Media Release

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PHARMAXIS ANNOUNCES RESEARCH COLLABORATION WITH WOOLCOCK INSTITUTE ON NOVEL CYSTIC FIBROSIS THERAPY

Pharmaceutical research company Pharmaxis (ASX: PXS) is pleased to announce a research collaboration with Sydney's prestigious Woolcock Institute of Medical Research to develop a novel inhalation therapy for the treatment of cystic fibrosis (CF).

The National Health and Medical Research Council (NHMRC) has awarded a research grant of $421,545 for development and testing of the Orbital® Inhaler with a dry powder formulation of the antibiotic tobramycin. The Orbital inhaler is a Pharmaxis invention which has been designed to deliver high-doses of dry powder drugs to the lungs in a more effective and convenient manner than existing technology.

The project will be led by Woolcock Institute Deputy Director and Head of Respiratory Technology Professor Paul Young along with Professors Daniela Traini and Scott Bell.

Pharmaxis Chief Executive Officer Mr Gary Phillips said, "This research will bring together the acknowledged expertise of the Woolcock Institute and Pharmaxis in the field of cystic fibrosis. We are pleased the NHMRC is supporting this research which we believe has potential to see Australian innovation translated into a commercial product ready for late stage clinical trials and partnering."

Prof Scott Bell, The Prince Charles Hospital and QIMR Berghofer Medical Research Institute, Brisbane said "Australia is at the leading edge of CF treatment. We have around 3200 people with CF in Australia, and each will need to receive regular antibiotic treatment for lung infection, occurring due to the thick mucosal secretion build-up in the lung. If these are not treated effectively, progressive lung deterioration occurs. The ability to deliver antibiotics locally, using the Orbital device overcomes a number of challenges that we are facing in the clinic, and this clinical trial is likely to pave the way to better health outcomes and quality of life."

Prof Paul Young, Woolcock Institute Deputy Director and Head of Respiratory Technology, said "While antibiotic treatment options for patients with cystic fibrosis has come a long way, the use of innovative devices such as the Orbital will be a significant step forward. Currently, CF patients have to grapple with loading multiple drug-containing capsules into their devices when taking their daily dose of antibiotics. With a lack of flexibility in this model, patients may encounter tolerability and cough issues along with logistical issues relating to loading, emptying and cleaning of their inhaler. The Orbital circumvents these problems by providing a press-button, single use device containing the whole antibiotic dose that the patient can inhale over a number of breaths that are suitable to them. This approach would not only improve the quality of life for CF sufferers but mark a revolutionary way in which we deliver antibiotics for CF."

The Orbital is capable of delivering a high payload of antibiotics for the treatment of infection in cystic fibrosis patients. Currently treatments for cystic fibrosis infection are via oral, intravenous or lengthy inhalation processes. This can lead to significant side effects, consequent poor patient compliance, and limited therapeutic efficacy.

A Phase 1 clinical trial conducted by Pharmaxis has shown the Orbital can administer large amounts of dry powder to healthy subjects in one inhalation without compromising safety or tolerability. The compact device is capable of housing up to 400mg of powder for inhalation within a specially designed dosing chamber and delivers sequential doses to the patient with a simple one touch deployment.

Pharmaxis has previously developed Bronchitol® an inhaled dry powder for the treatment of CF. The product is approved and marketed in Europe, Russia and Australia and a third large multicentre clinical trial is currently underway aiming to secure approval in the United States.

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SOURCE: Pharmaxis Ltd, Sydney, Australia
CONTACT: Felicity Moffatt, phone +61 418 677 701 or email felicity.moffatt@pharmaxis.com.au

For more information on the NHMRC grant :
https://www.nhmrc.gov.au/grants-funding/outcomes-funding-rounds

For more information on the Woolcock Institute: http://woolcock.org.au/

About Pharmaxis

Pharmaxis (ACN 082 811 630) is an Australian research pharmaceutical company with a portfolio of products at various stages of development and approval. Its product Bronchitol® for cystic fibrosis is marketed in Europe and Australia and a phase 3 trial to enable completion of an NDA for the US market is underway. Its product Aridol® for the assessment of asthma is sold in Europe, Australia and Asia. The company's development pipeline is centred on its expertise in amine oxidase chemistry and includes Semicarbazide-Sensitive Amine Oxidase Inhibitors (SSAO) for Non-alcoholic Steatohepatitis (NASH) and inflammatory diseases including Chronic Obstructive Pulmonary Disease (COPD), and Lysyl Oxidase Inhibitors (LOX) targeting fibrotic diseases including pulmonary fibrosis and some cancers. In May 2015, Boehringer Ingelheim acquired the Pharmaxis investigational drug PXS4728A, to develop it for the treatment of the liver-related condition NASH. Pharmaxis is listed on the Australian Securities Exchange (symbol PXS). The company's head office, manufacturing and research facilities are located in Sydney, Australia. For more information about Pharmaxis, please see www.pharmaxis.com.au.

Forward-Looking Statements

Forward-looking statements in this media release include statements regarding our expectations, beliefs, hopes, goals, intentions, initiatives or strategies, including statements regarding the potential of products and drug candidates. All forward-looking statements included in this media release are based upon information available to us as of the date hereof. Actual results, performance or achievements could be significantly different from those expressed in, or implied by, these forward-looking statements. These forward-looking statements are not guarantees or predictions of future results, levels of performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this document. Except as required by law we undertake no obligation to update these forward-looking statements as a result of new information, future events or otherwise.