery platforms.

Phosphagenics' shares are listed on the Australian Stock Exchange (POH). An ADR – Level 1 program was established in the U.S. with The Bank of New York Mellon (PPGNY) for U.S. investors to trade in Phosphagenics' stock on the 'over-the-counter' market. In July 2007, this was upgraded to the International OTCQX, a new premium market tier in the U.S. for international exchange-listed companies, operated by Pink Sheets, LLC.

For more information, please visit Phosphagenics' web site at www.phosphagenics.com

Safe Harbor Statement

This press release contains forward-looking statements based on current expectations of future events. If underlying assumptions prove inaccurate or unknown risks or uncertainties materialise, actual results could vary materially from the Phosphagenics' expectations and projections. Risks and uncertainties include general industry conditions and competition; economic conditions, such as interest rate and currency exchange rate fluctuations; technological advances and patents attained by competitors; challenges inherent in new product development, including obtaining regulatory approvals; domestic and foreign health care reforms and governmental laws and regulations.

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