



8 January 2010

Company Announcement

PHOSPHAGENICS TO PRESENT AT ONEMEDFORUM 2010

MELBOURNE, Australia: Phosphagenics Limited ("Phosphagenics") (ASX: POH; OTCQX: PPGNY) announced today that Fred Banti, President of US operations, will present at the OneMedForum 2010 Finance Conference taking place at the Sir Francis Drake Hotel in San Francisco, January 12-13, 2010. Phosphagenics' presentation will take place on Wednesday, January 13, 2010 at 8:30 a.m. Pacific Time.

Enclosed for release to the market is an updated investor corporate presentation which has been used as the basis for the presentations to be given by Mr Banti.

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) and its 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.

Company Contact:

Fred Banti, President (US Operations)

Phosphagenics Limited

Phone: 646-706-2155 Email: fbanti@phosphagenics.com

Investor and Media Contact:

Michael D. Becker, President & CEO

MD Becker Partners LLC

Phone: 267-756-7094 Email: michael@mdbpartners.com



PHOSPHAGENICS



Delivering More...

Through Innovation in Transdermal Delivery

Listed on the Australian Stock Exchange (POH) and OTCQX (PPGNY)

Safe Harbor

This presentation 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.

Overview

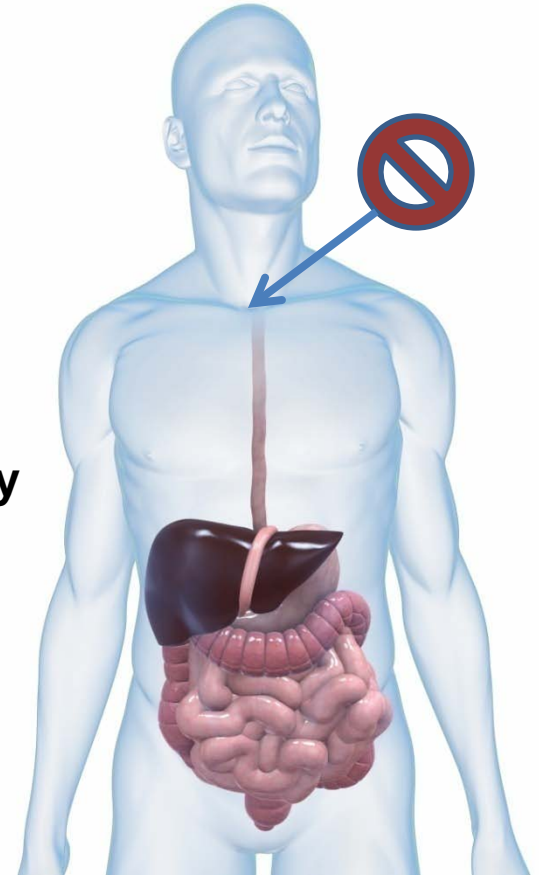
- Headquartered in Australia
 - Corporate development in U.S.
- Clinically validated transdermal α -tocopheryl phosphate mixture (TPM) drug delivery technology
- Creating value by leveraging TPM technology across diverse markets with partners
- Strong intellectual property
- Listed on the Australian Stock Exchange (POH) and OTCQX (PPGNY)

Transdermal Benefits

For the patient:

- Eliminate first pass metabolism
- Provide steady delivery/blood levels
- Increase compliance/convenience
- Reduce systemic drug interactions
- Minimize abuse/diversion

**Versus
Oral
Delivery**



Transdermal Benefits

For the pharmaceutical industry:

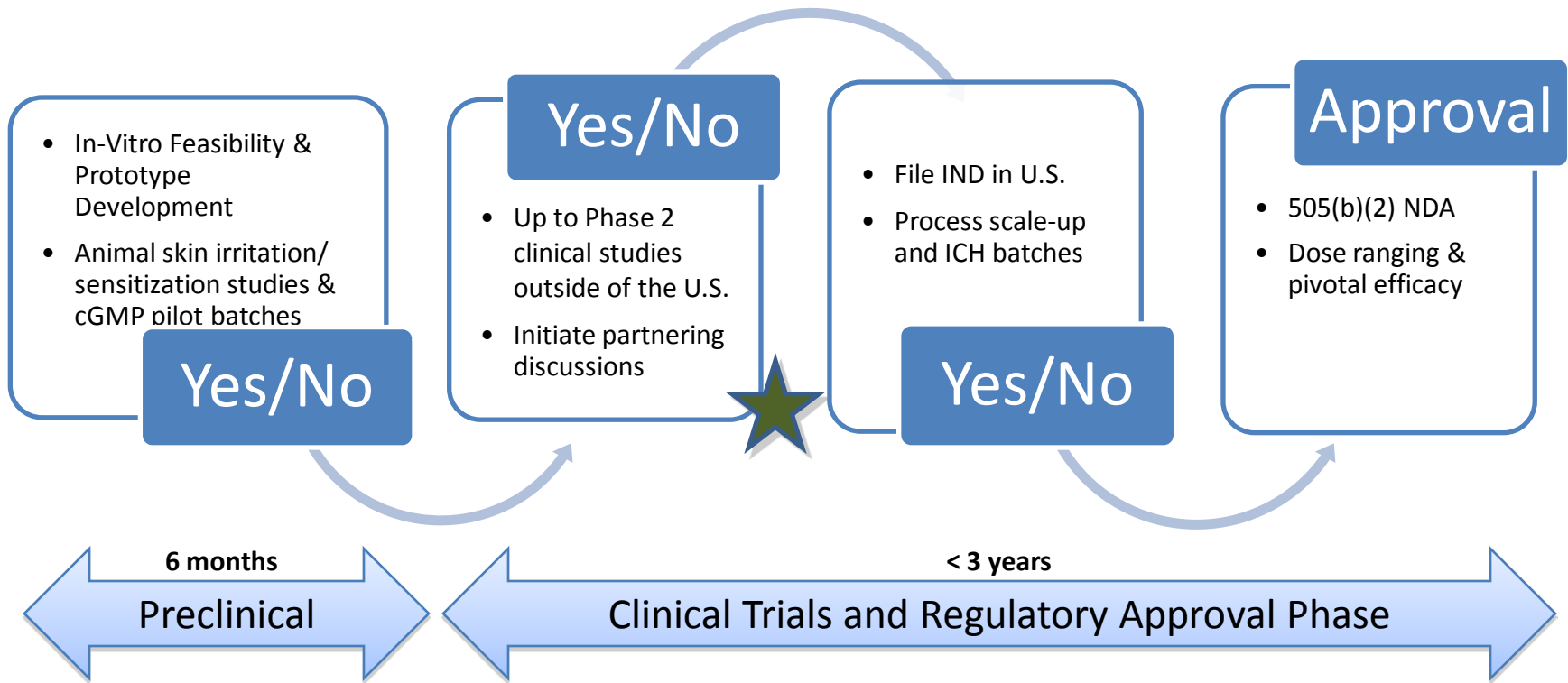
- Replace lost sales as R&D productivity continues to decline
- Extend product life cycle in the face of generic competition
- Manage the escalating costs of developing new products
- Conversion of injectable only drugs to more convenient transdermal products
- Delivery options for NCEs (increase bioavailability, large molecules not suitable for oral delivery, etc.)

Large Market Opportunities*

- **Pain**
 - Buprenorphine (Chronic)
 - Fentanyl (Chronic)
 - Sufentanyl (Chronic)
 - Levorphanol (chronic)
 - Various NSAIDs (Arthritic)
 - Triptans (Migraine)
 - Lidocaine
 - Opioids (Oxycodone)
- **Hypertension**
 - Enalapril
 - Clonidine
 - Ramipril
 - Timolol
- **Motion Sickness**
 - Scopolamine
- **Male Hypogonadism/Female Sexual Dysfunction**
 - Testosterone
- **Nausea**
 - Granisetron
- **Parkinson's**
 - Ropinirole
 - Pergolide
 - Pramipexole
 - Rotigotine
- **Depression**
 - Buspirone
 - Bupropion
- **Obesity**
 - Phentermine
 - Methamphetamine
- **Alzheimers**
 - Tacrine
 - Memantine
- **Birth Control**
 - Estrogen/Progestin
- **Urinary Incontinence**
 - Tolterodine
 - Oxybutynin

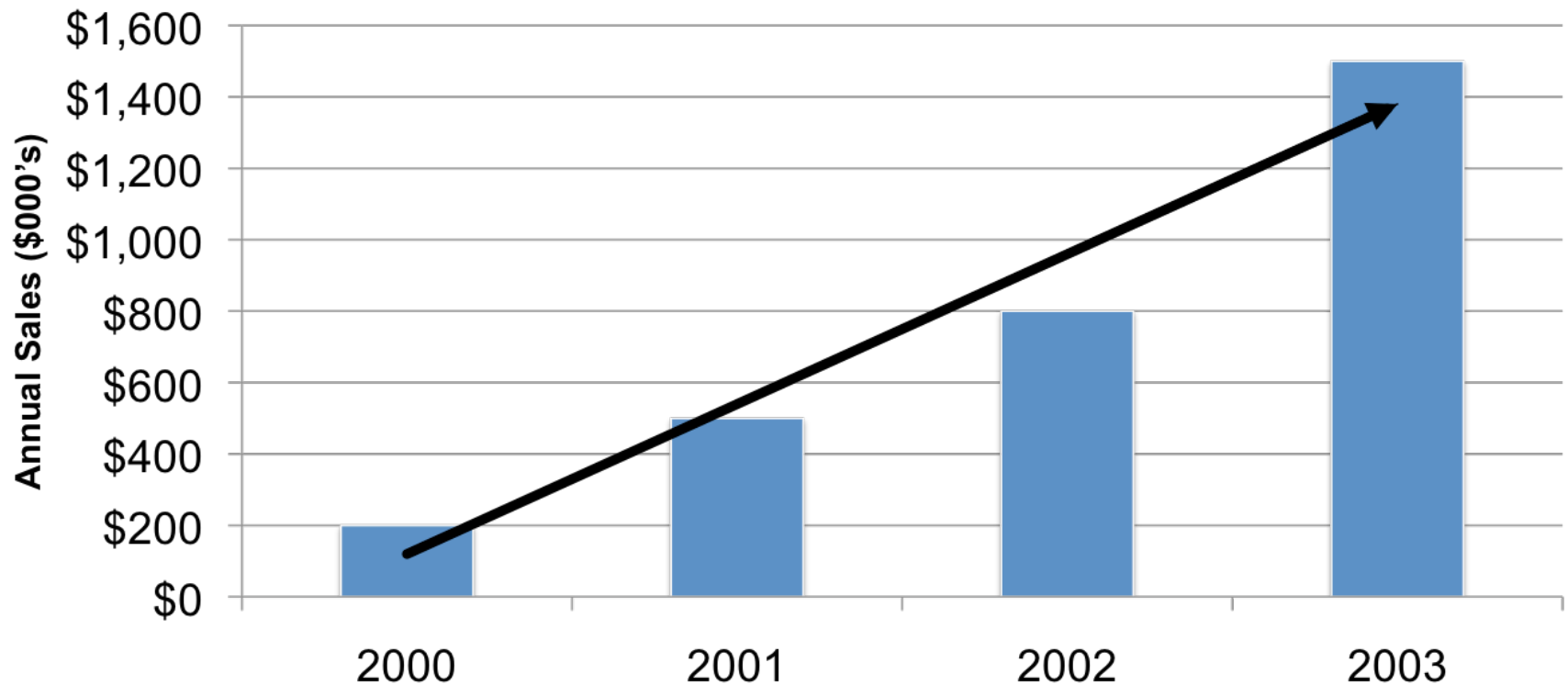
Shorter Regulatory Process

Transdermal drug development of known drugs can be short and inexpensive, with multiple value inflection points and partnering opportunities



Example of Success

The 72-hour Duragesic® transdermal patch revolutionized the use of fentanyl in chronic pain management and reached over \$2 billion in sales before patent expiry in January, 2005



Transdermal Summary

- Transdermal drug delivery systems provide low cost / reduced risk opportunities for product life cycle extension
- As a “novel” technology, the upside potential for transdermal delivery of new molecules in almost all therapeutic categories is still very significant
- α - Tocopheryl Phosphate Mixture (**TPM**) is uniquely suited to provide access to larger molecules and select peptides
- TPM delivery technology can deliver both small and large molecules into the dermis and across the skin (transdermal) without causing any disruption, irritation or damage

Technology Overview

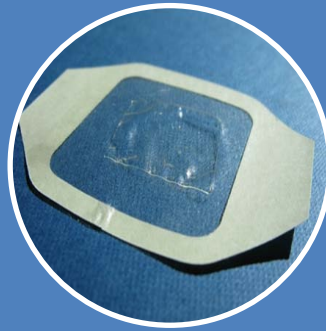
- TPM is a multi-component, multi-functional delivery system
- TPM is comprised of α -TP and α -T₂P
- α -TP is the signalling form of vitamin E and is associated with specific cellular transport
- TPM enhances the absorption and solubility of compounds in the body
- TPM is non-invasive, non-irritant and has unique properties
- TPM is GRAS approved

TPM does not alter the active compound, but instead alters the lipidic structure of the stratum corneum allowing for the specific, controlled delivery and enhanced absorption of small molecules or peptides into the skin (locally) or systemically

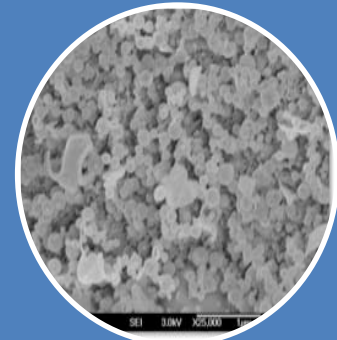
Formulation Examples



reservoir patch



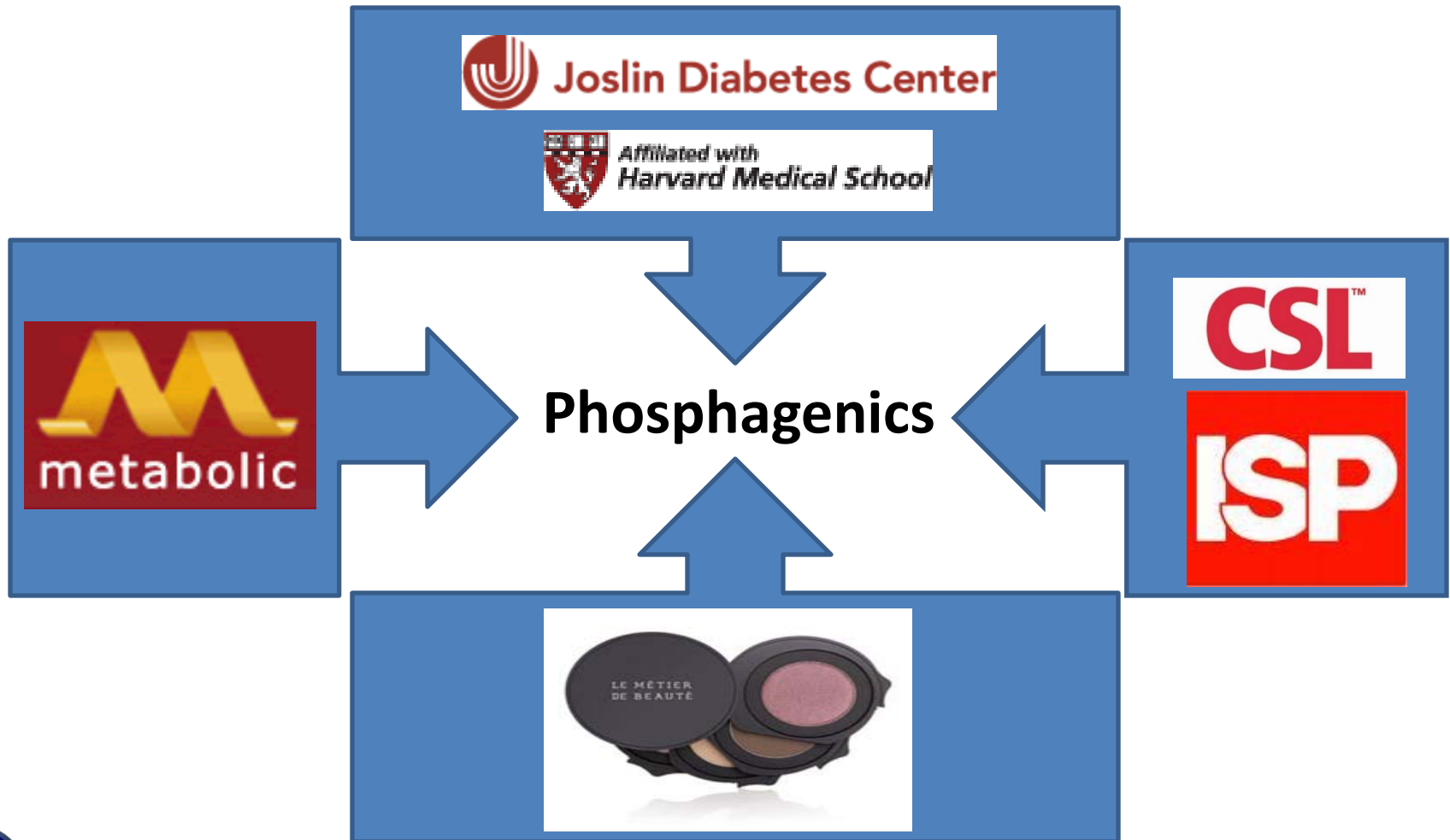
matrix patch



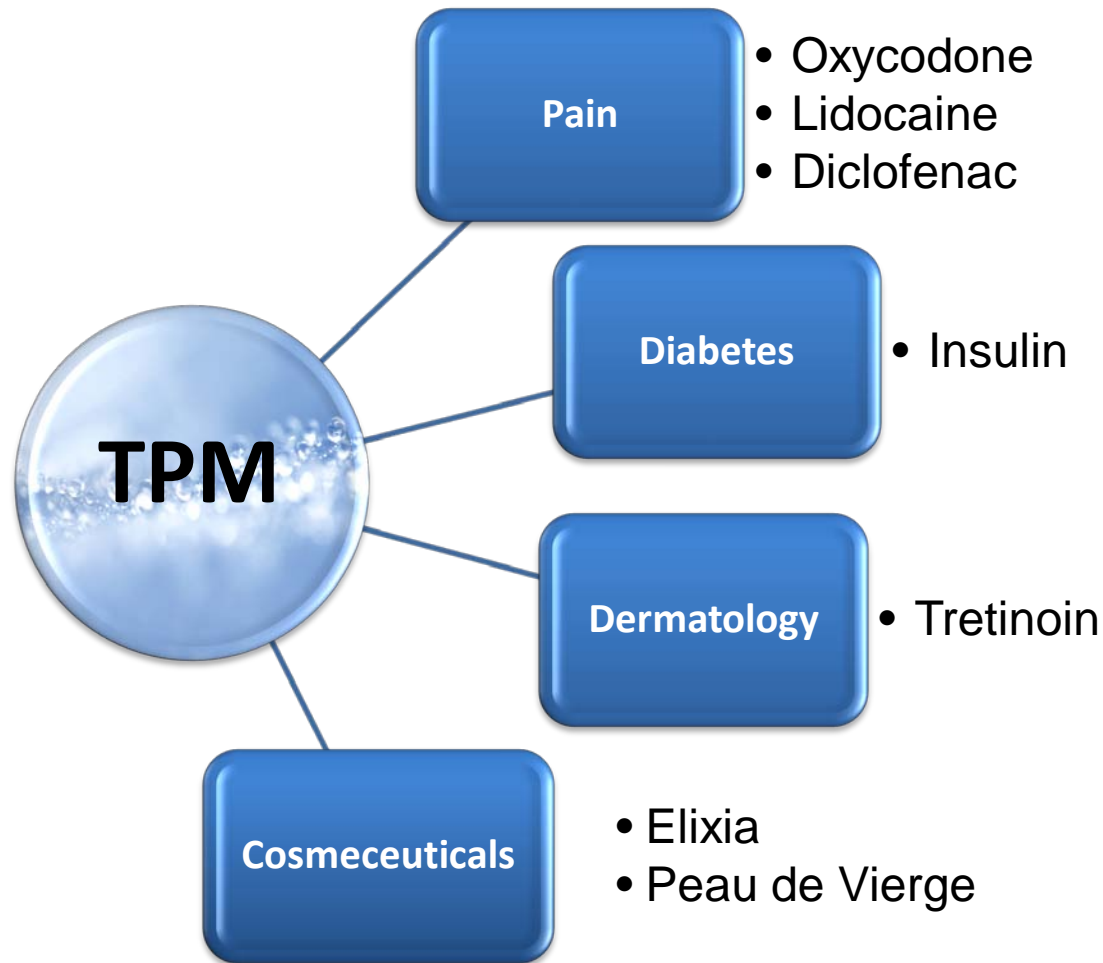
vesicle formulation



Collaborations



Validated Technology



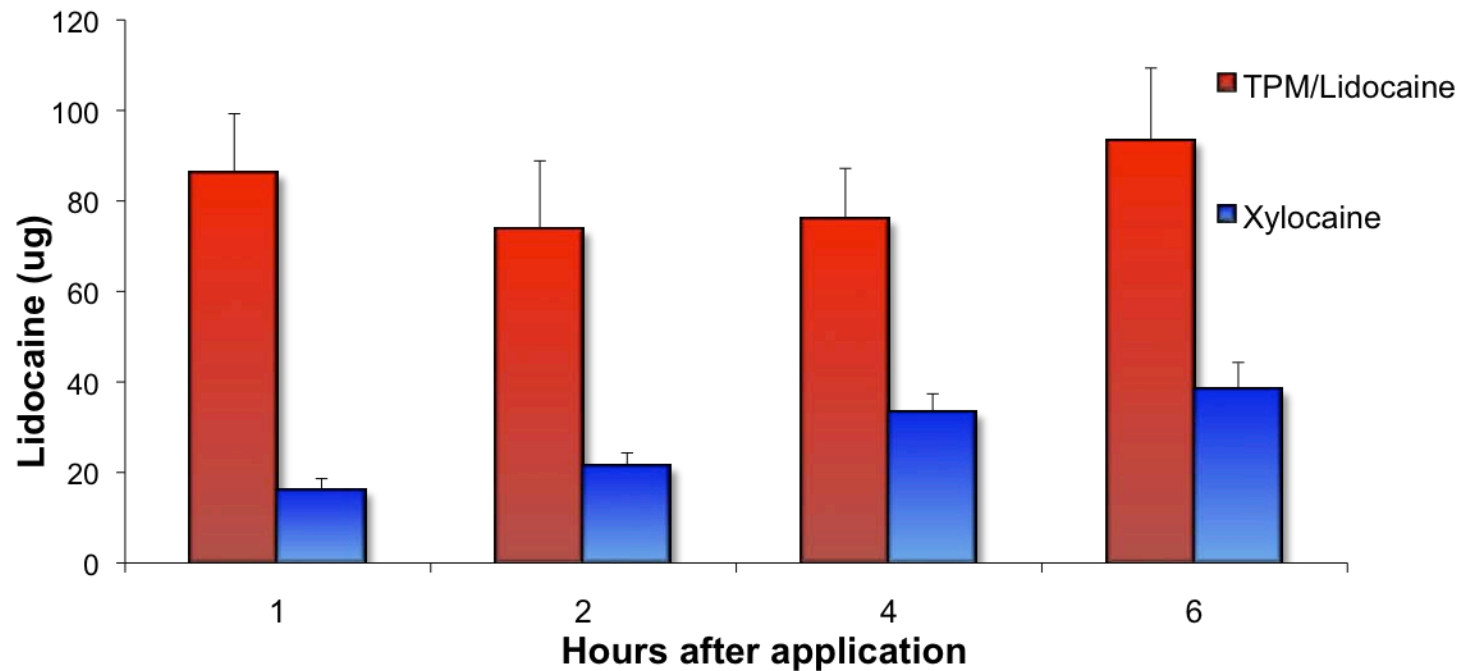
Phase I Study: Oxycodone

- TPM/oxycodone has the potential to be the first transdermal oxycodone – currently there is a very large unmet medical need for non-invasive, non irritating sustained release opioid delivery
- Completed all preclinical studies
- Developed patch systems in house
- Phase I Repeat Insult Patch Test completed in June 2009 with no significant erythema and no sensitization
- Phase I safety and tolerability study of matrix patch completed in September 2009 – Single application demonstrated sustained release of oxycodone
- Repeat dose study completed on both matrix and reservoir patch systems – results available January 2010



Phase I Data: Lidocaine

- Equivalent dose of Xylocaine 5% ointment and TPM/lidocaine
- 21 tape strips taken at each time point. First strip discarded. Results from strips pooled
- N = 11 healthy volunteers, bars represent SEM

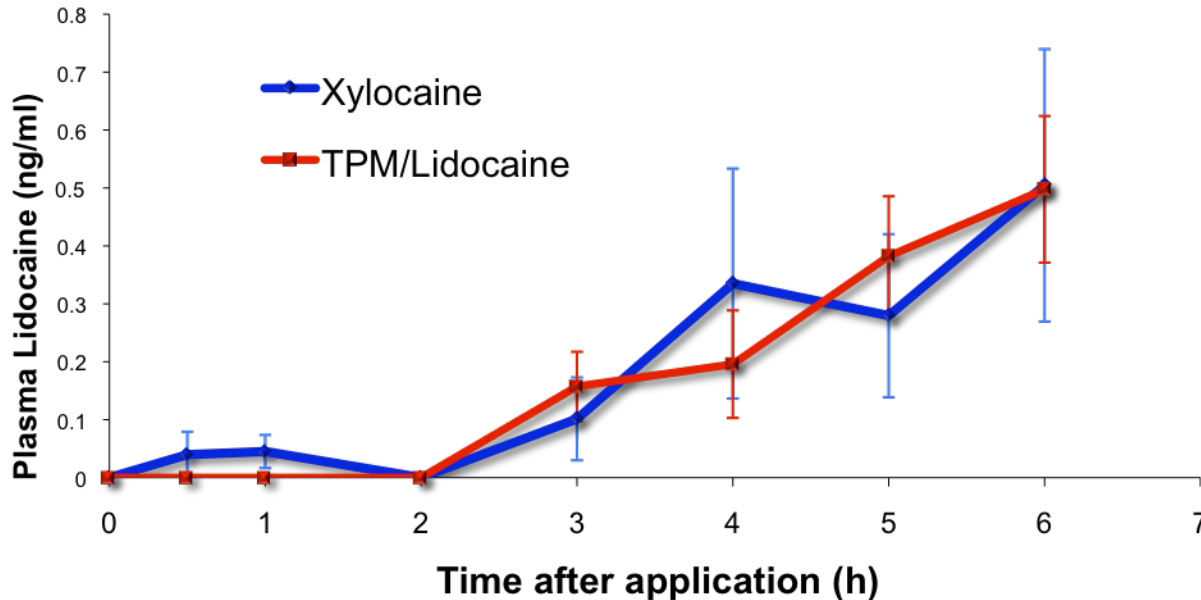


TPM/lidocaine significantly increased dermal absorption in-vivo compared to Xylocaine ($p < 0.001$).



Phase I Data: Lidocaine

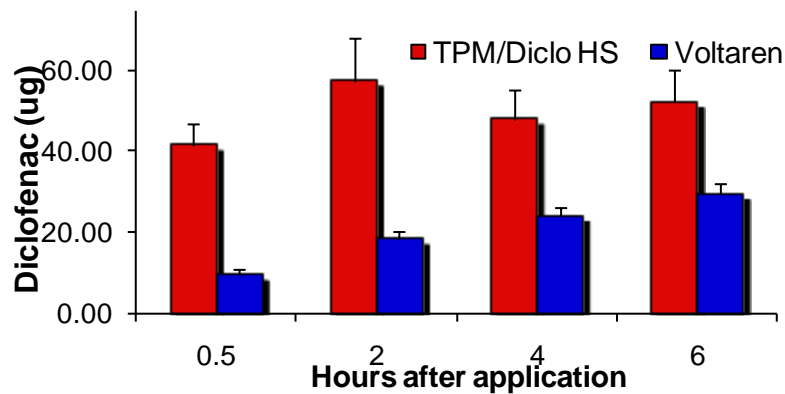
- Equivalent dose of Xylocaine 5% ointment and TPM/lidocaine given after pre-treatment bleed (T_0)
- N = 11 healthy volunteers, bars represent SEM



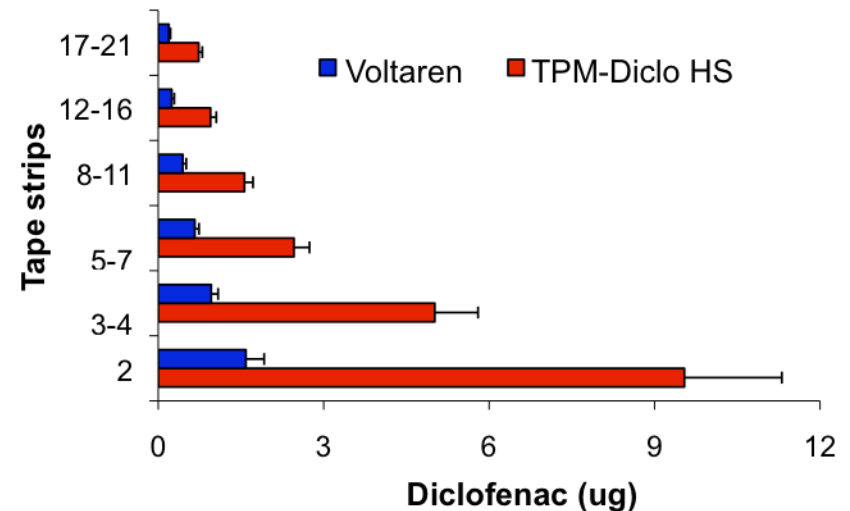
No difference in plasma lidocaine concentrations despite TPM/lidocaine significantly increasing the amount delivered to the skin

Phase I Data: Diclofenac

- Dermal penetration of diclofenac 30 minutes after topical application
- N=21 tape strips taken at each time point. First strip discarded
- N = 12 healthy volunteers, bars represent SEM



TPM/diclofenac delivered on average over four times more ($p < 0.001$) diclofenac into the stratum corneum, than Voltaren® gel.



TPM/diclofenac significantly increased the depth of penetration, with 380 percent ($p < 0.001$) more diclofenac in the deepest layers of the skin sampled.

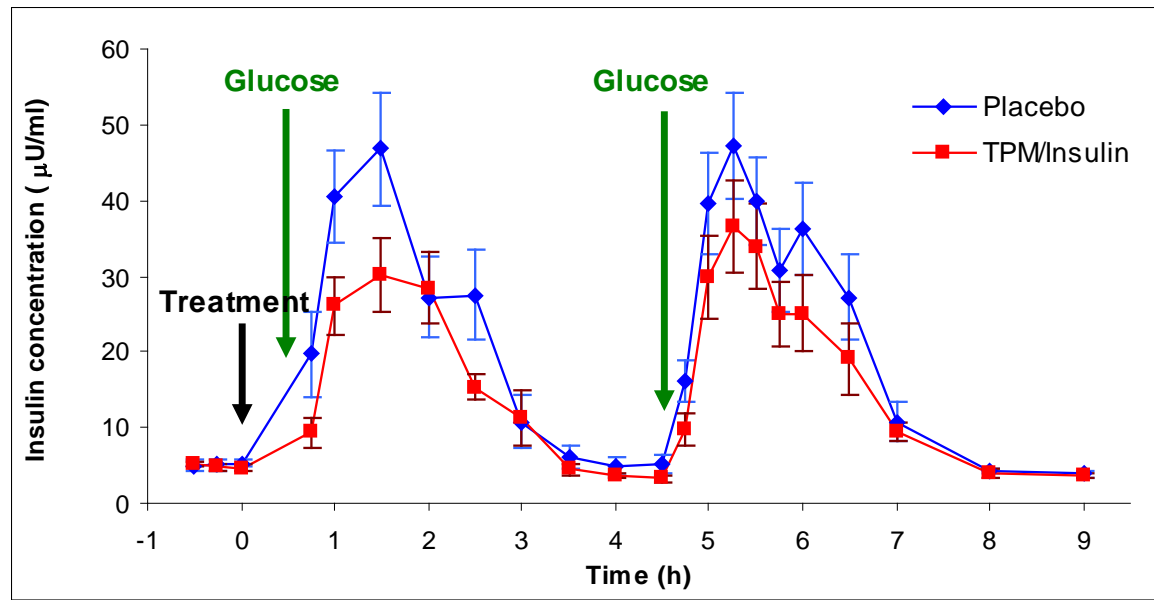
Phase I Study: Insulin

- Safety and pharmacodynamic activity was established in healthy subjects in 2 Phase I studies
- Number of subjects = 40; one T.D application per subject
- Dose 45 units insulin/kg body wt; skin area of application = 15 x 30 cm
- Two Oral Glucose Tolerance Tests (OGTT) 4 hours apart
- Significant reductions in blood glucose, insulin and C-peptide levels from a single application of TPM/insulin
- No irritation observed
- Conducted in Australia in collaboration with the Joslin Diabetes Centre/ Harvard Medical School, Boston

Phase I Data: Insulin

Significant changes in insulin concentration

	1 st OGTT		2 nd OGTT		Significance
Parameter	Active	Placebo	Active	Placebo	<i>p</i>
Insulin AUC _{0-1h} (mU.h.L)	20.2 ± 6.5	32.5 ± 12.3	23.7 ± 10.3	31.2 ± 14.1	0.010
Insulin AUC _{0-2.5h} (mU.h.L)	52.5 ± 17.0	72.9 ± 29.0	55.1 ± 23.5	74.1 ± 32.5	0.013



Mean (±SE) concentrations.

Time 0 h = dose applied.

OGTTs given at the arrows

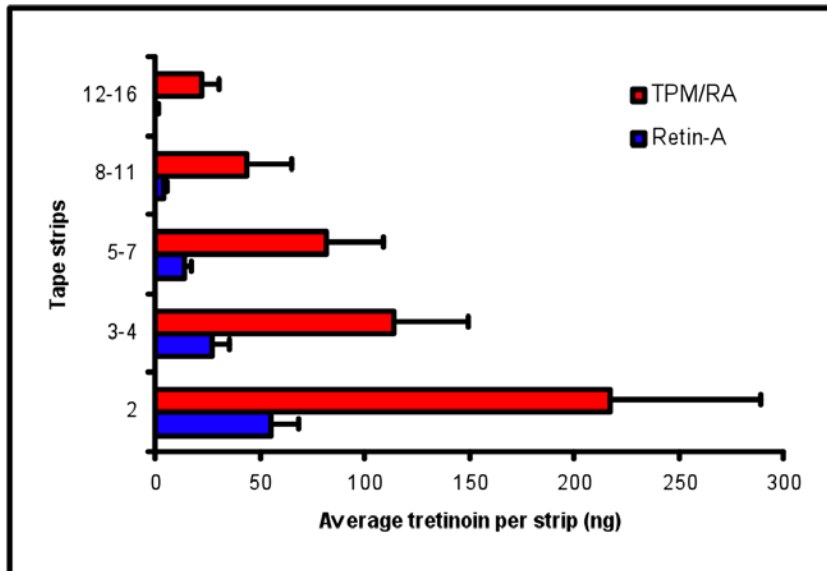
Insulin Project Update

- Successful small scale Phase 2 study completed in Type 1 patients
- Preclinical formulation development and dose optimization work currently underway
- Matrix and micro-needle patch development work underway

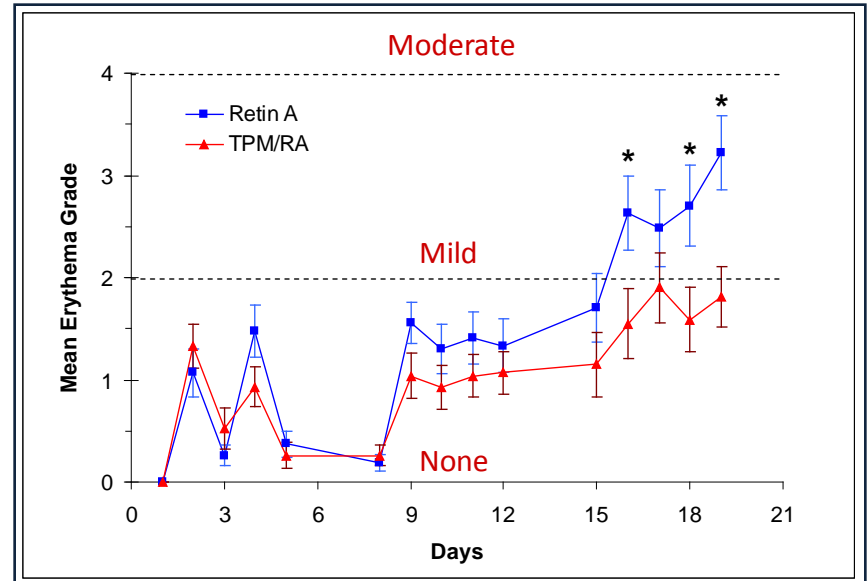
Phase I Data: Tretinoin

- Human Clinical Trials – Penetration via tape stripping completed in 10 subjects
- Repeat insult patch tolerance (RIPT) test compared Retin-A and TPM/tretinoin
- Patches applied each day for 19 days and erythema and dryness scored
- N = 30 healthy volunteers, bars represent SEM

Penetration



Erythema



While significantly increasing the amount of tretinoin delivered, TPM was able to reduce the amount of irritation compared to Retin-A



Cosmeceuticals

- US launch targeting high-end consumers:
- Phosphagenics' TPM technology included in new Le Métier de Beauté beauty line, with two products initially (and others in the pipeline for 2010)
- Exclusive launch of Le Métier de Beauté color treatment with TPM in Neiman Marcus, Bergdorf Goodman, John Barrett, Jose Eber and Fred Segal
- Peau de Vierge Cosmetic Line
 - Anti-aging Tint Moisturizer
 - Mineral Photo Touch Concealer



Magazine press in December has included: WWD, In Style, Harpers Bazaar, with more to follow.

Cosmeceuticals

- Personal care product under the Brand Name: **ELIXIA**
- Australian launch through Exclusive Pharmacies (initially six products)
- Proposed launch timing March 2010
 - Products developed from a topical pharmaceutical delivery platform built around years of scientific and clinical research not hype, which has been applied to the Skincare and Cosmetic Industries
- **Initial Product Range**
 1. Multi V Moisturiser (50ml)
 2. Tinted Multi V Moisturiser with Sun Protection (50ml)
 3. Cleanser (100ml)
 4. Multi V Body Lotion (100ml)
 5. Anti-oxidant Serum (30ml)
 6. Multi action Eye Serum (20ml)



Intellectual Property

Title	PCT	Granted in	Pending in
Improved process for phosphorylation	PCT AU 2000/00452	Australia, Canada, Europe (Belgium, Germany, France, Ireland, Italy, The Netherlands, Switzerland/ Liechtenstein, United Kingdom), Mexico US	Brazil, Japan
Formulation containing phosphate derivatives of electron transfer agents	PCT AU 2001/01475	Australia, South Korea	Brazil, China, Canada, Europe, Japan, Mexico, US
Carrier	PCT AU 2003/00998	Australia	Brazil, Canada, China, Europe, Japan, South Korea, Mexico, US
Alkaloid formulation	PCT AU 2005/000307	Australia, Singapore	Brazil, Canada, China, Europe, Hong Kong, India, Israel, Japan, South Korea, Mexico, New Zealand, Russia, South Africa, US
Carrier Comprising One or More Di and or Mono (Electron Transfer Agents) Phosphate Derivatives or Complexes Thereof	PCT AU 2006/000839	-	Australia, Brazil, Canada, China, Europe, Hong Kong, Israel, India, Japan, South Korea, Mexico, New Zealand, Russia, Singapore, South Africa, US



Attractive Business Model

- Marry our novel TPM delivery technology with products through partners
- Generate value from:
 - Development fees
 - Licensing fees
 - Milestone payments
 - Royalties on sales
- Partner at increasingly later stages of product development to maximize value
- Shorter development time from preclinical to product approval compared with NCEs
- Lower risk in reformulating proven, marketed products

Milestones and Objectives

- Business development
 - Create value by leveraging TPM technology and products across diverse markets with partners
- Clinical and regulatory
 - Pharmaceuticals
 - Oxycodone
 - Complete repeat dose study for matrix and reservoir patch
 - Secure IND in USA
 - Partnering discussions
 - Insulin
 - Complete optimization and patch delivery system
 - Initiate clinical trial
- Financial
 - Revenue from skin care products via commercial partners



PHOSPHAGENICS

Thank You

Delivering More...

Through Innovation in Transdermal Delivery

www.phosphagenics.com