



*ASX Limited
Market Announcements Office*

Phosphagenics Investor Presentations

16 April 2018, Melbourne: Australian drug delivery company, Phosphagenics Limited (ASX:POH; OTCQX:PPGNY), is pleased to present the latest versions of the Phosphagenics non-confidential investor relations documents.

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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[®] (Targeted Penetration Matrix). TPM[®] 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[®] enhanced patches, gels and injectable products for the human health market and is also developing TPM[®] 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).

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.

www.phosphagenics.com



| | |
|-----------------------------------|-------------|
| Fiscal Year End | Dec 31 |
| Market Cap (12/31/17) | \$25 M |
| 52-Week Price Range (2017) | ¢1.2 - ¢2.2 |
| Shares Outstanding | 1.5 B |
| Cash (18 Jan '18) | \$5.4M |
| Note: amounts shown in AUD | |

COMPANY STRATEGY

Phosphagenics is an established Australian biopharmaceutical company, utilising its proprietary TPM[®] delivery technology to **develop innovative therapeutics** that address unmet medical needs and **enhance patients' quality of life.**

Traditionally a transdermal company, Phosphagenics is expanding its focus – utilising the solubilisation properties of TPM[®] to develop a portfolio of enhanced injectables.

Its strategic focus is to:

- Enhance the efficacy and safety of already approved drugs
- Develop products using a novel route of administration, thus exploiting untapped value for known molecules
- Utilize accelerated regulatory pathways, which require reduced investment and risk than standard development programs

TPM[®] TECHNOLOGY OVERVIEW

A proprietary, patient friendly and cost effective delivery & solubility technology, combining multiple forms of Vitamin E

Able to overcome various challenges of injectable drugs

Enables transdermal or topical drug delivery without adversely disrupting the skin surface or causing irritation

TPM[®] is the result of 15+ years of R&D and over \$100M

TPM[®] is protected by 100+ patents across 15 patent families

TPM[®] TARGETS CHALLENGES FOR INJECTABLE DRUGS FROM MANUFACTURING TO THE CLINIC

Partners have already recognized advantages of TPM[®] & products are already in development

Manufacturing

A safer & more natural excipient
Improve stability & reduces need for lyophilisation

Supply Chain

Reduce 'cold chain' requirements
Speed up reconstitution of lyophilised drugs

Clinical Use

Increase stability of reconstituted drugs
Enable new injectable drugs to address unmet medical needs



Global JV has produced a transparent TPM[®]/Propofol (without lecithin or soybean oil) **now** in preclinical testing




TPM[®]/Daptomycin with stability & reconstitution advantages **now** in late phase development*

Multiple new injectable drugs under early R&D

(disclosure limited for IP protection)

* Partnership is in arbitration

LEGACY TOPICAL & TRANSDERMAL PRODUCTS PROVIDE CONSIDERABLE OPPORTUNITY FOR PARTNERSHIPS AND REVENUE

| TPM [®] /Diclofenac Gel | TPM [®] /Oxymorphone Patch | TPM [®] /Oxycodone Patch |
|---|---|---|
|  <ul style="list-style-type: none"> Licensed in 17 countries Launched in India and other emerging markets Generating both royalty and TPM[®] sales revenue | <ul style="list-style-type: none"> First in World transdermal oxymorphone patch Significant performance & tolerability in Phase 1: plasma PK equivalent to oral dosing of Oxymorphone ER Commercial formulation undergoing optimization | <ul style="list-style-type: none"> First in World topical / locally acting oxycodone patch Completed Phase 2a: promising activity in subset of patients with postherpetic neuralgia, but did not reach significance Positive nonclinical data encourage development for inflammatory pain (e.g. OA) |

Several other proof-of-concept products have confirmed the ability of TPM[®] to increase delivery and/or reduce irritation associated with dermal delivery (due to Vitamin E activity)

ARBITRATION ACTION AGAINST AGILA & MYLAN

- In 2016, Phosphagenics filed Arbitration proceedings against Agila & Mylan, asserting breaches of agreements associated with TPM[®]/Daptomycin.
- Phosphagenics' independent experts have calculated that, if successful on all claims and causes of action, the maximum damages could approach US\$300M.
- The formal Hearing of the arbitration was held and concluded in 4th Quarter 2017, and a decision is expected 1H 2018 (exact timing at the discretion of the Arbitrator).

RECENT STRONG DATA IN ANIMAL NUTRITION

- In addition to being a source of Vitamin E, TPM[®] can also enhance the oral delivery of co-formulated nutrients, features which are beyond those of Vitamin E.
- A recent large scale program involved several livestock studies, the first of which in newly weaned pigs, showed a statistically significant 3% increase in Feed Conversion Ratio over Vitamin E. Additional studies in poultry have also shown significant performance improvements in standard and heat stressed conditions. Discussions and due diligence are underway with a number of large animal nutrition companies.

RECURRING REVENUE FROM PRODUCTION

- Our facility in Melbourne produces 10+ tonnes of TPM[®] & Vital ET[®] per year, resulting in \$1M+ in revenue
- Vital ET[®] is a form of TPM[®] used in 100+ personal care products - it does not have delivery capabilities, but maintains the anti-irritant action (distributed by Ashland)



This document may include forward-looking statements that are inherently subject to risks and uncertainties. These statements relate to, but are not limited to: (1) the safety or efficacy of, or potential applications for, Phosphagenics' TPM[®] platform technology; (2) the strength of Phosphagenics' intellectual property; (3) the timelines for Phosphagenics' clinical trials and regulatory processes for its different products; (4) the scalability and efficiency of manufacturing processes; (5) revenue projections, market share expectations, share price expectations and capital requirements. Actual results may differ from the expectations expressed in these forward-looking statements, and the differences may be material (whether positive or negative). The risks that may cause Phosphagenics' actual results, performance or achievements to be materially different from those expressed or implied by such forward-looking statements, include but are not limited to: (1) risks inherent in the development, approval and commercialization of potential products; (2) uncertainty of clinical trial results or regulatory approvals or clearances; (3) changes to market trends or government laws or regulations; (4) the potential need for future capital; (5) dependence upon collaborators; and (6) protection of intellectual property rights, among others. Accordingly, you should not place undue reliance on these forward-looking statements.



April 2018

Phosphagenics: Investor Presentation

www.phosphagenics.com
(ASX : POH)



Safe Harbour Statement

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Actual results may differ from the expectations expressed in these forward-looking statements, and the differences may be material (whether positive or negative). The risks that may cause Phosphagenics' actual results, performance or achievements to be materially different from those expressed or implied by such forward-looking statements, include but are not limited to: (1) risks inherent in the development, approval and commercialization of potential products; (2) uncertainty of clinical trial results or regulatory approvals or clearances; (3) changes to market trends or government laws or regulations; (4) the potential need for future capital; (5) dependence upon collaborators; and (6) protection of intellectual property rights, among others. Accordingly, you should not place undue reliance on these forward-looking statements.

Mission

To become a leading biopharmaceutical company, utilising our TPM[®] delivery technology to develop innovative therapeutics that address unmet medical needs and enhance patients' quality of life.

A snapshot of Phosphagenics



- **TPM[®]** is a proprietary solubilisation / drug delivery technology combining multiple forms of Vitamin E (protected by **15+ patent Families**)
- Result of 15+ years R&D and over **\$100M investment**

- Pipeline of **TPM[®] injectables** with enhanced usability characteristics
- TPM[®] patch & gel products with enhanced delivery characteristics
- Additional products targeting **lucrative markets** beyond Human Health



- **\$5.4M cash** (18 Jan'18), **no debt** and **\$100M+ tax losses**
- **Recurring annual revenues** (from manufacturing): \$1M+/year
- Benefit of Australia's R&D incentive (**43% rebate**) for applicable R&D
- **Potential upside** from international arbitration with decision expected 1H 2018 (claims lodged of ~US\$300M)

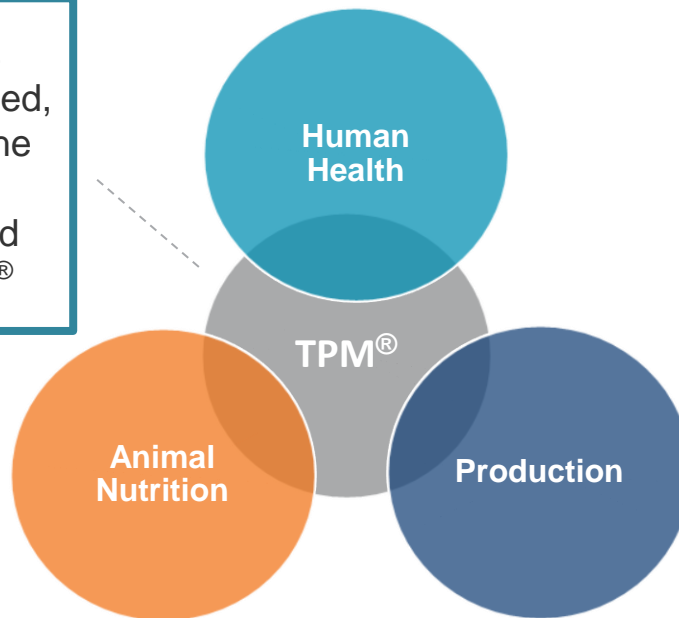
- **Experienced** international management team and Board of Directors
- Global **partnerships** providing additional funding and expertise



TPM[®] is core to Phosphagenics' portfolio

Phosphagenics leverages TPM[®]'s unique properties, data and broad patent portfolio across multiple lucrative markets

Phosphagenics invented*, developed, patented and is the sole global manufacturer and supplier of TPM[®]



Highly versatile with an excellent stability and safety profile



Enhances injectable drug solubility, stability & utility characteristics



Enhances transdermal drug delivery and oral bioavailability

TPM[®] can overcome key challenges for injectable drugs



CHALLENGES

👍 “TPM[®] targets”

Manufacturing

- Solubilisation needs complex, toxic or allergenic excipients
- Unstable formulation needs lyophilisation
- Drug is too unstable to be an injectable

- A **safer** and more natural excipient
- **Improve stability** reducing need to lyophilise
- Allows previously unsuitable drugs to be **injectable**

Supply Chain

- ‘Cold chain’ needed to maintain stability
- Reconstitution of lyophilised powders is difficult, incomplete or time consuming

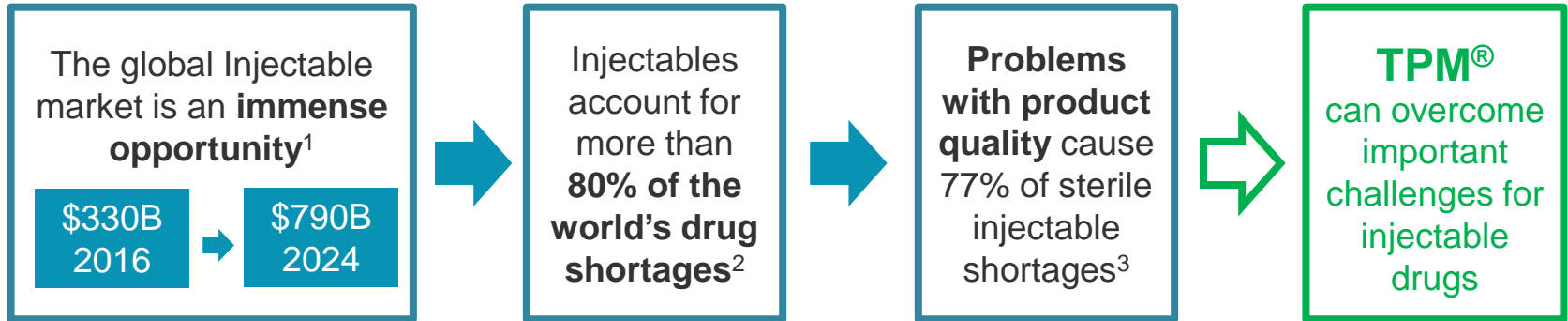
- **Reduce ‘cold chain’** by improving RT* stability
- **Speed up reconstitution** of lyophilised drugs

Clinical Use

- Excipients are allergenic or toxic to certain patients (black box warning)
- Lack of stability post reconstitution - limited to single use only
- Unmet medical need caused by inability to make an injectable formulation

- **Replace problem** excipients
- **Increase stability** of reconstituted drugs – potentially allowing multi-use products
- **Enable injectable formulation** of previously unsuitable drugs to address unmet medical need

Phosphagenics has a strong Human Health “Injectable” portfolio strengthened by the benefit of global partnerships

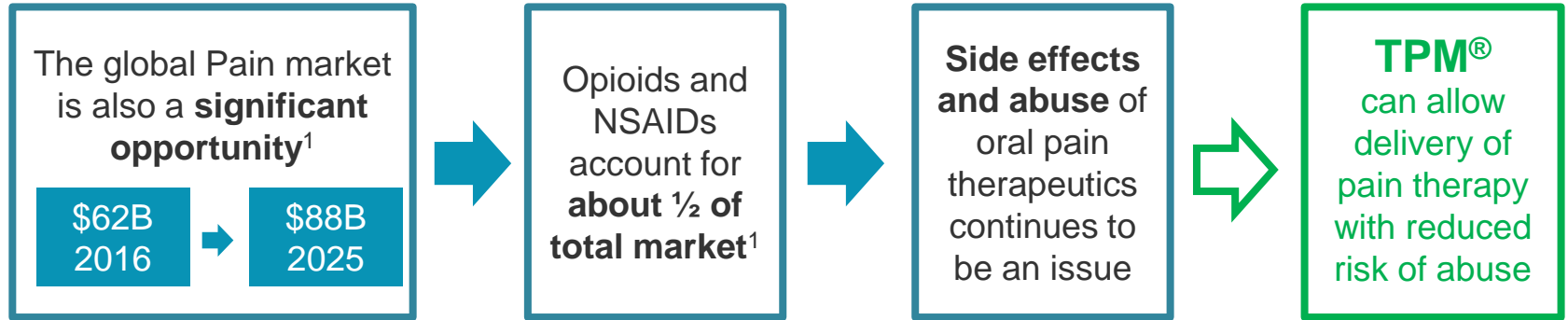


| Product | TPM Advantage | Territory | Partner | Research | Development | Marketed |
|----------------------------|----------------------------------|-----------|-----------|----------|-------------|----------|
| Injectable Products | | | | | | |
| Daptomycin | Reconstitution speed & Stability | Global | Mylan® | | | |
| Propofol | Clarity & Excipient toxicity | Global | TERUMO® | | | |
| Other Products* | Multiple benefits | Global | Available | | | |

Partnered Yet to Partner * Not yet publicly disclosed

1 www.researchandmarkets.com; "Global Injectable Drug Delivery Market Analysis, Companies Profiles, Size, Share, Growth, Trends and Forecast to 2024"
 2 IMS Study Reveals Drug Shortages in U.S. Disruptive Yet Narrowly Concentrated, IMS Institute for Healthcare Informatics, Nov. 14, 2011
 3 www.ncsl.org/research/health/drug-shortages-preserving-the-drug-supply.aspx

Phosphagenics has a strong Human Health “Pain Product” portfolio strengthened by the benefit of global partnerships

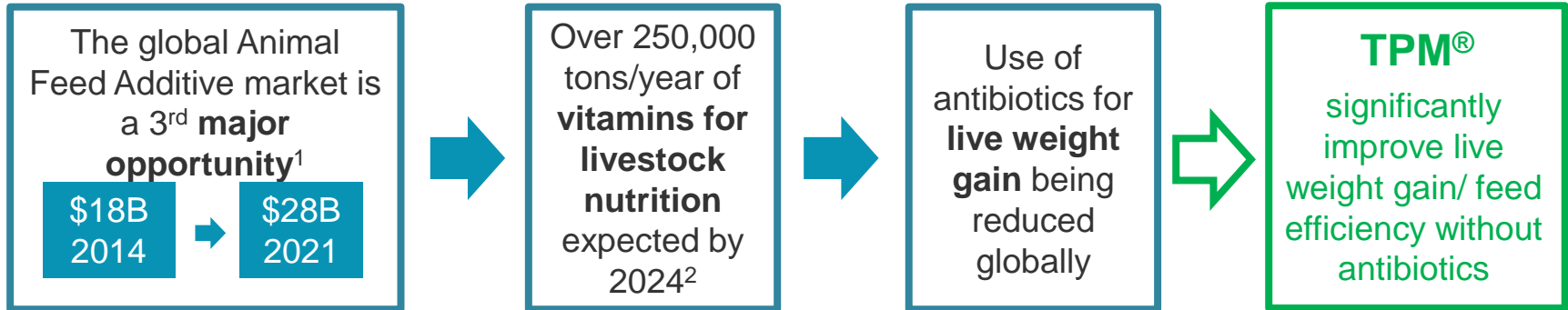


| Product | TPM Advantage | Territory | Partner | Research | Development | Marketed |
|----------------------|--|--------------|-----------------|----------|-------------|----------|
| Pain Products | | | | | | |
| Diclofenac Gel | Enhanced delivery | India | NOVARTIS | → | | |
| Diclofenac Gel | Enhanced delivery | 16 countries | THEMIS MEDICARE | → | | |
| Oxycodone Patch | Transdermal Delivery & reduced abusability** | Global | Available | → | | |
| Oxymorphone Patch | Transdermal Delivery & reduced abusability** | Global | Available | → | | |
| Additional Products* | | Global | Available | → | | |

Partnered Yet to Partner

- * Including lidocaine gel; ropivacaine gel and others not disclosed
- ** compared with oral treatment

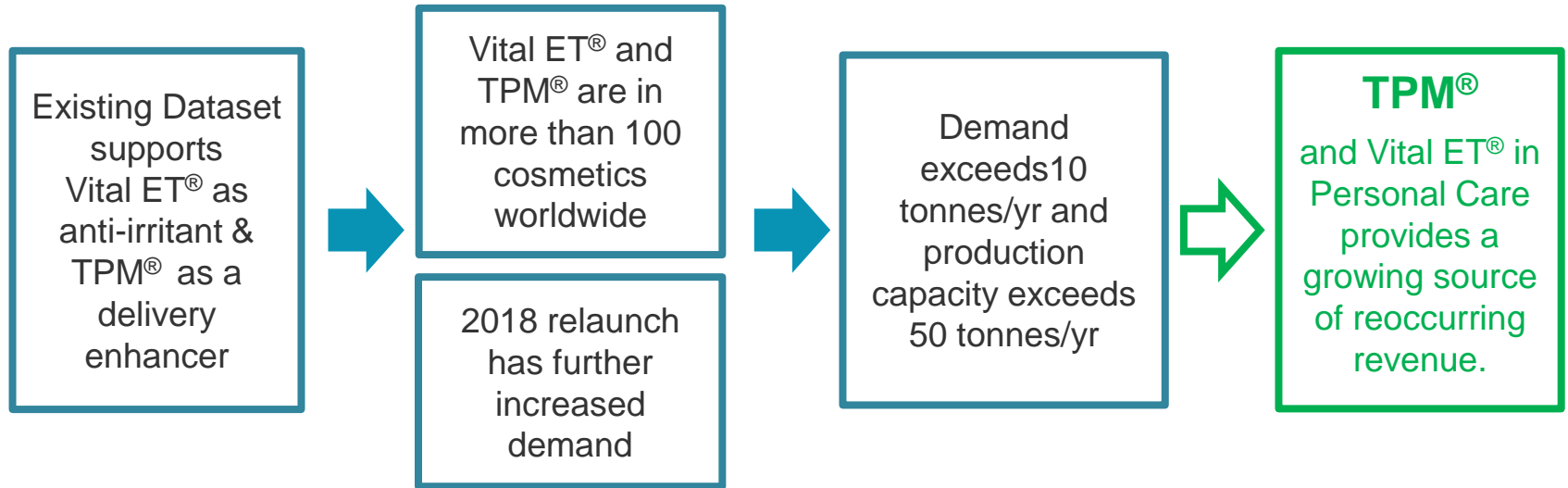
Phosphagenics has a strong “Animal Health” portfolio driven by recent strong trial data



| Product | TPM Advantage | Territory | Partner | Research | Development | Marketed |
|---|--|-----------|-----------|----------|-------------|----------|
| Animal Health & Nutrition Products | | | | | | |
| Pig, Poultry, Feed efficiency | 3%+ increase in Feed Efficiency | Global | Available | → | | |
| Cattle mastitis & fertility | Positive data as drench treatment, more work needed as an in-feed additive | Global | Available | → | | |

■ Partnered
 Yet to Partner

Phosphagenics' "Personal Care" portfolio has multiple partnerships generating growing recurring revenues



| Product | Territory | Partner | Research | Development | Marketed |
|---------------------------|-----------|-------------------------------------|-----------------------|-------------|----------|
| Personal Care | | | | | |
| Vital ET® (100+ Products) | Global | ASHLAND | [Solid orange arrow] | | |
| TPM® Based Products | Global | LE MÉTIER DE BEAUTÉ RODAN+FIELDS | [Hollow orange arrow] | | |

Partnered

Partnered (Non-exclusive). Available for additional Non-exclusive partners.

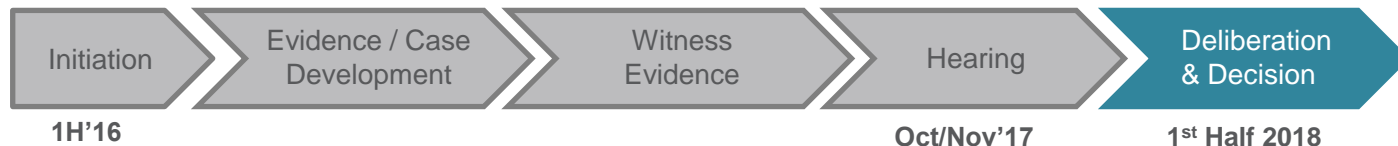
Phosphagenics' arbitration with Mylan

2011/12: Signed agreements with Agila Specialties Private Ltd to develop and market Phosphagenics' TPM[®]/Daptomycin injectable

2013: Strides Shasun (STR:IN NATL INDIA) sold Agila to Mylan (MYL (NASDAQ, TASE)) for ~US\$1.4B

2016: Phosphagenics filed arbitration in Singapore asserting Agila and Mylan breached agreements (multiple claims and causes of action)

Hearing: **Completed** Nov' 2017 Phosphagenics represented by Mr J Rowlands and Corrs Chambers Westgarth (voted #1 law firm in Australia & APAC by The Legal 500)



Decision: **Expected 1H 2018** (exact timing at the discretion of the Arbitrator)

- Licensing Agreement continues in full force, (pending the Arbitrator's decision)
- Settlement discussions can occur in parallel

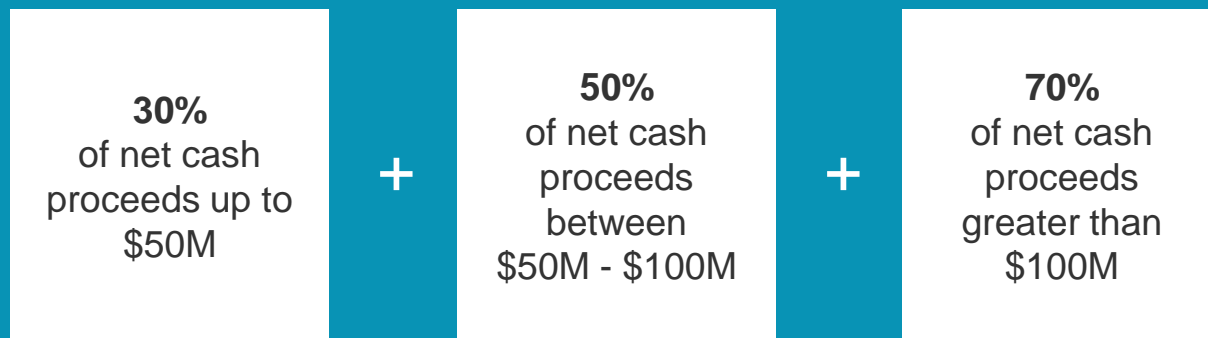
Damages: Maximum total damages could approach **US\$300M***

*Phosphagenics' independent experts opinion if successful on all claims and causes of action, aggregate of all claims, recognising a probability of success from zero to maximum calculated by the experts

Board of Directors recommends shareholder return*

If Phosphagenics is successful and receives a material payment from Mylan, the Board intends to recommend a return of capital* (after costs):

Calculation:



Illustrative Example

| Net Award* Aus\$ | Return to Shareholders* | Shareholder Return Per 1% Held # |
|---------------------|----------------------------|-------------------------------------|
| \$30M | \$9M | \$90,000 |
| \$60M | \$20M | \$200,000 |
| or \$120M | \$54M | \$540,000 |

* Actual amount and timing of shareholders return will be dependent on (i) financial position of the company at the time of decision, (ii) Actual Cash Award received by POH less estimated costs, (iii) number of shares on issue and (iv) Board and shareholder approval



We have delivered consistent substantial news flow and target valuable newsflow over the next 12 months

| | | | |
|-----------------------------|--|----------------------|--------------------------|
| 2H 2016 | <i>Patch options (2) and R&D Alliance deal (3) with Terumo</i> | <i>Human Health</i> | Complete |
| | <i>R&D Agreement for new projects with Terumo.</i> | <i>Human Health</i> | Complete |
| | <i>ProPhase Arbitration Decision</i> | <i>Personal Care</i> | Complete |
| 1H 2017 | <i>Commercial reformulation of TPM®/Oxymorphone Patch</i> | <i>Human Health</i> | Complete |
| | <i>Successful Results for Swine Feed Efficiency Program</i> | <i>Animal Health</i> | Complete |
| | <i>Successful results for Poultry Feed Efficiency Program</i> | <i>Animal Health</i> | Complete |
| 2H 2017/ 1H 2018 | <i>Sale of BioElixia® brand</i> | <i>Personal Care</i> | Completed Aug '17 |
| | <i>Terumo Agreement signed for "TPM®/Oxymorphone Patch"</i> | <i>Human Health</i> | Completed Aug '17 |
| | <i>Credit Pharma Term Sheet for "TPM®/Diclofenac Gel"</i> | <i>Human Health</i> | Completed Sep '17 |
| | <i>Rights Issue raised over \$3.3M (+\$1.3M Jan'18)</i> | <i>Corporate</i> | Completed Oct '17 |
| | <i>Mylan Arbitration Formal Hearing</i> | <i>Human Health</i> | Completed Nov '17 |
| | <i>Results of Dairy Cattle Feed additive program</i> | <i>Animal Health</i> | Completed Dec '17 |
| | <i>Initial TPM® Injectable Candidate enter development</i> | <i>Human Health</i> | <i>On track 1H '18</i> |
| | <i>Outcome of Mylan Arbitration</i> | <i>Human Health</i> | <i>Targeted 1H '18</i> |



Experienced Management & Board with strong track record of success



Greg Collier, Chairman & Independent Director

- 20+ years experience; current CEO of Invion (ASX: IVX)
- Previous: CEO of ChemGenex (sold to Cephalon for \$200M+)
- 150 peer reviewed publications, 33 patents, Roche Award for Excellence



Ross Murdoch, CEO & Managing Director

- 25+ years experience; joined Phosphagenics in 2015
- Previous: SVP of Shire Pharmaceuticals, President & COO of Prana Biotechnology
- PhD in Clinical Pharmacology, University of Melbourne



Peter Lankau, Independent Director

- 30+ years experience; currently on Boards of ANI Pharmaceuticals & Cipla
- Previous: Executive Chairman of Nautilus Pharmaceuticals, Chairman & CEO of Logical Therapeutics, CEO & Director of Endo, VP of Alharma



David Segal, Non-Independent Director

- 30+ years experience as a stockbroker
- Shareholder of Phosphagenics since 1999 (when known as Vital Capital)
- Previous: Investor Relations manager of Phosphagenics



Experienced Management & Board with strong track record of success



Anna Legg, CFO & Company Secretary

- 20+ years financial experience; joined Phosphagenics in 2013
- Experience with establishment of international entities, statutory reporting, system development and financial modeling



Paul Gavin, CSO

- 15+ years with Phosphagenics; an inventor of the TPM[®] platform technology
- Responsible for all Research & Development at Phosphagenics
- PhD in Biochemistry & Molecular Biology, Monash University



Alex Stojanovic, VP Business Development & Commercial

- 14 years experience; joined Phosphagenics in 2014
- Previous: Sr Director of Grunenthal, Strategy Consultant of ZS Associates
- PhD in Pharmacology & Toxicology, Dartmouth College



Roksan Libinaki, GM Animal Health & Nutrition

- 15+ years with Phosphagenics, during which time she has managed R&D programs focused on improved oral bioavailability and/or efficacy of nutrients and drugs
- PhD in Biochemistry & Molecular Biology, Monash University



Phosphagenics is a exciting investment opportunity



Experienced Management / Board with strong track record of success



Validated TPM[®] Technology through all three businesses

- Portfolio including “world first” transdermal opioid patches, gels & injectables



Multiple Commercialised Products and consistent annual revenues from partnerships and sales of TPM[®] & Vital ET[®]



Strong Track record of delivering milestones with significant value-adding milestones targeted over the next 12 months



Attractive valuation: Share price/value disparity. Substantial upside potential and potential capital return from any net cash received from Mylan Arbitration



A\$5.4M cash (18 Jan'18); No Debt; Tax losses >A\$100M



Phosphagenics

Innovative Biopharmaceutical Company Headquartered in Australia

Key Statistics:

ASX/OTCQX Code POH/PPGNY (listed 2004)

Headquarters Melbourne, Australia

Employees 12

Shares ~1.5 billion

Cash \$5.4M (18 Jan 2018)

Revenue ~\$1.2M (2017)

Market Cap ~\$20M (at \$.012/share)

3 Business Units

- Human Therapeutics
- Animal Nutrition
- Production & Personal Care



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