



**AGM Presentation (November 2017)**

# Disclaimer

## DISCLAIMER

This presentation has been prepared by PharmAust Limited (ASX: PAA) (ACN: 094 006 023) (the “Company”). It does not purport to contain all the information that a prospective investor may require in connection with any potential investment in the Company. You should not treat the contents of this presentation, or any information provided in connection with it, as financial advice, financial product advice or advice relating to legal, taxation or investment matters.

No representation or warranty (whether express or implied) is made by the Company or any of its officers, advisers, agents or employees as to the accuracy, completeness or reasonableness of the information, statements, opinions or matters (express or implied) arising out of, contained in or derived from this presentation or provided in connection with it, or any omission from this presentation, nor as to the attainability of any estimates, forecasts or projections set out in this presentation.

This presentation is provided expressly on the basis that you will carry out your own independent inquiries into the matters contained in the presentation and make your own independent decisions about the affairs, financial position or prospects of the Company. The Company reserves the right to update, amend or supplement the information at any time in its absolute discretion (without incurring any obligation to do so).

Neither the Company, nor its related bodies corporate, officers, their advisers, agents and employees accept any responsibility or liability to you or to any other person or entity arising out of this presentation including pursuant to the general law (whether for negligence, under statute or otherwise), or under the Australian Securities and Investments Commission Act 2001, Corporations Act 2001, Competition and Consumer Act 2010 or any corresponding provision of any Australian state or territory legislation (or the law of any similar legislation in any other jurisdiction), or similar provision under any applicable law. Any such responsibility or liability is, to the maximum extent permitted by law, expressly disclaimed and excluded.

Nothing in this material should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities. It does not include all available information and should not be used in isolation as a basis to invest in the Company.

## FUTURE MATTERS

This presentation contains reference to certain intentions, expectations, future plans, strategy and prospects of the Company. Those intentions, expectations, future plans, strategy and prospects may or may not be achieved. They are based on certain assumptions, which may not be met or on which views may differ and may be affected by known and unknown risks. The performance and operations of the Company may be influenced by a number of factors, many of which are outside the control of the Company. No representation or warranty, express or implied, is made by the Company, or any of its directors, officers, employees, advisers or agents that any intentions, expectations or plans will be achieved either totally or partially or that any particular rate of return will be achieved.

Given the risks and uncertainties that may cause the Company’s actual future results, performance or achievements to be materially different from those expected, planned or intended, recipients should not place undue reliance on these intentions, expectations, future plans, strategy and prospects. The Company does not warrant or represent that the actual results, performance or achievements will be as expected, planned or intended.

## US DISCLOSURE

This document does not constitute any part of any offer to sell, or the solicitation of an offer to buy, any securities in the United States or to, or for the account or benefit of any “US person” as defined in Regulation S under the US Securities Act of 1993 (“Securities Act”). The Company’s shares have not been, and will not be, registered under the Securities Act or the securities laws of any state or other jurisdiction of the United States, and may not be offered or sold in the United States or to any US person without being so registered or pursuant to an exemption from registration including an exemption for qualified institutional buyers.

# 2017 Highlights:

## Successfully repositioned for clinical success

- New **executive team** appointed
- Monepantel **reformulation** to address palpability
- Progressed Phase II **Lymphoma trial**
- Appointed **world-class** advisory team
- Re-engaged with **Elanco**
- Strategic investment in **Epichem** to **grow revenues**

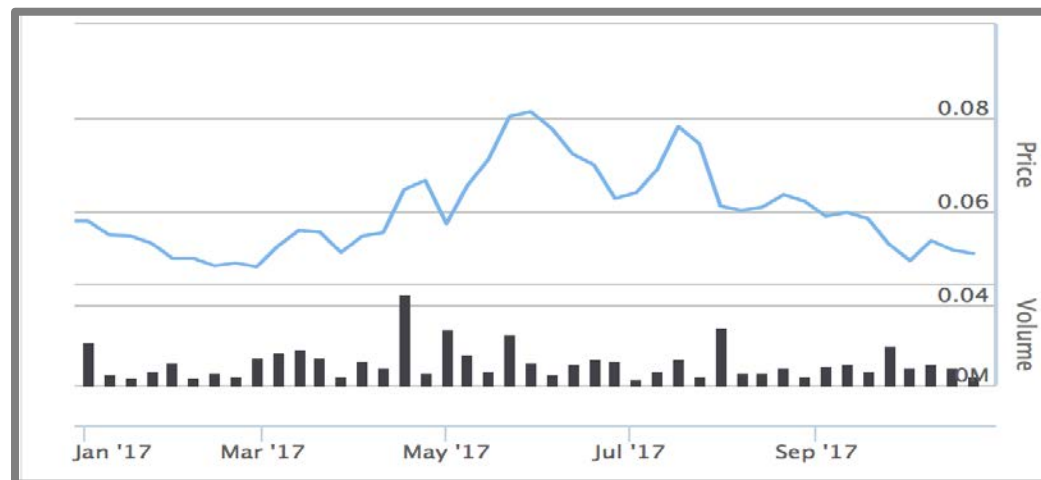
# Corporate Overview

- **PharmAust: Clinical-stage oncology** company
- Lead product is **Monepantel** (MPL) – a repurposed drug already approved for Veterinary use
- PharmAust **patented MPL** as a **novel anticancer drug**
- **Clinical strategy** targeting **MPL** for both **human and vet** applications
- **Option Agreement** with **Novartis Animal Health/Elanco** for veterinary cancer applications
- **Epichem**: profitable business, forecast revenues of ~\$4m in 2018 FY

# Corporate Snapshot

<b>ASX Code:</b>	PAA
<b>Market Cap</b>	\$8m
<b>Cash<sup>1</sup></b>	\$2.32M
<b>Debt<sup>2</sup></b>	\$0.47
<b>Epichem Revenue</b>	\$3.05M (FY17)

<b>Total Shares on Issue</b>	146,694,903
<b>Options (Unlisted)</b>	42,547,078
<b>Top 20 Own</b>	36%
<b>Board/Exec Own</b>	13%



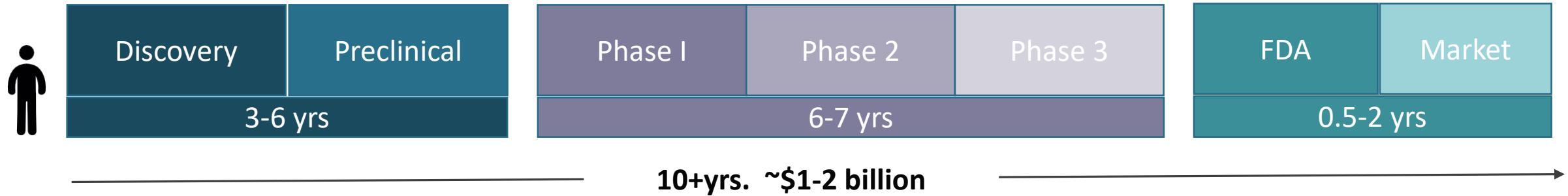
1. As of 30 Sept, 2017

2. EFIC loan to Epichem: Mar 31, 2017

# Repurposing MPL for accelerated path to commercial returns

# Drug Repurposing = Capital efficient path to market

## Typical Drug Development Phases



Drug repurposing/repositioning

6yrs. ~\$300 million



Drug repurposing/repositioning

3-5yrs. ~\$2-5 million



# Why MPL for Cancer

MPL Approved for Animal Health



**In vitro:** MPL kills wide range of cancer cell lines

**In vivo:** MPL monotherapy inhibits tumours in mice xenografts (pancreatic, ovarian, colorectal)

**In vivo:** MPL combined with front-line drugs improves potency in mouse xenografts (ovarian)

Comprehensive Preclinical Data-pack (potent and safe)



**Toxicology :** 4 species (mice, rats, sheep, dogs)

**Pharmacology:** (mice, sheep, dogs)

Phase I/II clinical data in dogs showing safety, suppression of cancer biomarkers and efficacy



Phase I clinical data in humans showing safety, suppression of cancer biomarkers

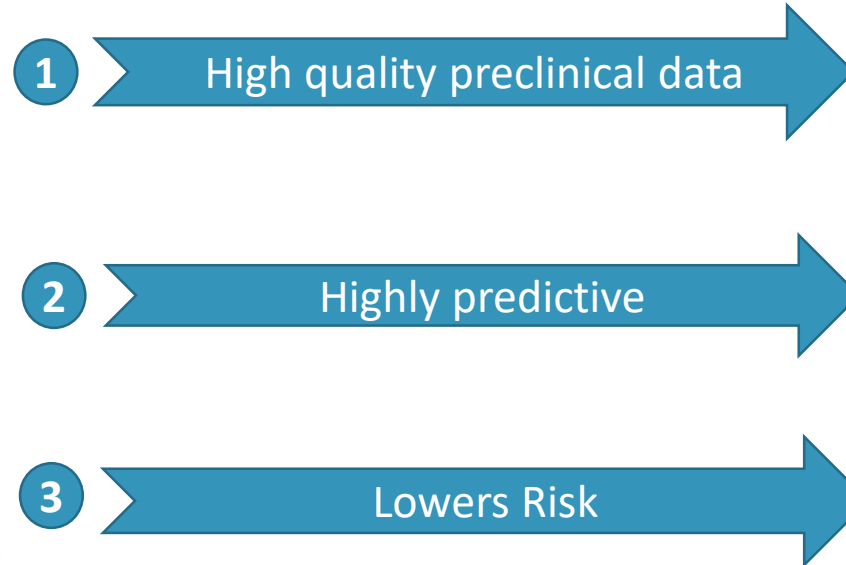
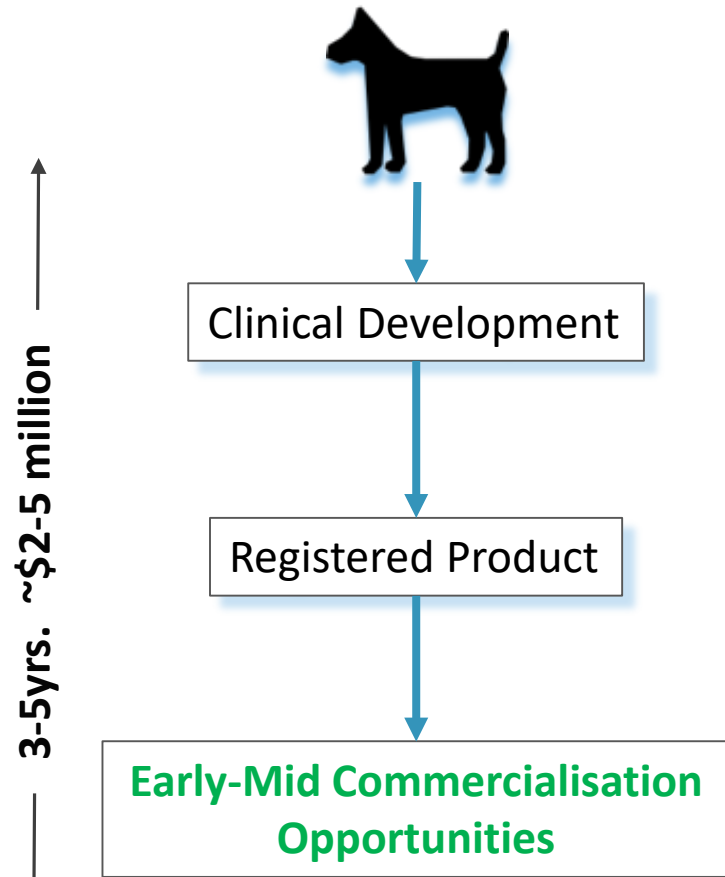


# Strategy to develop MPL as a Cancer Therapeutic for:

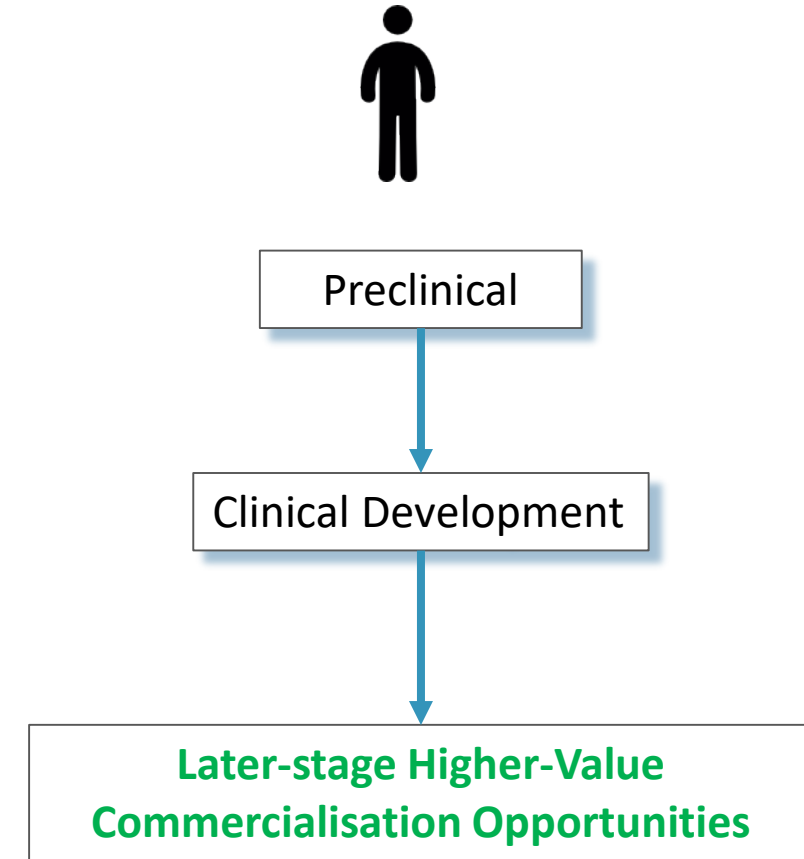
- **Veterinary Health**
- **Humans**

# Rationale for dual clinical development strategy

## Vet Oncology Development



## Human Oncology Development



Market for human mTOR inhibitors  
>\$2billion/yr

# Companion Animal Health Market (US:2016)



**Vet Care Expenditure \$17b<sup>1</sup>**

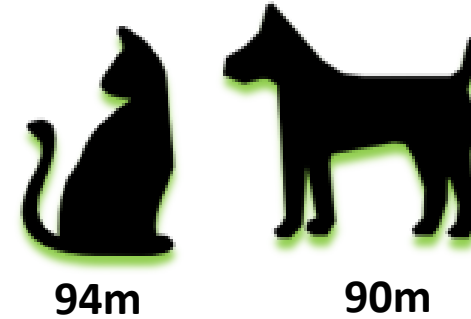


**Pet drug market \$10.2b by 2018<sup>2</sup>  
(8% CAGR)**



**Willingness to pay more for treatment<sup>3</sup>  
(\$2K-\$5K/treatment)**

**US Dog/Cat  
Populations (2016)<sup>1</sup>**



- 6 m dogs diagnosed with cancer US/yr
- **Therapeutic market** dominated by repurposed drugs

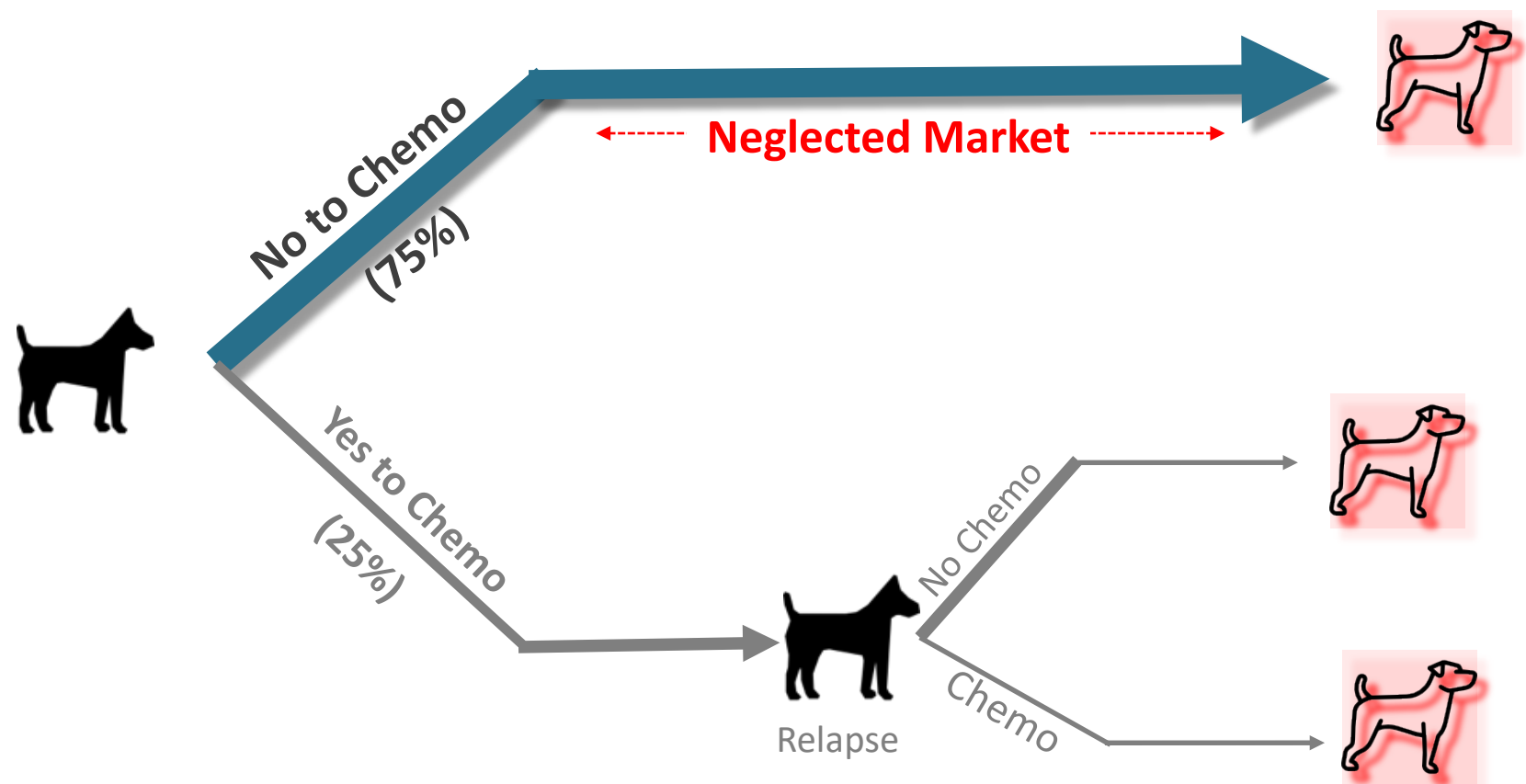
1. [http://www.americanpetproducts.org/press\\_industrytrends.asp](http://www.americanpetproducts.org/press_industrytrends.asp)

2. Competition in the Pet Medications Industry (2015)

3. AP-Petside.com Poll, conducted by GfK Roper Public Affairs and Media: April 7-12, 2010

# Positioning MPL to address neglected cancer markets

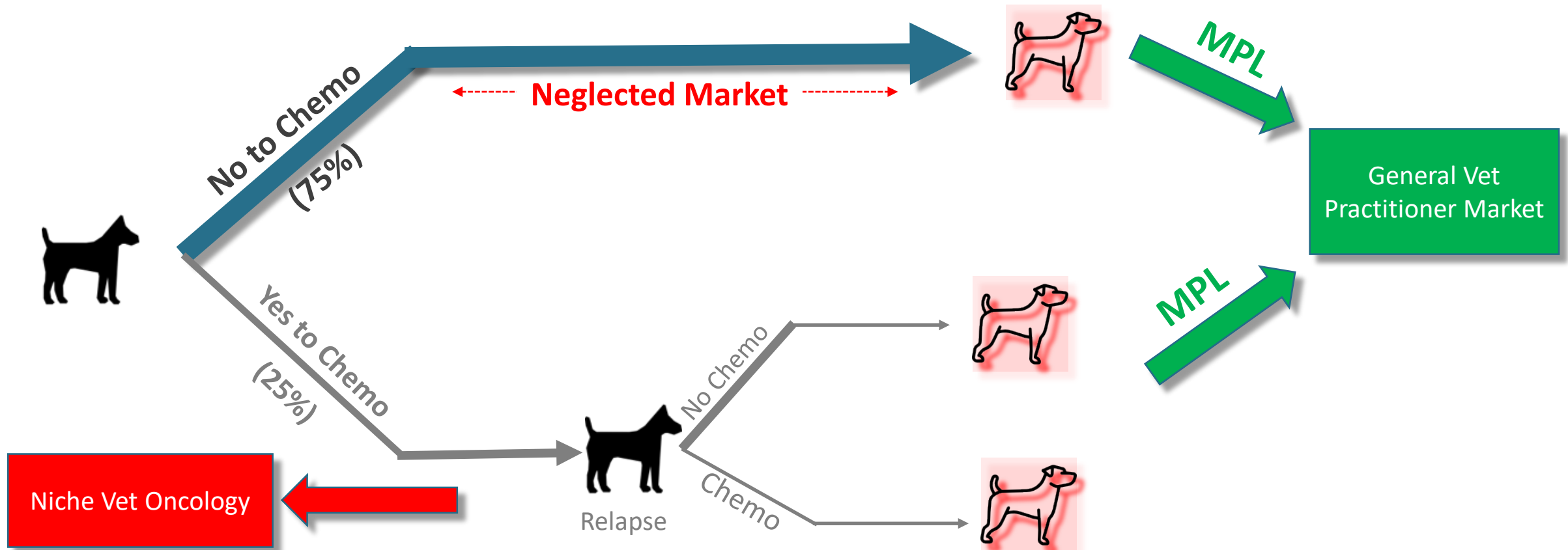
Decision Tree Following Pet Cancer Diagnosis



Drug Needs	MPL
Low Cost	✓
Safety	✓
Efficacy	✓

Drug Needs	MPL
Efficacy	✓
Low Tox	✓

# Commercial Strategy: Target entire cancer market





# Epichem

# About Epichem

- Specialist Synthetic & Medicinal Chemistry Services
- Highly awarded West. Aust. Company (Founded 2003)
- Staff of 23 (15 PhD's)



## Revenues

Drug Discovery & Technical  
Services

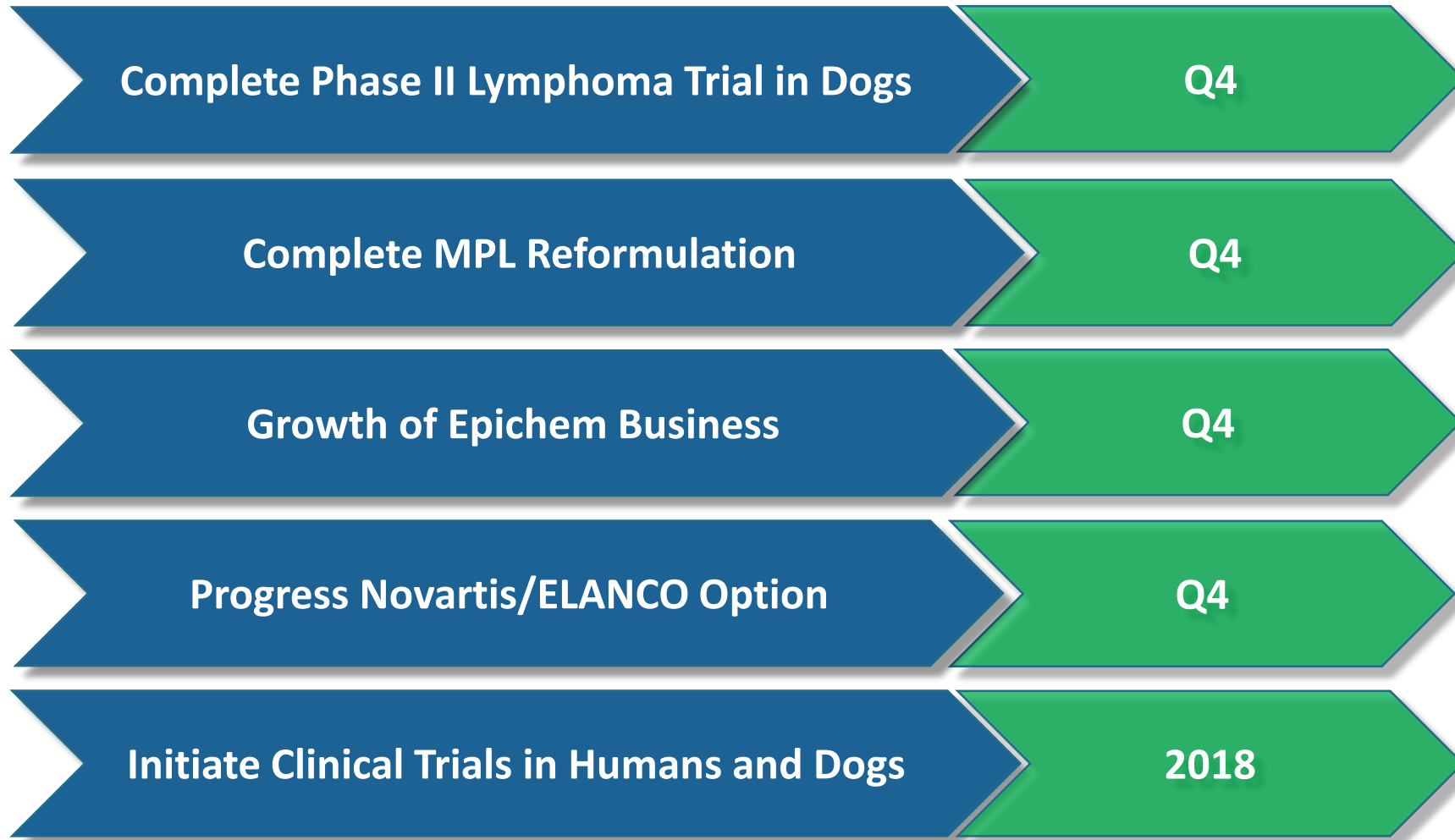
Fine Chemicals Catalogue

# Key Drivers for Epichem Growth

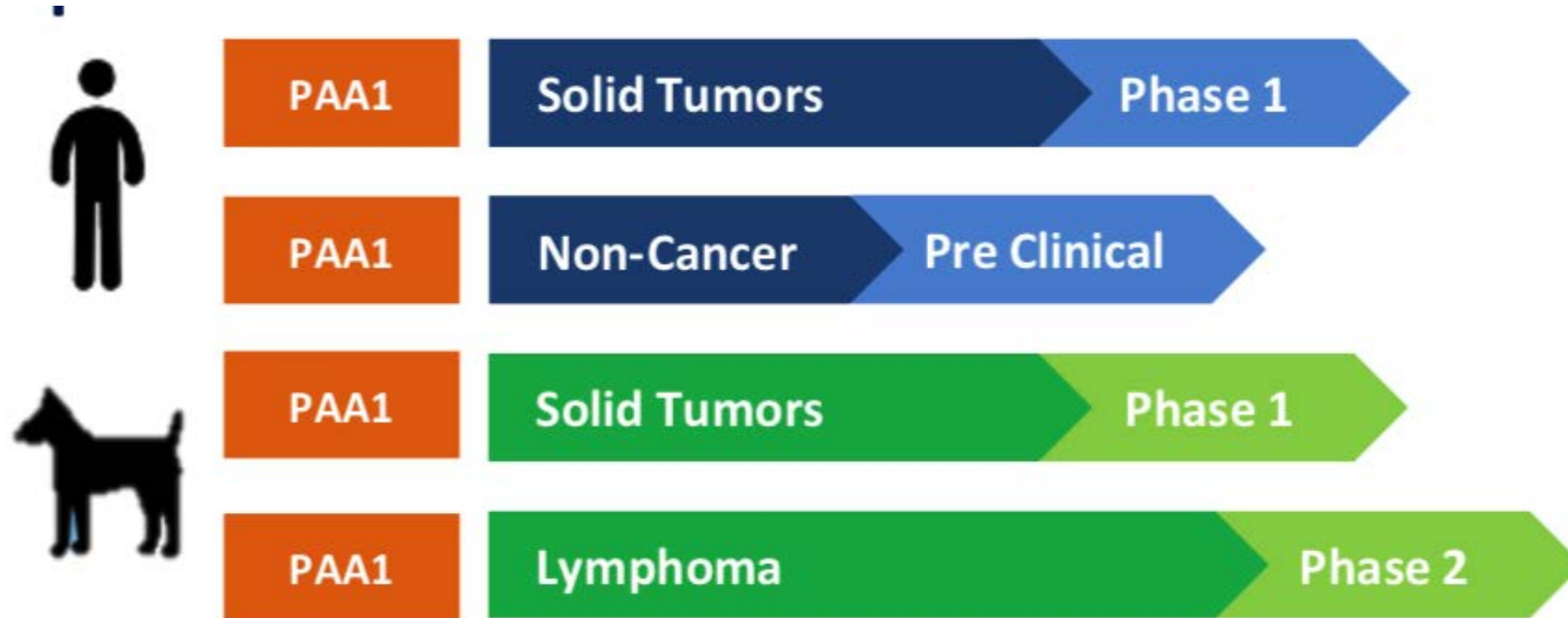
- **Phase 2 Lab Expansion** to meet demand
- **ISO17025/34** accreditations – highest ‘calibration and testing’ stds.
- Targeting expansion of **high margin catalogue** business
- **Renewal** of existing major contracts
- **Epichem**: profitable business, forecast sales of ~\$4m in 2018 (>25% CAGR)

# Next Steps and Roadmap

# On-Track for Roadmap



# PharmAust's Therapeutic Pipeline



# PAA undervalued vs peers

Company	Description	Market Cap (\$Aus) <sup>1</sup>
Anatara Lifesciences (ASX: ANR)	Animal/Human Health Antimicrobial (Detach) Revenues 2017 FY \$1m, EBITDA -3.4m	\$82m
National Vet Care (ASX: NVL)	Consolidated Vet Practices	\$161m
Paradigm Bio (ASX:PAR)	Repurposed small molecule. Phase II	\$36m
Kindred Bio (NASDAQ)	Repurposed biologics/small molecules for animal health	\$264m
<b>AB-Science (Euronext)</b>	<b>Masitinib for human (Ph3) and pet cancers (Registered). Validates PAA model of developing one drug for multiple markets in human and animal health.</b>	<b>\$469m</b>

1: 29 November 2017

# PharmAust's Value Proposition

- \$8m Market Cap = Enterprise Value (revenue + cash + phase II ready asset)
- Developing a **single product** for **multiple markets** in **human & animal health**.
- **Validated model:** Lower costs/development risks, accelerates path to **multiple** value accretion **catalysts**
- Novartis Animal Health/**ELANCO Option** - strategic access to vet health market with global heavyweight.
- **Granted** patents for **cancer** and **non-cancer** – creates license opportunities in multiple markets
- **Epichem:** profitable business, forecast sales of ~\$4m in 2018 (>25% CAGR)



# Thank you

Check out our new webpage:  
[www.pharmaust.com](http://www.pharmaust.com)