



21 May 2009

**THE MANAGER
COMPANY ANNOUNCEMENTS OFFICE
ASX LIMITED**

Dear Sir/Madam

Phosphagenics Limited

**PRESENTATION AT BIO INTERNATIONAL CONVENTION
ATLANTA, GEORGIA, 18 – 21 MAY 2009**

Attached for release to the market is a copy of the slide presentation to be given by Phosphagenics SVP and Chief Business Officer, Fred Banti, to the BIO International Convention being held in Atlanta, Georgia 18 – 21 May 2009.

Mr Banti will present Phosphagenics to the Convention during the afternoon session on Wednesday 20 May 2009 local time (a.m. Melbourne time today).

Yours faithfully
Phosphagenics Limited

Mourice R Garbutt
Company Secretary

p\asx\bio convention 21 05 09

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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Phosphagenics Limited

Fred Banti, SVP & Chief Business Officer

BIO International Convention

May 18-21, 2009

Atlanta, Georgia

Safe harbor



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➤ **Phosphagenics Corporate Summary**

Phosphagenics Delivery Technology

Product Pipeline

Systemic Transdermal Delivery

Non-Systemic Localized Delivery

Summary

Phosphagenics Overview



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- Public company listed on the Australian Stock Exchange (POH) and US Level 1 ADR OTCQX (PPGNY)
- Platform delivery technology discovered in 2002 and progressively improved
- Delivery and product technology is patent protected in major markets including the USA, South Americas, Europe, Japan and China
- Delivery technology has wide ranging application for product development in pharmaceutical, nutraceutical and personal care markets
- Manufacturing, Research & Development based in Australia
- Corporate Development based in USA

Investment Highlights



Six programs in clinical development in high value markets

Systemic transdermal delivery

- Insulin – Completed phase 2 in type 1 diabetes patients completed Q4 2008
- Oxycodone – Phase 1 preparation underway - trial to commence 2Q 2009

Localised topical delivery

- Lidocaine - phase 1 human pk trial completed Q4 2008
- Diclofenac - phase 1 human pk trial completed Q1 2009
- Tretinoin - phase 1 safety and irritation completed Q3 2008

Oral

- Phospha E[®] - phase 2 human trial results expected towards the end of Q2 2009

Business Strategy



Lower risk business model

- Drug delivery focus
 - Faster time to market and lower R&D expenditure
 - Increased success rate
 - Multiple opportunities to extend market exclusivity of off-patent drugs

Commercialization Strategy

- Co development
 - Sharing expenses and risks
- Out licensing
 - Generating upfront payments and milestones
- Topical or Transdermal Formulation Development Collaborations
 - Partnerships on proprietary compounds



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A Versatile Technology Platform



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- The platform technology is built around the science and application of phosphorylation
- Phosphorylation is the process whereby the addition of a phosphate group enhances the bioavailability, activity and safety of existing pharmaceuticals
- Phosphorylation of tocopheryl leads to tocopheryl phosphate that exists naturally in biological tissues and common foods
- Phosphorylation enhances the absorption of tocopherol through the skin as well as acting as a penetration enhancer for other molecules that it carries
- This discovery lead to the development of Phosphagenics' TPM delivery platforms for topical and transdermal delivery

Dermal & Transdermal Delivery Technology

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- The Tocopherol Phosphate Mixture (TPM) delivery technology delivers both small and large molecules into (dermal) and across (transdermal) the skin without causing disruption, irritation or damage
- TPM delivery systems can be formulated into liquids, patches, sprays, micro-emulsions and vesicular entrapment
- TPM vesicular entrapment systems have successfully delivered large peptides (insulin) across the skin and into the systemic circulation
- The vesicular system is a multi-lamellar, malleable carrier and can be formulated in a range of sizes from nanometers to microns in diameter
- TPM formulations can be developed to deliver locally or systemically

Vesicular TPM Delivery System



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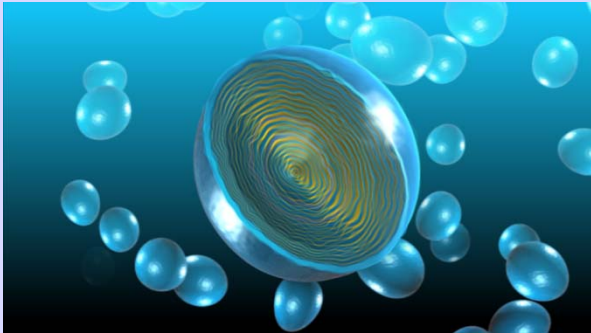


Figure a) Close-up of a TPM vesicles showing its multi-layered interior.

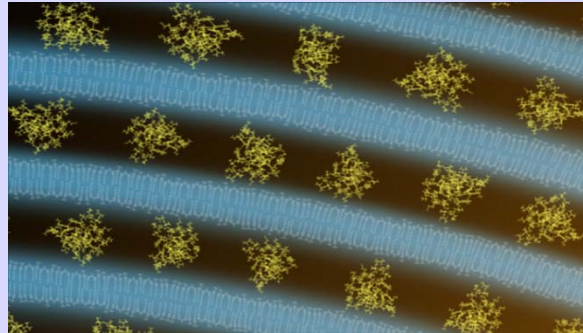


Figure b) Inside view of the TPM vesicle, showing how the drug to be delivered ("the active") may be positioned within the layers of the vesicle.



Figure c) An example of where and how the TPM/active gel may be applied to the skin.

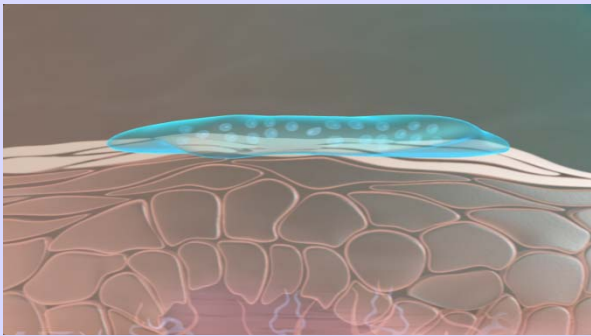


Figure d) Close-up of the TPM/active gel, showing the vesicles in suspension.

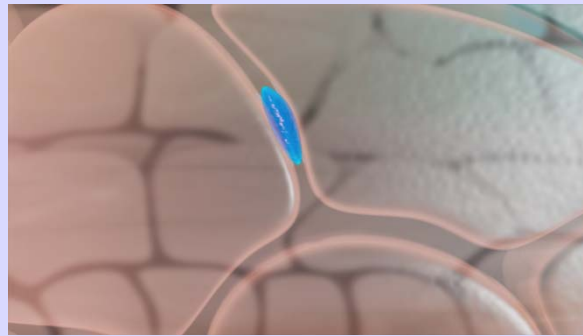


Figure e) Close-up showing how the TPM/active vesicles' flexibility allows them to squeeze between the skins cells and travel towards the more vascular, deeper layers of the skin.

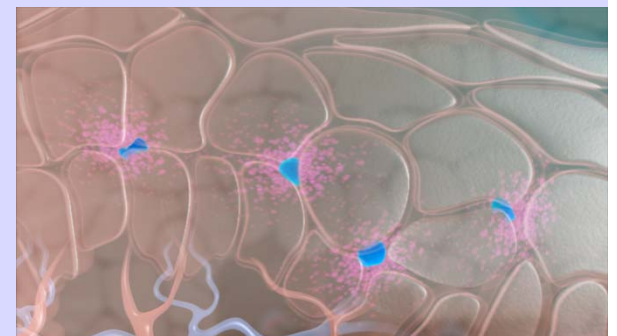


Figure f) A representation of TPM vesicles delivering the active to the site of action, in this case the deeper layers of the skin.

Advantages of the Patented TPM Technology



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FEATURE		BENEFIT
1	Can transport both small and large molecules into and across the skin	→ <i>Technology applicable to a wide range of drugs</i>
2	TP found as an endogenous molecule in biology (tocopherol converts to TP)	→ <i>Natural and Safe</i>
3	Powerful penetration enhancer that does not disrupt or irritate the dermis	→ <i>No skin irritation Maintains skin integrity</i>
4	Allows for a sustained release of compounds from just one application	→ <i>Flexible dosage regimens Longer therapeutic levels maintained</i>
5	Rapidly penetrates the dermis (less than 1 hour)	→ <i>Permits normal daily activities (e.g. showers, swimming)</i>
6	Cost-effective to produce	→ <i>Significant value add opportunity</i>
7	Effective in a variety of forms	→ <i>Can be produced in a wide range of presentations (powder, liquid, gel, sprays etc)</i>



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	Discovery & Research	Pre-clinical	Phase 1	Phase 2	Target Application
Drug Delivery – Systemic/Transdermal					
Insulin					Diabetes
Oxycodone					Pain Management
Drug Delivery - Non-systemic/Localised					
Lidocaine					Pain Management
Diclofenac					Pain Management
Tretinoin (Dermatology)					Acne
Oral					
Phospha E® (Nutra)					Metabolic Syndrome



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Summary of Systemic Transdermal Programs



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TPM /Insulin completed Phase 2 trial

- Phase 2 trial completed at 2 sites in Australia
- Primary endpoint met - assessing the efficacy of TPM/insulin in Type 1 diabetic patients
- Conducted in collaboration with the Joslin Diabetes Centre/Harvard Medical School, Boston, US

Oxycodone

- Phase I trial to commence 2Q 2009
- Preclinical animal models showed systemic delivery with efficacy and without skin sensitization or irritation
- **No other transdermal oxycodone are available**

Regulatory Status Transdermal Programs



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Regulatory filings

- TPM/CMC Drug Master Files submitted to the FDA
- FDA Investigational New Drug packages for TPM/oxycodone and TPM/insulin underway

Toxicology

- Robust safety package available – acute dermal, 28 day oral, skin sensitization, 28 day chronic dermal toxicity study

Clinical - Good Clinical Practice (GCP)

- TPM/insulin phase 2a trial (completed)
- TPM/oxycodone phase 1 trial (planned)



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➤ **Non-Systemic Localized Delivery**

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Non-systemic Targeted Delivery



Competitive positioning

The platform offers opportunities to:

- Provide a more effective topical product
- Reduce systemic exposure of the active
- Provide a variety of dosage forms including gels, foams and sprays without comprising the effectiveness of the product
- Reduce intolerance and dermal reactions caused by many topical therapies

Pre-clinical success

In-vivo animal studies have shown that the platform has the ability to:

- Enhance the delivery of topically applied compounds compared with other approved topical products
- Minimise systemic exposure
- Minimise dermal irritation

Development Status- Localized Programs



Lidocaine

- Phase 1 proof of concept pk trial completed Q4 2008
- Small scale phase 2 efficacy trial planned
- IND development underway

Diclofenac

- Phase 1 proof of concept pk trial completed Q1 2009
- Second phase 1b trial planned for 3Q 2009

Tretinoin (retinoic acid)

- Phase 1 pk proof of concept completed Q3 2008
- Australian Dermal efficacy trial in the planning stage



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Conclusions & Next Steps



Clinical and development

- Continue clinical development trials for our six programs
- Prepare IND filings for lidocaine and oxycodone
- Explore different topical delivery applications (i.e. sprays, roll on applicator, foams, etc.) as well as formulating other actives

Commercial

- Seek a worldwide collaboration for our projects in clinical development
- Seek to formulate partners' proprietary compounds with our TPM technology



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Thank You
For more information go to
www.phosphagenics.com



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