This presentation does not constitute investment advice. Neither this presentation nor the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sale of shares.

Shareholders should not rely on this presentation. This presentation does not take into account any persons particular investment objectives, financial resources or other relevant circumstances and the opinions and recommendations in this presentation are not intended to represent recommendations of particular investments to particular persons.

The information set out in this presentation does not purport to be all inclusive or to contain all the information which its recipients may require to make an informed assessment of the proposed transaction. You should conduct your own investigations and perform your own analysis in order to satisfy yourself as to the accuracy and completeness of the information, statements and opinions contained in this presentation.
PHARMAUST LIMITED

…Fast tracking leading edge technology in cancer therapy…
PharmAust Cancer Programs

**MPL** Breakthrough New Cancer Therapy Drug Class with Reduced Side-Effects

**Albendazole** Reformulation and use of an Approved Drug for Cancer

**Mucin** Dissolution Sensitizing Highly Resistant Cancers to Chemotherapy
PHARMAUST LIMITED
CORPORATE STRUCTURE

PHARMAUST LIMITED
ASX:PAA

100%  100%

Pitney Pharmaceuticals Pty Limited
Sydney-Based

epicem
Perth-Based

100%

Pharmaust Limited
PharmAust -> Challenging Limitations in Cancer Therapy

- Drug Toxicity
- Drug Resistance
- Cancer Recurrence
- Poor Tumour Targeting
- Poor Diagnosis -> Patients Progressed at Treatment
- Optimising Treatment
- Survival vs Quality of Life
PHARMAUST STRATEGY

- Targeting oncology applications of well established drugs and “piggy-backing” on substantive programmes of major pharmaceutical companies
- Engaging leading clinical oncology units St George Hospital, Sydney and The Royal Adelaide Hospital
- Granted patents or patent filings (either owned outright or jointly with partner)
- Relationships with major global corporations
- Use of CROs and external R&D suppliers
## Targeted Therapies for Cancer

<table>
<thead>
<tr>
<th>DRUG</th>
<th>TARGET</th>
<th>PEAK ANNUAL SALES</th>
<th>PATIENT COST</th>
<th>COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>HERCEPTIN + PACLITAXEL</td>
<td>BREAST CANCER (HER2-NEU)</td>
<td>$6.5Bln</td>
<td>$60,000/ANNUM</td>
<td>GENENTECH/ROCHE</td>
</tr>
<tr>
<td>GLEEVEC</td>
<td>MULTIPLE CANCERS TYROSINE KINASE</td>
<td>$4.7Bln</td>
<td>$92,000/ANNUM</td>
<td>NOVARTIS</td>
</tr>
<tr>
<td>AVASTIN + 5FU</td>
<td>COLON, RENAL, OVARIAN CANCER VEGF INHIBITOR</td>
<td>$2.6Bln</td>
<td>$100,000/ANNUM (US)</td>
<td>GENENTECH</td>
</tr>
<tr>
<td>ABRAXANE + GEMCITABINE</td>
<td>PANCREATIC CANCER</td>
<td>$800M</td>
<td>$60,000/ANNUM</td>
<td>CELGENE</td>
</tr>
</tbody>
</table>
Pharmaust Limited Foundations, Relationships and Commercial Cornerstones

Strategic Alliances

- Novartis Animal Health
- New South Wales Innovations
- University of Cambridge
- Listed Japanese Group
- Royal Adelaide Hospital
- Cmax & CPR

IP - Granted and Pending Patents

Pharmaust Limited Foundations, Relationships and Commercial Cornerstones
MONEPANTEL (MPL or PPL-1)

1. MPL is a new class of anticancer drug
2. MPL can act alone or in combination with standard of care chemotherapy for treatment of cancer
3. Pharmaust has the IP for MPL assigned from the University of NSW
MONEPANTEL’S UNIQUE PROPERTIES

- Unlike most cancer drugs, MPL has virtually little or no toxicity based on the toxicology undertaken by Novartis Animal Health.
- MPL has shown a high degree of selectivity in killing cancer cells over normal cells in culture.
- Studies in animal models show potent tumour regression without toxicity as measured by weight loss.
- MPL demonstrates a potent synergistic action with many cytotoxic drugs used in “Standard of Care.”
EFFECT OF MPL ON TUMOUR-BEARING MICE

Dose-finding study of IP administered Drug in nude mice bearing Subcutaneous ovarian tumours (OVCAR-3), SC / IP

Control Group VEHICLE

Low dose Group MPL (25 mg/kg) DRUG

High dose group MPL (50 mg/kg) DRUG
Monepantel Kills Drug Resistant Cancer Cells

- Temozolamide resistant cancer cells are effectively killed by MPL
- MPL has little toxicity on “Normal” Human Embryonic Kidney Cells
- MPL offers Treatment Options either singularly or with “Standard of Care”
EFFECT OF MPL ON CANCER CELLS

TEMZOLAMIDE RESISTANT GLIOMA U251

HEK [Human Embryonic Kidney cells]

NORMAL CELLS
SYNERGY BETWEEN AMINOACETONITRILES AND CYTOTOXIC DRUGS

- Selective Synergy between MPL and cytotoxic drugs on “cancer” cells
- Little synergy between MPL and cytotoxic drugs on “normal” cells
- Opportunity for “New Class” of drug for cancer
- Therapy in conjunction with standard clinical practice
- Optimization of Synergy
Comparison of tumour volume V.s. treatment time in mice treated with MPL/Taxol alone or in combination (after 5 doses).
Lack of PPL-1 Toxicity as Measured by Weight Loss

Body Weight

OVCAR 3 S.C tumour; i.p. injection

animal weight (g)

Days post cell inoculation

Control
2 mg/kg Gem
2 mg/kg Gem + 25 mg/kg MPL
5 mg/kg Gem + 25 mg/kg MPL
5 mg/kg Gem
5 mg/kg Gem + 50 mg/kg MPL
5 mg/kg Gem + 50 mg/kg MPL
25 mg/kg MPL
50 mg/kg MPL
Human Safety Trial - Monepantel

ACCELERATED ENTRY INTO MAN DUE TO EXTENSIVE TOXICOLOGY BY GLOBAL MAJOR

- Patient #1 -> Discontinued after 3 days (drug-unrelated death)
- Patient #2 -> Completed 28 days
- Patient #3 -> Discontinued after 13 days (urinary tract infection)
- Patient #4 -> Discontinued after 4 days (did not wish to continue)
- Patient #5 -> Completed 28 days
- Patient #6 -> Completed 28 days

Successful Demonstration of Safety and Indication of Clinical Value by Suppression of Key Cancer Marker
Determination of p-P70S6K in PBMC of patients treated with MPL

Significance at Day 3 p<0.0005

PK – BLOOD LEVELS
Monepantel offers a new therapeutic regimen with or without standard Chemotherapy. The current Chemotherapy market is US$42 billion/annum.
Canine Trial
No Adverse Events Noted

- Four Dogs Received MPL (25mg/kg) compassionately
- Three Dogs treated with the lowest dose of MPL (25mg/kg) as part of trial

Tasteless Formulation of MPL in Soft-Gel Capsules
Albendazole for the Treatment of Ascites

Two Clinical Trials Completed Showing:
1. Maximum tolerated dose
2. Benefits in Localised Therapy in the abdomen
3. Significant Inhibition of VEGF
**Fig. 1.** Effect of albendazole (ABZ) on ascites development. Nude mice inoculated i.p. with OVCAR-3 cells were left to develop ascites and then randomly assigned to one of control or albendazole treatment groups (n = 10 per group). Whereas all mice in the control group developed overt ascites, there were no macroscopic signs of ascites formation in albendazole-treated mice.

**Fig. 3.** Survival curve showing the effect of albendazole (ABZ) on survival. Whereas for all animals the intended duration of treatment was 4 weeks, mice (10 per group) were euthanized if due to ill health, they were expected to become moribund within a short time. Survival was calculated as the number of days lapsed between initiation of treatment and euthanasia, and % mice surviving was the number of animals remaining in each group (×10) at the end of each week following initiation of treatment.
Tumour Growing in the Abdomen and producing large quantities of Ascites fluid which distends the abdomen and reduces life expectancy.

Retention of Albendazole in the Abdomen

![Graph showing retention of Albendazole in the abdomen over time after drug administration.]
Mucin Dissolution

Efficacy of a Novel Mucolytic Agent on Pseudomyxoma Peritonei Mucin with Potential for Treatment through Peritoneal Catheters.

PharmAust Limited
Epichem is a profitable wholly owned subsidiary of PharmAust which provides services in synthetic and medicinal chemistry to the drug discovery and pharmaceutical industries. Epichem turnover is $2.0M/annum. With two state-of-the-art laboratories in Perth and Melbourne, Epichem serves an international clientele ranging from small operations to large multinational pharmaceutical companies. Epichem’s ability to excel in a highly competitive global marketplace was recently recognized when in 2010 it won an Australian Export Award. It has achieved this by combining a world-class team (12 Ph.Ds) of highly innovative chemists and a management committed to customer service.
Contact Details

DR ROGER ASTON
Executive Chairman
PharmAust Limited
Email: rogeraston@aol.com
Phone: 61 (0) 402 762 204