



*ASX Limited  
Market Announcements Office*

## **Phosphagenics Signs Development Agreement for TPM<sup>®</sup>/Oxymorphone Patch in Japan**

22 August 2017, Melbourne: Australian drug delivery company, Phosphagenics Limited (ASX: POH; OTCQX: PPGNY), is pleased to announce the signing of a development agreement with Terumo Corporation, for the TPM<sup>®</sup>/Oxymorphone patch in Japan.

In January 2017 Phosphagenics and Terumo signed a non-binding term sheet detailing the proposed terms under which Phosphagenics would grant Terumo exclusive rights to develop, market and sell a TPM<sup>®</sup> enabled Oxymorphone patch in Japan. Since then, both parties have collaborated to finalise the composition of a patch specifically focused on the Japanese market, which prefers a 1-day (24-hour) patch. The success in developing this patch has allowed further progression to a new binding agreement and has also benefited Phosphagenics' 3-day patch, which is designed around the requirements of the US market.

The agreement signed today targets progression of a 1-day TPM<sup>®</sup> enabled Oxymorphone patch into the clinic within the first 12 months followed by a formal consultation with Japanese Regulatory Authorities (PMDA) to determine the most efficient way forward to market. Phosphagenics will undertake some of the activities associated with progression of the patch and will receive up to \$2M in development milestone payments through this period.

On successful completion of the first Phase 1 study and PMDA consultation, Terumo can activate an exclusive option and progress to a full license agreement. The terms for such an agreement, set forth in the previous non-binding term sheet, include Terumo accepting all Japanese development costs, providing additional development and sales milestones, and paying Phosphagenics single to double digit royalties on net sales in Japan. Entry into a license agreement and actual terms remain subject to further agreement by both Parties. Phosphagenics retains full rights to market and/or partner both the 1-day or 3-day TPM<sup>®</sup>/Oxymorphone patch in any market outside of Japan.

As part of this agreement Terumo has now formally informed Phosphagenics of its strategic decision not progress two TPM<sup>®</sup> enabled patches in parallel. The TPM<sup>®</sup> enabled Oxycodone patch is therefore free to be partnered by other companies across all territories. The signing of this agreement marks the fourth R&D partnered project between Terumo and Phosphagenics.

Mr Masahito Takahashi, General Manager of the Pharmaceutical Group, Hospital Systems Division, General Hospital Company, Terumo Corporation, said, "This agreement marks a significant milestone in a relationship that continues to get stronger. Terumo remains enthusiastic about the potential of TPM<sup>®</sup> enhanced products and continues to commit significant resources across all joint programs. This agreement is another demonstration of our growing confidence in TPM<sup>®</sup> and confidence in Phosphagenics as a partner and the potential of the TPM<sup>®</sup>/Oxymorphone patch for Japan."

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Phosphagenics' Chief Executive Officer, Dr Ross Murdoch, said, "During the past 12 months, Phosphagenics and Terumo have worked very closely to progress multiple TPM<sup>®</sup> based projects including the TPM<sup>®</sup>/Oxymorphone patch. The signing of this agreement ensures that we can now rapidly progress the patch into the clinic and onto the PMDA. Success with this patch has the potential to provide Phosphagenics tens of millions of dollars from milestones and royalties as well as valuable data to help us partner and market TPM<sup>®</sup> products across all markets."

Phosphagenics will keep the market informed of further progress as appropriate.

## **Enquiries**

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## **About Phosphagenics**

Phosphagenics Limited is focused on developing and commercialising innovative Human Health, Animal Health and Personal Care products using its proprietary drug delivery system called TPM<sup>®</sup> (Targeted Penetration Matrix). TPM<sup>®</sup> is derived from Vitamin E using a unique, proprietary and patented process and has been proven to enhance the solubility and oral, dermal and transdermal absorption of drugs and nutrients.

Amongst its major projects, Phosphagenics' is developing TPM<sup>®</sup> enhanced patches, gels and injectable products for the human health market and is also developing TPM<sup>®</sup> to enhance the feed efficiency and health of livestock.

Phosphagenics' shares 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).

## **About Terumo**

Terumo Corporation is engaged in the manufacture and sales of medical products and devices, including pharmaceuticals. The company is headquartered in Japan, with extensive global operations.

Terumo is listed on the Tokyo Stock Exchange (TSE: 4543) with a market capitalisation in excess of ¥1.5 trillion.

## **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 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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