
**PHARMAXIS AND CHARLIE TEO FOUNDATION IDENTIFY PROMISING
NEW DRUG TO TACKLE BRAIN CANCER**

**Unique mechanism of drug action inhibits enzymes critical to tumour
growth and survival**

An Australian drug discovery will be the focus of a new study to tackle an aggressive and deadly form of brain cancer with a funding grant from the Charlie Teo Foundation. The drug, developed by Sydney-based research company Pharmaxis (ASX: PXS), will enter pre-clinical efficacy testing for glioblastoma (GBM), the most common form of brain cancer with an average survival of only 15 months from diagnosis.

Charlie Teo Foundation, an Australian charity, has awarded a \$AUD 186,837 research grant to Y. Alan Wang, Ph.D., associate professor of Cancer Biology at The University of Texas MD Anderson Cancer Center to enable study of the Pharmaxis drug, known as PXS-5505.

Lysyl oxidase enzymes play a crucial role in GBM because they attract inflammatory cells that accelerate tumour growth and reduce survival. PXS-5505 is a potent inhibitor of lysyl oxidases and should stop these processes.

Pharmaxis' drug has demonstrated a good safety profile in healthy volunteer clinical studies in Australia. Previous research has already shown the importance of lysyl oxidases to tumour growth in GBM, and the current research will seek to validate the effectiveness of the Pharmaxis drug in brain cancer models.

Pharmaxis CEO Gary Phillips said, "We are delighted the Charlie Teo Foundation has awarded this grant to enable study of PXS-5505, aiming to fight this devastating form of brain cancer which is in desperate need of treatment options. I lost my own father to glioblastoma so this project is close to my heart. We sincerely thank the Charlie Teo Foundation for recognising the potential for PXS-5505 and taking this last step to validate effectiveness.

"The study will run over one year and if successful can lead to clinical trials in 2022. This new project accesses external funds and expertise to extend the potential uses of PXS-5505 which is already entering efficacy trials in myelofibrosis, a rare form of bone marrow cancer which is currently enrolling patients in a phase 1c/2 clinical trial."

Worldwide, it's estimated there are more than 300,000 cases of brain and nervous system tumours each year with GBM being the most common form (Lancet Neurol 2019).

Founder and Director of the Charlie Teo Foundation, Professor Charlie Teo said,

"As a neurosurgeon what I see most from my patients is shock and disbelief that there are no treatment options available to them. There is only one first-line chemotherapy and radiation therapy

and these treatments only extend life by a matter of months. My brain cancer patients do not accept this fate, and neither do I.

“Charlie Teo Foundation is bringing together teams who we consider to be the best brains around the globe, combining the necessary expertise with ground-breaking technology and ‘out of the box’ thinking. Together, we believe we can improve treatment options for people with brain cancer.”

Pharmaxis is an established Australian pharmaceutical research company with expertise developing drugs for inflammatory and fibrotic diseases. The company has a highly productive drug discovery engine, drug candidates in clinical trials and two respiratory products approved and supplied in global markets. The Pharmaxis headquarters at Frenchs Forest in Sydney houses high tech science labs and drug manufacturing facilities.

Charlie Teo Foundation is an Australian charity dedicated to funding brain cancer research. Brain cancer kills more children in Australia than any other disease and more young people under 40 than any other cancer. The charity was officially launched by Professor Charlie Teo in March 2018, on the premise of running a low-cost charity and funding research differently. To date, Charlie Teo Foundation has raised over \$14 million for brain cancer research.

#ENDS#

SOURCE: Pharmaxis Ltd, Sydney, Australia

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About Pharmaxis

Pharmaxis Ltd is an Australian pharmaceutical research company developing drugs for inflammatory and fibrotic diseases, with a focus on myelofibrosis. The company has a highly productive drug discovery engine built on its expertise in the chemistry of amine oxidase inhibitors, with drug candidates in clinical trials. Pharmaxis has also developed two respiratory products which are approved and supplied in global markets, generating ongoing revenue.

Pharmaxis is developing its drug PXS-5505 for the bone marrow cancer myelofibrosis which causes a build up of scar tissue that leads to loss of production of red and white blood cells and platelets. The US Food and Drug Administration has granted Orphan Drug Designation to PXS-5055 for the treatment of myelofibrosis and permission under an Investigational Drug Application (IND) to progress a phase 1c/2 clinical trial that commenced recruitment in Q1 2021. PXS-5505 is also being investigated as a potential treatment for other cancers such as glioblastoma, liver and pancreatic cancer.

Other drug candidates being developed from Pharmaxis’ amine oxidase chemistry platform are targeting fibrotic diseases such as kidney fibrosis, NASH, pulmonary fibrosis and cardiac fibrosis; fibrotic scarring from burns and other trauma; and inflammatory diseases such as Duchenne Muscular Dystrophy.

Pharmaxis has developed two products from its proprietary spray drying technology that are manufactured and exported from its Sydney facility; Bronchitol® for cystic fibrosis, which is approved and marketed in the United States, Europe, Russia and Australia; and Aridol® for the assessment of asthma, which is approved and marketed in the United States, Europe, Australia and Asia.

Pharmaxis is listed on the Australian Securities Exchange (PXS). Its head office, manufacturing and research facilities are in Sydney, Australia. 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. For example, despite our efforts there is no certainty that we will be successful in partnering our LOXL2 program or any of the other products in our pipeline on commercially acceptable terms, in a timely fashion or at all. 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.