



ASX Release

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## PRELIMINARY RESULTS OF PPL-1 IN HUMAN TRIAL SHOWS REDUCTION IN TUMOUR MARKERS

**PharmAust Limited** ("PharmAust") (ASX: PAA & PAAO) is pleased to report that preliminary analysis of the white blood cells from four patients receiving PPL-1 at the Royal Adelaide Hospital (RAH) has shown a meaningful reduction of a key target of PPL-1, which is expressed in the cancer.

The primary objective of PharmAust's "First in Man" trial is to demonstrate safety in a rising dose format. Evaluation of white blood cells of patients who have received PPL-1 for three consecutive days has shown that the levels of p70S6K are reduced as compared to its levels on Day 0 before treatment started. This preliminary analysis was undertaken in four patients who received daily doses of PPL-1 for at least 3 consecutive days and resulted in a reduction of p70S6K of between 8% and 65%.

Professor David Morris, inventor of the use of PPL-1 in cancer therapy and surgeon at the St George Hospital said "This observation confirms the biological activity of PPL-1 in man by inhibiting a key cancer growth messenger, p70S6K. This finding supports our studies on p70S6K in cancer cells and in animal models".

Professor Michael Brown, Principal Investigator at the RAH said, "This is a particularly interesting result as we are still at the lowest dose of PPL-1 in the trial and we are seeing apparent reductions in the levels of the p70S6K pharmacodynamic marker. We will continue to monitor patients' blood as recruitment progresses".

p70S6K is considered as a promising marker and indicator of the aggressive behaviour and prognosis of carcinomas. Overexpression of p70S6K is generally associated with aggressive disease and poor prognosis among cancer patients. Patients with elevated p70S6K often have poor survival rates and metastases. Reductions of p70S6K in blood cells may reflect blocks to tumour progression.

PPL-1 is an approved veterinary drug launched in recent years by one of the leading global animal health corporations for the treatment of parasitic diseases in sheep. PharmAust, through its wholly owned subsidiary, Pitney Pharmaceuticals Pty Limited, owns patents on the use of PPL-1 in cancer and malignant disease. The drug will be potentially administered to patients suffering from diverse cancers. Recruitment will include selection of patients suffering from lung, pancreas, oesophageal, gastric, colorectal, ovarian, breast, prostate, liver, sarcoma, lymphoma, and melanoma.

The cancer chemotherapy market (estimated at \$42 billion/annum)\* is currently the fastest growing sector within the pharma industry, mainly driven by the identification of new potential therapeutic targets. This growth is further fuelled by the magnitude of the disease worldwide, currently estimated at more than 25 million people suffering from cancer globally, and an estimated 5 million people dying each year from the disease.

\*Reference: Research and Markets.com accessed 14<sup>th</sup> February 2014:

[http://www.researchandmarkets.com/reports/335548/chemotherapy\\_market\\_insights\\_20062016\\_a](http://www.researchandmarkets.com/reports/335548/chemotherapy_market_insights_20062016_a)

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