

# PRESENTATION

AGM

27<sup>th</sup> OCTOBER 2015



ASX: PAA

ACN 094 006 023

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# Corporate Overview

1. Proprietary Technology pipeline of three Drugs:
  - PPL-1 Monepantel (“MPL”) for the treatment of Cancer
  - Albendazole for the treatment of ascites
  - Mucin, a formulation to clear mucin from tumours
2. Parallel Development track with both human and veterinary applications
3. Option Agreement with Top 5 Pharma Company for the Veterinary applications
4. Joint patent with large Japanese chemical/Pharma company
5. Lead product PPL-1 (MPL) successfully completed Phase I in humans
6. Lead product PPL-1 (MPL) phase II ready to commence Qtr 1, 2016
7. Pipeline products Albendazole and Mucin to be developed with partners

# Corporate Snapshot

## PharmAust Limited

ASX Code	PAA
Shares on Issue <sup>1</sup>	77.8 million
Options on Issue <sup>2</sup>	23.5 million
Market Cap.	\$12.9 million
Cash (30 June 2015)	\$3.4 million
Debt	nil
Enterprise Value	<b>\$9.5 million</b>

## Shareholders as at October 2015

Professor David Morris	9.6%
Dr Roger Aston	5.7%
Top 20	49.7%

## Board & Management

Dr Roger Aston	Executive Chairman
Mr Robert C Bishop	Executive Director
Dr Wayne Best	Non Executive Director
Mr Sam Wright	Non Executive Director

<sup>1</sup> Assumes shareholder approval of 1:20 consolidation

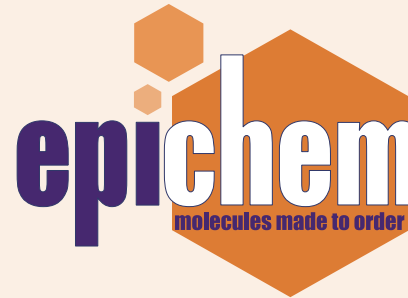
<sup>2</sup> Ex Price \$0.16, Expiry Date 3 September 2018



# PharmAust to Focus on **MPL** and **Epichem** following Successful Phase I and New Chemistry Facility



Pitney Pharmaceuticals  
Limited



Human Phase II with  
MPL and Accelerate  
Commercialisation.  
Partnering Albendazole  
and Mucin projects.

Sales Growth forecast to  
reach \$10M by 2020.  
Support for MPL  
programme.

# WHY FOCUS: MPL MEETS KEY PHASE 1 ENDPOINTS

1. **Safety** – Excellent safety profile as predicted from pre-clinical models
2. **Active dose** – Identified for PPL-1 from effects on cancer markers
3. **Efficacy** – Determined within trial by markers and effects on tumours (p70s6K and p4E-BP-1)
4. **Synergy** – with many cytotoxic drugs currently in use (model system studies)
5. **Optimum** – use of funds



# MPL Active in Phase I Trial in Patients Who Fail other Available Treatments (“Standard of Care”)

## *Implications for MPL*

- As a new class of cancer drug with a novel mechanism of action, it provides the opportunity to be effective where “Standard of Care” has failed
- Preclinical studies show reversal of drug resistance, thus potential for combination therapy
- The very low toxicity of MPL avoids the dosing-limitations and toxicities of many approved anticancer drugs
- Novel mechanism of action (autophagy) potentially circumvents resistance points of known drugs



# PPL-1 (MPL) IS ALREADY APPROVED FOR VETERINARY USE

- Novartis Animal Health have registered MPL for the treatment of parasitic diseases in animals (“Zolvix”)
- Extensive Manufacturing and Toxicology may already be available
- PAA hold patents on the use of MPL and AADs in cancer
- Over 50 MPL analogues are available for development
- Epichem has synthesized further MPL analogues





# WHAT IS THE RELEVANCE OF p70s6k?

## Elevated p70s6k is associated with poor outcomes in cancer

- Rapamycin-sensitive p70s6k pathway is a potential novel target for therapeutic intervention in small cell lung cancer
- Patients who have a poor response to chemotherapy have high p70s6k levels
- Overexpression of p70s6K in breast cancer patients is associated with aggressive disease and poor prognosis
- p70s6k has been implicated to promote malignant transformation of cancers
- patients with breast cancer with increased p70s6k phosphorylation have poor survival and increased metastasis

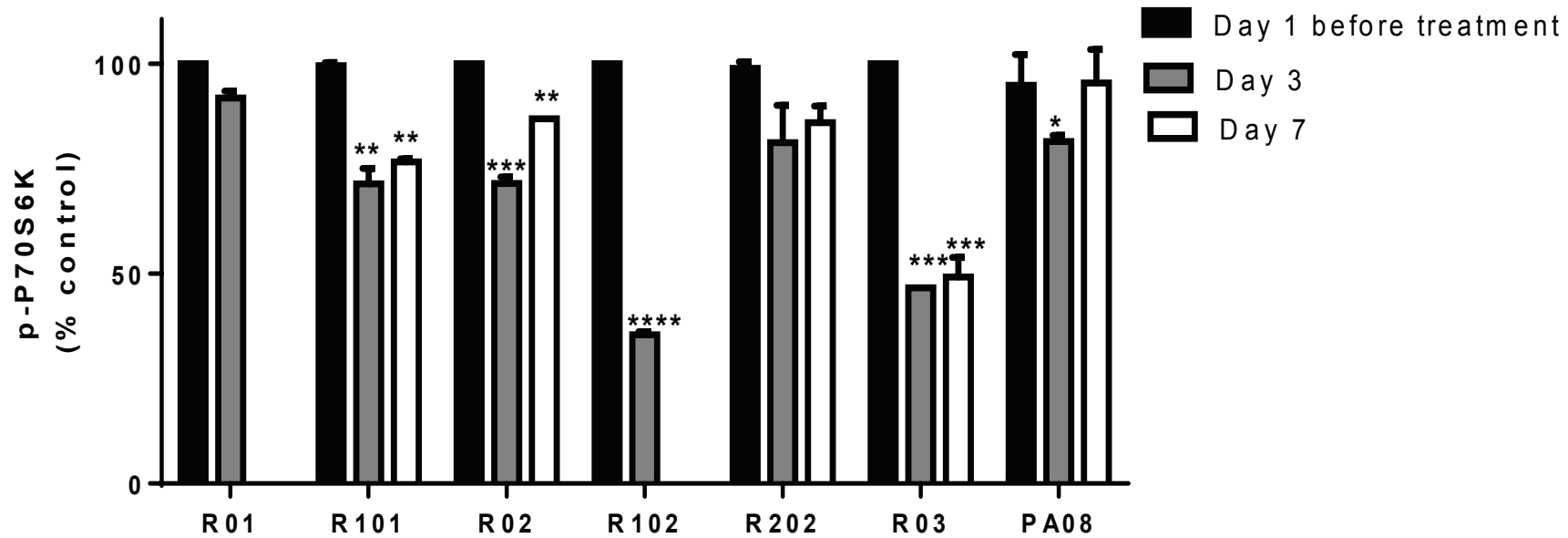
\*Rapamycin sells into the multibillion organ transplant market and the cancer market

- Rapamycin and Everolimus both inhibit p70s6k and interfere with mTOR
- Revenues for Novartis and Pfizer for these drugs are in the \$ billions



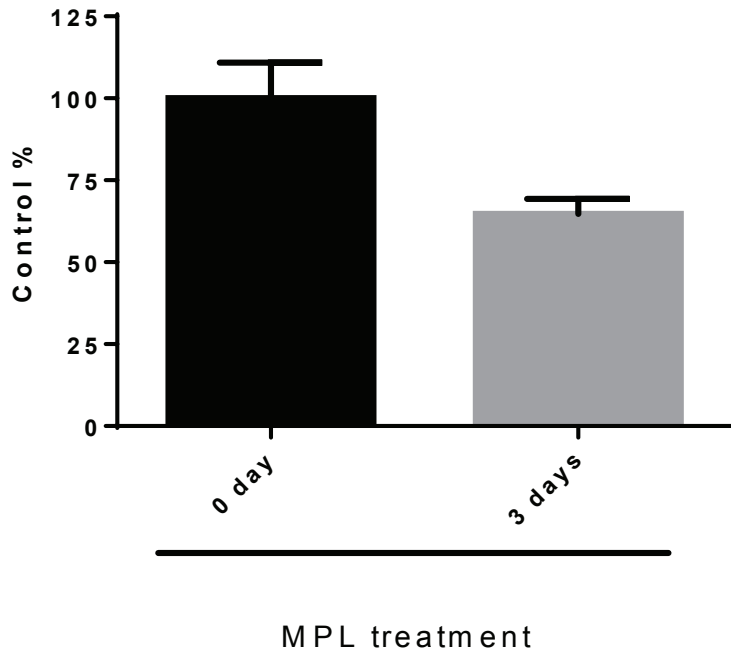
# Suppression of p70s6k in Man

Determination of p-P70S6K in PBMC of patients treated with MPL

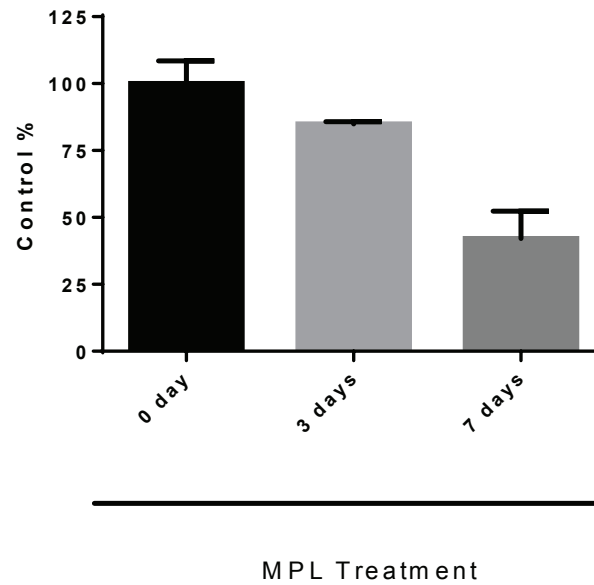


# Suppression of p70s6k in dogs

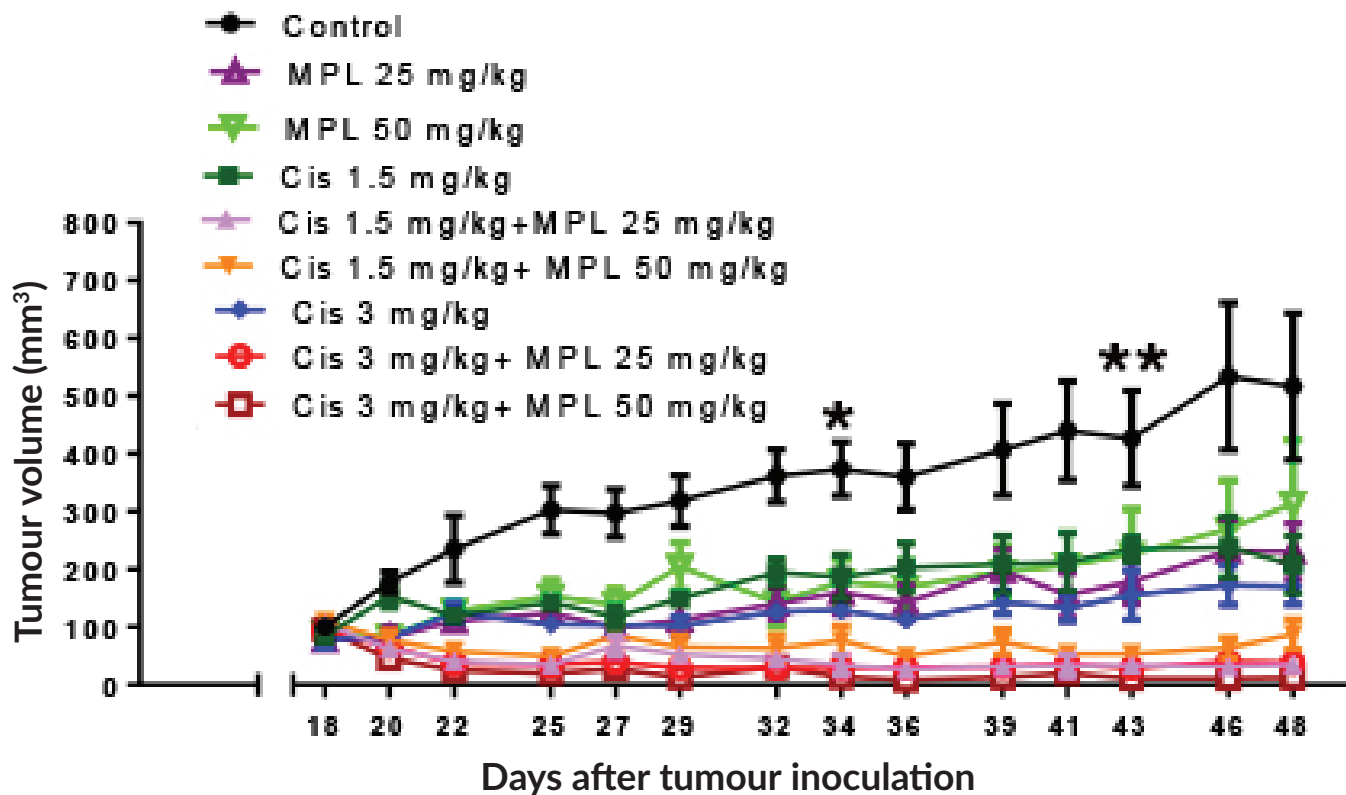
P-p70S6K Elisa in dog PBMC



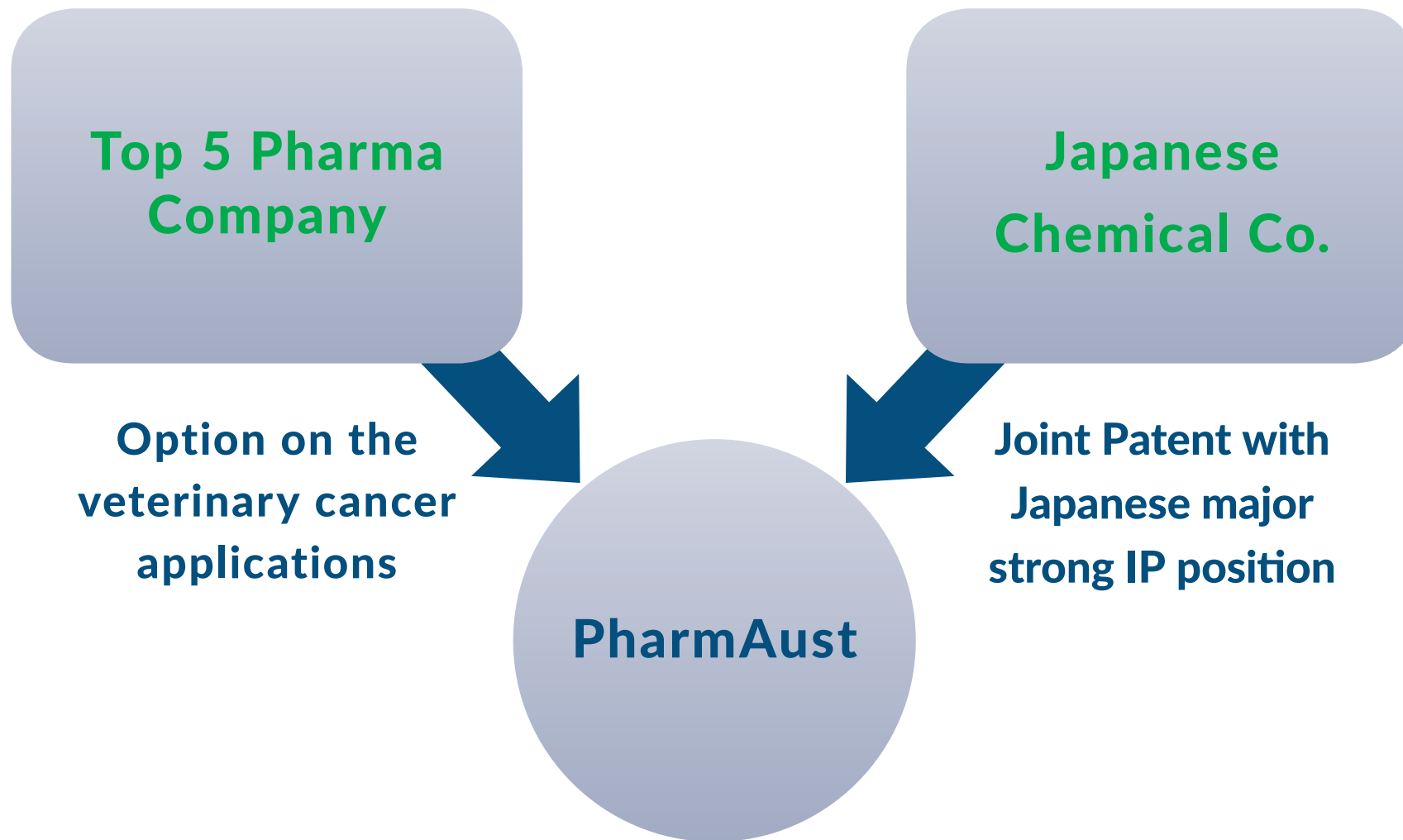
P-p70S6K Elisa in dog (Mortimer Cambell) PBMC



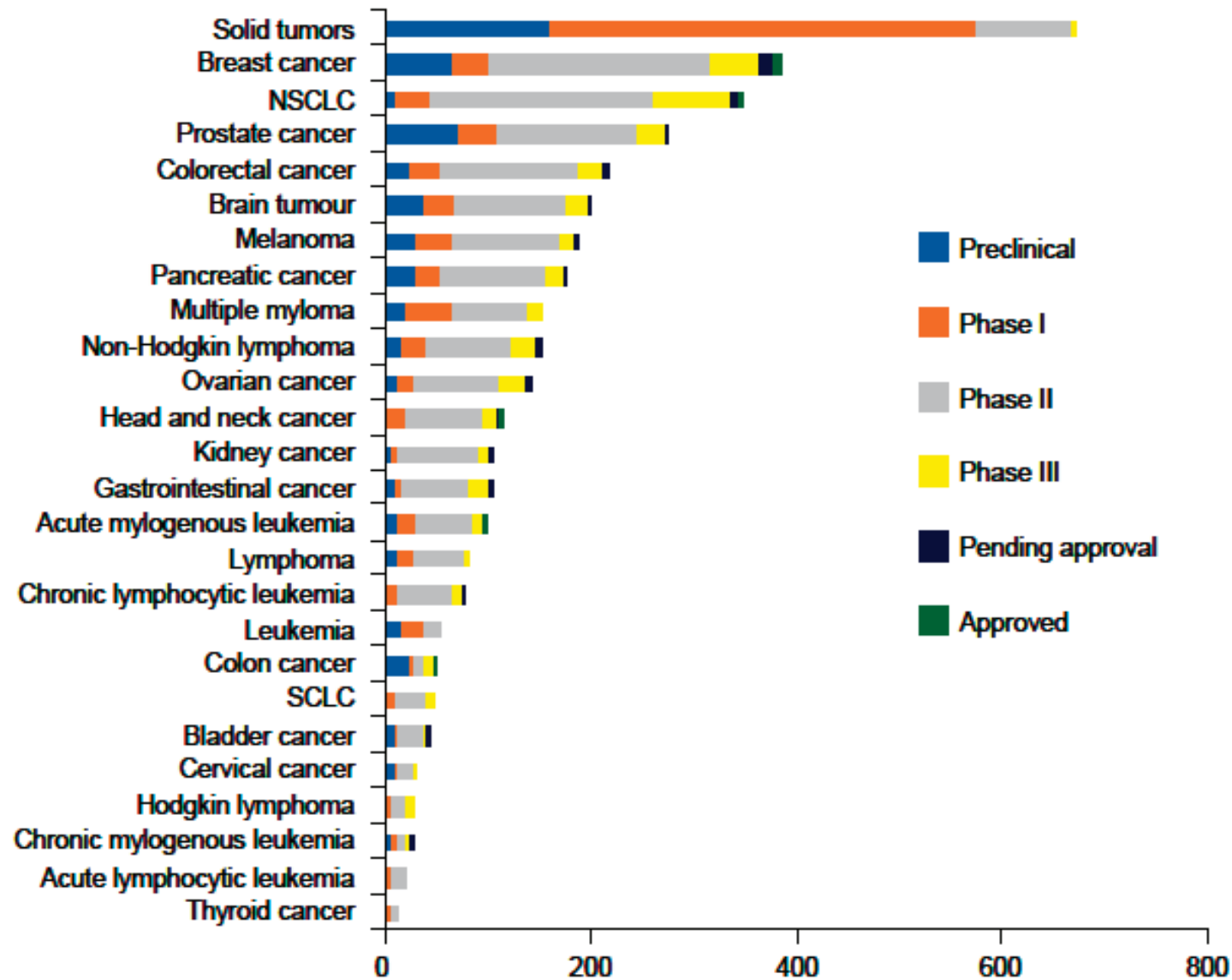
# SYNERGY BETWEEN MPL AND CYTOTOXIC DRUGS ON OVARIAN CANCER GROWN IN MICE



# COMMERCIALISATION OF MPL



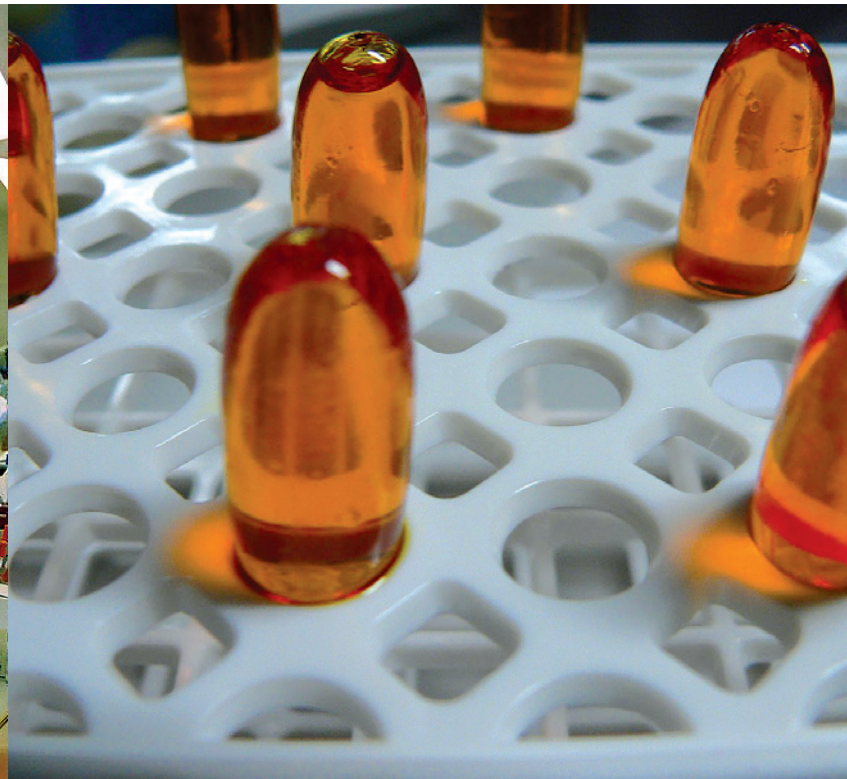
# Oncology pipeline by indication and stage of development, 2011



# EPICHEM NEW FACILITY



**NEW FACILITY**



**EXTRA CAPACITY TO  
BOOST REVENUES**



# Epichem's New Premises

- 10 year lease on Units 1-5
- Plus option for additional 10 years (2 x 5 years)
- Potential to expand into Suites 6-10
- New lab 2.4 times larger than our old Murdoch lab
- 5 more fumehoods and 3 Separate instrument rooms
- Separate room with full-height fumehood (GMP?)
- Integrated with our offices

# Revenues & Profits

## Epichem's Core Revenues

- Contract Drug Discovery
  - ✧ FY15 = \$1.54M
  - ✧ FY16 ~ \$1.86M
- Sale of Fine Chemicals (Reference Stds)
  - ✧ FY15 = \$0.34M
  - ✧ FY16 ~ \$0.75M
- 167 products and growing rapidly
- Technical Services & Consulting
  - ✧ FY15 = \$46k
  - ✧ FY16 ~ \$100k

# Contact Details

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