# Australian cancer drug licensed in $730M deal

February 1 2016

Scientist are working on Recombinant Protein Production Facility/Equipment at CSIRO. Credit: CSIRO

A promising new cancer drug, developed in Australia by the Cancer Therapeutics CRC (CTx), has been licensed to US pharmaceutical

company Merck in a deal worth $730 million.

The drug, which was developed with support from the UK-based Wellcome Trust and Cancer Research Technology (CRT), has potential clinical applications in both cancer and hemoglobinopathies (non-cancer blood disorders).

According to Dr Tom Peat from CSIRO, one of the key research partners in CTx, the drug is designed to inhibit the protein PRMT5, which is associated with a range of cancers, including mantle cell lymphoma, lung cancer, breast cancer and colorectal cancer.

"Patients who have these types of cancers often have high levels of this protein, which is unfortunately also linked to poor survival rates," Dr Peat said.

"Using our recombinant protein production facilities, we were able to produce samples of these proteins, crystallise them for structure based drug design and support the consortium's pre-commercial investigations and trials.

"Access to high quality protein is absolutely critical in structural biology approaches to drug discovery, and CSIRO is pleased to be able to contribute this key capability.

"The CTx consortium was able to develop a drug that binds to this protein, allowing it to target the cancerous cells.

"We're thrilled to be part of this development, which has the potential to make a real difference for patients here in Australia and around the globe."

Under the terms of the license, Merck US will now further develop the

drug, taking it to clinical trials, with a view to worldwide commercialisation.

"This is a great result for Australian science and further demonstrates what can be achieved when science and commercialisation capabilities unite," CTx chief executive Dr Warwick Tong said.

In addition to applications for cancer, PRMT5 inhibitors switch on important genes in the development of blood, which could provide disease-modifying treatment options for patients with blood disorders like sickle cell disease and beta thalassemia.

The deal provides potentially significant financial returns, which will be shared between CRT, CTx and the Wellcome Trust, with the majority being returned to CTx and its Australian research partners including CSIRO, Monash University, Peter MacCallum Cancer Centre and the Walter and Eliza Hall Institute.

Provided by CSIRO