



PHOSPHAGENICS

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Insulin Trial on Type 1 Diabetic Patients Completed

Human trial demonstrates ability to safely deliver insulin into patients with Type 1 diabetes.

Phosphagenics Limited (ASX: POH; OTCQX: PPGNY) has completed its transdermal insulin human trial which demonstrated that its TPM/insulin formulation safely delivered insulin into patients with Type 1 diabetes.

The protocols were designed to meet the primary end point of evaluating the glucose lowering efficacy of transdermal insulin in patients with Type 1 diabetes and the secondary end point of safety and tolerability. The clinical results met both end points.

Assistant Professor William Hsu of the Joslin Diabetes Centre, Harvard Medical School, Boston, and medical scientific advisor to the company, said: "Phosphagenics has shown that its TPM/insulin formulation has the ability to deliver insulin into patients with Type 1 diabetes. I believe that the results of this trial are extremely encouraging and further development should be pursued by the company."

This is the first time ever that insulin has been delivered transdermally to patients with Type 1 diabetes without the use of a device. Prior to embarking on the extensive research required to optimise its insulin formulation, Phosphagenics decided to conduct a trial to establish the viability of its current formulation to deliver insulin across the skin and into the systemic circulation of Type 1 diabetic patients.

In the next stage of its insulin development program, Phosphagenics will optimise its TPM/insulin formulation and this research, using a diabetic animal model, has already commenced with very promising results. Additionally the company will conduct a market research study among clinicians to determine the best form for the final commercial product. This may take the form of a gel, a patch, a spray or other device.

Dr Esra Ogru, Executive Vice President of Research and Development at Phosphagenics, said: "Once the optimised formulation has been incorporated into the final product and tested in animals, Phosphagenics will return to the clinic to conduct a dose ranging trial on humans with a superior product that will be in the final commercial form."

"The current study, designed to be a small scale proof of concept trial in Type 1 diabetic patients, did not contain a control arm and therefore was not powered to provide statistical measurements. However the TPM/insulin formulation reduced glucose levels in the majority of patients" said Dr Ogru.

“This, together with the results of our initial research optimising our formulation gives us great confidence in achieving our commercial objective of delivering insulin transdermally to treat diabetes. Diabetes is a difficult disease to treat because of its variability. However there exists a large unmet need for products that can deliver insulin to patients in a non invasive manner and the potential value of such products is substantial.”

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About Phosphagenics' Transdermal Carrier Technology

Phosphagenics' patented transdermal carrier technology (TPM) utilises natural dermal transport mechanisms to rapidly transport small and large molecules across the skin without disrupting or damaging its surface.

The Company believes that the key advantages of this delivery system includes the fact that it possesses anti-inflammatory and anti-erythema properties, thus minimising skin irritation, and has the ability to provide a sustained systemic delivery of a wide range of drugs – ranging from relatively small molecules (e.g. morphine, fentanyl, oxycodone, atropine, estradiol, testosterone) to large molecules (e.g. insulin and PTH) – from a single application. Additionally, the TPM delivery technology can be cost-effectively manufactured in a wide range of presentations (e.g. gel, paste, liquid and powder) adding value to existing pharmaceuticals.

Phosphagenics' TPM/insulin research is funded in part by a Commercial Ready Grant from the Australian Government through AusIndustry.

About Diabetes

Diabetes is an illness that occurs when the body does not produce or properly use the hormone insulin.

Insulin, which is produced in the pancreas, enables muscles and other tissues to absorb and utilise glucose (a form of sugar) as the body's energy source.

When individuals have diabetes, either their pancreas does not produce the insulin they need or their body cannot use its own insulin effectively. As a result, people with diabetes do not use enough of the glucose in the food they eat. This leads to the amount of glucose in the blood increasing, a condition referred to as "high blood sugar" or "hyperglycaemia". High levels of glucose in the blood can lead to medical complications.

The International Diabetes Foundation (IDF) estimates that direct and indirect healthcare costs associated with diabetes exceed \$US153 billion globally. IDF believes that some costs are preventable through disease control and management that decreases the longer term costs of complications, such as blindness and vision impairment, cardiovascular disease and kidney failure. At present there is no cure for diabetes.

The world pharmaceutical market for diabetes is estimated to be worth more than \$US18 billion per annum and growing.

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.

Company Contact Details:

Harry Rosen
Phosphagenics Limited
President and CEO
+61 3 9565 1184

Dr Esra Ogru
Phosphagenics Limited
Executive Vice President of Research and Development
+61 3 9565 1142

U.S. Investor and Media Contacts:

Brian Ritchie
FD
+1 212 850 5683