


Delivering More
TPM® Drug Delivery Technology | Pharmaceuticals | Consumer Products | Animal Health
At a Glance (20 April 2017)

Code:	ASX: POH (listed 2004)
Headquarters:	Melbourne, Australia
Sector:	Healthcare
Employees:	18
Shares on Issue:	~1.3 billion
Market Cap:	~\$20 million (A\$0.015/share)
Revenue:	~A\$1.6 million (in 2016)
Cash & Rec:	~A\$8.4 million (at 1 Jan'17)

Company Profile

- Phosphagenics (POH) is a research-based biotechnology company focussed on enhancing the delivery, effectiveness, and tolerability of proven pharmaceutical, consumer and animal health products
- TPM® (Tocopheryl Phosphate Mixture) is Phosphagenics' proprietary drug delivery system based on patented, proven chemical modification of Vitamin E
- Phosphagenics has developed multiple TPM® based novel products to address sizable, unmet industry needs across:
 - Human Health
 - Animal Health and Nutrition
 - Production and Personal Care

Market Opportunity

Phosphagenics is addressing the growing need for more efficient delivery of active molecules, vitamins and nutrients with improved efficacy, efficiency and lower risk of complications and adverse events.

Share Price (12 months)

Key Milestones

	Oxymorphone patch option (Terumo) matures	Completed
	Oxycodone patch option (Terumo) matures	Completed
4Q'16	ProPhase Arbitration ruling	Completed
	Poultry FCR Study headline results	Completed
	Lead Injectable candidates enter development	Completed
1Q'17	Oxymorphone draft Term sheet (Terumo)	Completed
1H'17	Sale of BioElixia® Brand	
2/3Q'17	Oxymorphone agreement progression (Terumo)	
2H'17	Additional TPM®/Diclofenac gel launches	
2H'17	Mylan Arbitration – formal hearing	

Management

Dr Ross Murdoch	CEO and Managing Director
Ms Anna Legg	CFO and Company Secretary
Dr Paul Gavin	CSO and GM, Human Health
Dr Roxsan Libinaki	GM, Animal Health and Nutrition
Mr Greg Moses	GM, Operations and Production
Dr Alex Stojanovic	VP, BD and Commercial

Enquiries:

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Phosphagenics has Three Business Units

Human Health (primary focus)

- There is great need for enhanced drug delivery of human therapeutics
- TPM® is an effective drug delivery platform already marketed in multiple products for humans
- TPM® is protected by over 100 patents and 14 patent families
- TPM® can enhance dermal, oral and intravenous routes of administration - thereby potentially lowering the amount of active drug delivered and associated side effects
- TPM®/Diclofenac gel is already commercialised in India and is being prepared for registration in 16 other markets via its partner Themis Medicare
- Phosphagenics has a number of advanced R&D programs including world first TPM®/Oxymorphone patch (currently under term sheet with Terumo for Japan) and TPM®/Oxycodone patches, TPM®/Propofol injectable, TPM® gels and an enhanced injectable TPM®/Daptomycin (with Mylan (under arbitration at present))
- In addition, Phosphagenics also has a number of in-house R&D programs focussed primarily on injectables

Product	Status
Diclofenac Gel	Marketed (& under registration) Novartis, Themis Medicare
Oxycodone Patch	Development Terumo option (Japan)
Oxymorphone Patch	Development Terumo draft term sheet (Japan)
Daptomycin Injectable	Development Mylan (Global)
Propofol Injectable	Development Terumo (Global)
2 additional products*	Research Terumo (Global)
Additional Injectables	Research Internal

Animal Health and Nutrition

- TPM® is able to enhance the uptake of vitamins and nutrients in humans and animals
- As a feed additive TPM® has the potential to address two main commercial opportunities in Animal Health:
 - improve feed efficiency in multiple livestock species
 - improve immunity, milk quality and fertility in dairy cows
- In 2016 Phosphagenics:
 - completed two trials in pigs, significant improvement in feed efficiency in weaners announced 1Q 2016
 - completed a feed efficiency poultry study, positive results announced 4Q 2016
 - Initiated a large dairy cattle study, results - late 2017

Product	Status
Horse Racing Nutrition	Marketed
Dairy Cattle Mastitis	Marketed
Pigs, Poultry Feed Efficiency	Proof of Concept trials complete
Dairy Cattle Mastitis, Fertility	Trials Active Completion due 2H'17

Production and Personal Care

- Phosphagenics has its own purpose built manufacturing plant in Clayton, Australia, to manufacture TPM® and Vital ET®
- The manufacturing process is proprietary and patent protected
- In 2015 Phosphagenics manufactured and sold over 22 tonnes to partners in the Personal Care industry
- "Production and Personal Care" is already a cash flow positive business for Phosphagenics
- TPM® and Vital ET® are already used in up to 100 cosmetic and skin care products, including the prestige label Le Métier de Beauté
- Phosphagenics has a global distribution agreement with Ashland, supplying TPM® and Vital ET® as a raw ingredient to multiple other commercial partners

Product	Status
TPM® based BioElixia®	Brand for Sale
TPM® based Products	Partnered Le Métier + multiple others
Vital-ET® based Products	Marketed Ashland