Update: PharmAust and Leiden University Medical Centre Monepantel COVID-19 Testing

- LUMC using highly specialised coronavirus culture conditions for testing monepantel (MPL)
- MPL is highly insoluble in water and this challenge is being met by LUMC
- LUMC affected by the Netherlands government's strictest yet COVID-19 working restrictions
- Timing not affecting PharmAust's overall clinical development plans

8 January 2021 – Perth, Australia: PharmAust Ltd (ASX:PAA), a clinical-stage oncology company, is working closely with Dr Martijn van Hemert at Leiden University Medical Centre (LUMC) in the Netherlands as more research is being undertaken at LUMC to increase the solubility of MPL, as a precursor to MPL demonstrating applicability against coronavirus.

This involves finding conditions that are compatible with the highly specialised assays and coronavirus culture conditions for testing MPL. These assays and this development program are crucial for later performing work in more advanced human airway systems.

Combining the conditions required for the specialised cell-based assays at LUMC with the highly insoluble nature and unique features of MPL, means the standard assays used for other compounds require a unique high level of optimisation in MPL testing.

As announced on 28 May 2018, PharmAust successfully reformulated monepantel (MPL) from a liquid product to a tablet. As announced on 17 October 2017, part of the challenge in reformulation was addressing the poorly soluble nature of MPL in water.

PharmAust's clinical research plans, however, remain on track. As announced on 23 December 2020, MPL manufacture in preparation for research and development in Phase 1/2 clinical trials is ongoing with trials remaining due to commence later in CY 2021.

PharmAust's Chief Scientific Officer Dr Richard Mollard stated, "PharmAust is delighted to have the opportunity to work with a researcher of the internationally recognised calibre of Dr Martijn van Hemert. Moving MPL forward as an antiviral weapon against COVID-19 is critical for the armamentarium being developed globally to fight this disease. The importance of this work may be best described by Dr van Hemert's narrative during his recent European Parliamentary Research Interview about COVID-19 treatments[1]."

"PharmAust is grateful to the researchers who are presently working with disrupted global supply chains and under the Netherlands' strictest COVID-19 associated lockdowns yet. These lockdowns have endured since 15 December 2020 and will remain in place until 19 January 2021. Researchers have done a fantastic job meeting these challenges and PharmAust will be pleased to update shareholders as results come to hand."

[1] https://sciencemediahub.eu/2020/11/25/a-scientists-opinion-interview-with-martijn-van-hemert-about-covid-19-treatment/

This announcement is authorised by the Board

Enquiries:

Dr Roger Aston
Executive Chairman and CEO
Tel: 0402 762 204
rogeraston@pharmaust.com

Dr Richard Mollard
Chief Scientific Officer
Tel: 0418 367 855
rmollard@pharmaust.com

About PharmAust (PAA):
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 $3.5 million in revenue in FY 2020.

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

About LUMC:
Leiden University Medical Center (7,000 employees, >EUR 700 million annual turnover) is a modern and internationally renowned biomedical research center. LUMC integrates research, education and patient care with a high-quality profile and a strong scientific orientation, ranging from basic to applied and clinical research. LUMC offers state-of-the-art research facilities to contribute to innovation and scientific research, i.e. Leiden Genome Technology Center, Flow Cytometry Core Facility, Center for Proteomics and Metabolomics, Light and Electron Microscopy, Bioinformatics - Data Analytics - Computational Biology, GMP-facility, Leiden Stem Cell Hotel, Central Animal and Transgenic Facility, Preclinical Imaging Facility, Biosafety level-3 Facility, and Biobank Facility.

The Molecular Virology team (~35 scientific and supporting staff members) of the LUMC department of Medical Microbiology studies the molecular biology of +RNA virus replication and uses this knowledge to develop novel antiviral strategies. The group has worked on coronaviruses for over 30 years, and was and is deeply involved in the characterisation of the emerging SARS- and MERS-coronaviruses in 2003 and 2012, and SARS-CoV-2 since the beginning of 2020. Key contributions were made to the functional characterization of the coronavirus replicative enzymes, RNA synthesis, replication organelles, and innate immune evasion strategies. Moreover, the group has identified and studied the mechanism-of-action of a wide variety of compounds with antiviral activity.