





**ASX Release** 11th July 2016

# JUNIPER PHARMA SUCCESSFULLY COMPLETES MANUFACTURE OF REFORMULATED MPL CAPSULES

Juniper to supply capsules for clinical evaluation in both canines and man: Canine Cancer Trial to begin now at The University of Cambridge

PharmAust Limited ("PharmAust") (ASX: PAA) is pleased to report that Juniper Pharma Services Ltd has now developed and completed the manufacture of 1,000 capsules of MPL (monepantel) to GMP (Good Manufacturing Practice) standards to support further development of PharmAust's cancer programs. This first batch of capsules will now be provided to the University of Cambridge to be used in the canine cancer trial announced recently (27th June 2016). A total of 20,000 capsules will be produced to support the clinical work moving forward.

The manufacture of capsule-formulated MPL for the trial will enable dog owners to administer the drug without the palatability challenges encountered in the previous trial undertaken in Sydney during 2014/2015. However, as with the trial undertaken in Sydney, dosing of canines will be on a "weight" basis so it is expected that animals will be receiving in the region of 5-10 capsules per day depending on their weight on admission. Furthermore, Juniper will retain capsules for ongoing stability trials to determine whether there is any deterioration of the product over time.

Both the human and canine trials will determine the effects of MPL on tumour growth as determined by measurement of the size of tumours and whether progression is slowed. Previous studies demonstrated that tumour marker p70s6k was meaningfully suppressed in cancer both in humans and canines following treatment with MPL.

PharmAust's Chairman, Dr Roger Aston said: "Although tumour markers are generally a good indication of tumour progression and activity, determination of tumour size is a far more predictive and acceptable endpoint from a regulatory standpoint. If successful, the canines currently about to begin treatment in Cambridge will not only be a reflection of what happens in dogs but also what one might be expected in man.

### For further details about PharmAust please contact:

**Dr Roger Aston Executive Chairman** Tel: 0402 762 204

rogeraston@pharmaust.com

Mr Robert Bishop **Executive Director** Tel: 0417 445 180

robertbishop@pharmaust.com

## **About University of Cambridge**

The University of Cambridge's mission is to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence. It admits the very best and brightest students, regardless of background, and offers one of the UK's most generous bursary schemes. The University of Cambridge's reputation for excellence is known internationally and reflects the scholastic achievements of its academics and students, as well as the world-class original research carried out by its staff. Some of the most significant scientific breakthroughs occurred at the University, including the splitting of the atom, invention of the jet engine and the discoveries of stem cells, plate tectonics, pulsars and the structure of DNA. From Isaac Newton to Stephen Hawking, the University has nurtured some of history's greatest minds and has produced more Nobel Prize winners than any other UK institution with over 80 laureates.







## **About Juniper Pharma Services**

Juniper Pharma Services Ltd., a wholly owned subsidiary of Juniper Pharmaceuticals, Inc., is a contract development and manufacturing organisation (CDMO) that specializes in early phase pharmaceutical development. Its early phase services extend from pre-formulation and formulation development to clinical trial manufacturing, with specialist knowledge on developing challenging molecules and complex compounds. Juniper Pharma Services is also renowned for its expertise and toolkit to analytically resolve some of the toughest issues during development and relating to intellectual property issues. The company's services are dedicated to pharmaceutical, biopharmaceutical and healthcare companies across the globe. For more information please visit <a href="https://www.juniperpharma.com">www.juniperpharma.com</a>

#### **About PharmAust**

PharmAust is an Australian publicly listed biotechnology company engaged in pharmaceutical research and development. PharmAust has a lead targeted anticancer drug in the clinical stages of development. The company has successfully completed a Phase I study in man and is now commencing Phase II clinical trials. PharmAust is developing its targeted cancer therapy for both human and veterinary applications and has entered a research Option Agreement with Novartis Animal Health to develop the canine cancer applications of its lead product. PharmAust also manufactures specialist chemical reagents and pharmaceuticals for the industry and is targeting revenues of \$2.6M in financial year 2016.