Phase 1/2 MND Trial Successfully Completes Second Patient Cohort

- All MND patients have well-tolerated Monepantel (MPL) at the first and second dosing levels
- All 12 trial patients have elected to continue on MPL treatment
- Five patients have now surpassed the 6-month-mark on MPL without any safety issues, and one patient has shown stable disease
- The interim analysis evaluating changes in biomarkers, pharmacokinetics and pharmacodynamics is expected to be available in late May 2023
- PharmAust will continue with MPL dose escalation for Cohorts 3 and 4 to determine the optimum dose for a Phase 2 trial
- Safety and efficacy data from the trial will also guide a Phase 2 study in human cancer patients

28 April 2023 – Perth, Australia: PharmAust Limited (ASX: PAA & PAAO), a clinical-stage biotechnology company, has completed its second cohort of six patients in its Phase 1/2 clinical trial of its lead drug candidate monepantel (MPL) in Motor Neurone Disease/Amyotrophic Lateral Sclerosis (MND/ALS).

Having announced the completion of patient recruitment for treatment level 2 (refer ASX announcement 30 March 2023), PharmAust has completed the day 28 dosing of the final patient in the second cohort.

Importantly, all twelve patients from both Cohorts 1 and 2 have elected to continue on MPL treatment.

All patients have tolerated the MPL tablets well, and the Safety Monitoring Committee will review data from each dosage level for safety and pharmacokinetic effects.

The Phase 1/2 clinical study is determining the tolerability, safety, pharmacokinetics and preliminary efficacy of oral MPL in patients living with MND. The trial is open-label and comprises a four week escalating dose of MPL. The patients were enrolled at two sites: Calvary Health Care Bethlehem, Statewide Progressive Neurological Disease Service, Caulfield South and The Centre for Motor Neurone Disease Research, Faculty of Medicine and Health Research Macquarie University, Sydney.

Executive Chairman Dr Roger Aston said, “patients electing to continue using Monepantel after participating in the current trial for Motor Neuron Disease, provides increased comfort on our safety data particularly when viewed against the Riluzole (current standard of care) safety data reporting a 14%[1] rejection rate by patients for ongoing use”.

Interim analysis results due late May 2023

As announced on 2 March 2023, the Principal Investigator recommended undertaking an interim analysis of preliminary biomarkers and efficacy markers on completion of dosing of the last patient of Cohort 2.

Treatment-related changes from baseline in this safety, tolerability, pharmacokinetic and preliminary, efficacy study will include an analysis of functional rating scales, quality of life and cognitive assessment. Further, prognostic indicators and several disease-related biomarkers will be measured.

PharmAust will also continue with the MPL dose escalation for Cohorts 3 and 4 during the interim trial analysis to determine the optimum dose level for the Phase 2 trial.

Subject to Safety Committee reviews, the patients from Cohort 1 will move to Cohort 3 and the patients from Cohort 2 will move to Cohort 4.

MPL a promising treatment for MND

According to the International Alliance of ALS/MND Associations, MND affects over 350,000 people globally and kills more than 100,000 people every year. The disease is invariably fatal with the average life expectancy of someone who has MND being around 27 months. The MND/ALS addressable market is US$3.6Bn per annum with Riluzole already reaching ~US$1Bn annual sales.

The disease is progressive, meaning the symptoms get worse over time. MND has no cure and there is no effective treatment to reverse its progression. PharmAust notes patients have been dosed with MPL for up to six months in the clinical trial with no signs of material adverse events and appear “stable”.

PharmAust demonstrated in its preclinical programs that MPL has the potential to activate molecular pathways relevant to the treatment of MND. MPL could potentially reduce the rate of degeneration and loss of motor neurons in the anterior horns and motor nuclei of the brainstem. There are also a number of surrogate clinical endpoints to be determined during the trial. PharmAust has developed and manufactured a bespoke MPL tablet for the trial.

With success in the clinic PharmAust hopes that in due course MPL could receive orphan drug designation by the TGA and FDA for motor neurone disease. Such designations come with financial and supportive benefits and this opportunity is being evaluated by PAA.

The Phase1/2 study is being funded by a commitment of $881,085 by FightMND, the largest independent funder of MND research in Australia.

This announcement is authorised by the Board.

Enquiries:

Anusha Aubert
Investor Relations
investorenquiries@pharmaust.com

P +61 (8) 9202 6814
F +61 (8) 9467 6111
W www.pharmaust.com

About PharmAust Limited:

PharmAust Limited is listed on the Australian Securities Exchange (code: PAA) and the Frankfurt Stock Exchange (code: ECQ). PAA is a clinical-stage company developing therapeutics for both humans and animals. The company specialises in repurposing marketed drugs lowering the risks and costs of development. These efforts are supported by PAA’s subsidiary, Epichem, a highly successful contract medicinal chemistry company which generated $3.4 million in sales of goods & services in FY 2022.

PAA’s lead drug candidate is monepantel (MPL), a novel, potent and safe inhibitor of the mTOR pathway – a pathway having key influences in cancer growth and neurodegenerative diseases. MPL has been evaluated in Phase 1 clinical trials in humans and Phase 2 clinical trials in dogs. MPL treatment was well-tolerated in humans, demonstrating preliminary evidence of anticancer activity. MPL demonstrated objective anticancer activity in dogs. PAA is uniquely positioned to commercialise MPL for treatment of human and veterinary cancers as well as neurodegenerative disease as it advances a reformulated version of this drug through Phase 1 and 2 clinical trials.

[1] Approximately 14% (n = 141) of the 982 individuals with ALS who received RILUTEK in pre-marketing clinical trials discontinued treatment because of an adverse experience https://www.accessdata.fda.gov/drugsatfda_docs/label/2009/020599s013lbl.pdf