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Phebra to collaborate with University of Wollongong for cancer studies

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Researchers have recognised the well-established efficacy of arsenic in the treatment of Acute Promyelocytic Leukaemia (APL).



Australian pharmaceutical firm, Phebra, has announced a collaboration and licensing agreement with the University of Wollongong (UOW) to continue development of newly patented arsenic compounds that potentially treat haematologic malignancies and solid tumours.

Researchers, Dr. Carolyn Dillon and Ms. Judith Carrall, from the UOW School of Chemistry and Molecular Bioscience, recognised the well-established efficacy of arsenic in the treatment of Acute Promyelocytic Leukaemia (APL). They have since developed a new concept that promises to allow the dose of the cytotoxoc arsenic to be reduced by up to forty-fold. In addition, it has been designed to specifically target cancers that are sensitive to treatment by this drug.

Phebra Chief Executive, Dr Mal Eutick, said that the researchers had already seen positive indications in the in vitro trials to date, with the new arsenic compound successfully targeting a number of cancers including APL, Acute Myeloid Leukaemia (AML) and potentially pancreatic cancer.

"Phebra have been very impressed with the range, detail and quality of Dr Dillon and Ms Carrell's work. We are excited to be working in collaboration with UOW and are very enthusiastic about the initial laboratory studies that show activity, not only in haematological cancers such as APL and AML, but also potentially, in pancreatic cancer which has proven to be very difficult to treat," Dr Eutick said today.

"We've been encouraged by the strong data generated to date, showing the positive outcomes of successfully linking arsenic to cancer-targeting peptides, resulting in significantly-reduced levels of indiscriminate toxicity."

"Phebra believes it has the potential to represent a next generation of treatment. We are moving into animal trials later this year and expect to see positive results quite soon. Obviously, it will take time to conduct human studies but, potentially, it will be a huge benefit for patients and clinicians in treating many cancers."

Dr. Dillon said, "This research has been progressing for a number of years with promising results in vitro. We have confirmed our proof of concept, showing that the compound is one thousand times more toxic to the specific leukemia cells in

comparison to normal blood cells. We recognize that we still have a long way to go before this drug can proceed to clinical trials, but we are hopeful that it will prove successful."

"We are really excited to be working with Phebra. Firstly, the collaboration provides the potential to market our anti-cancer drug if it proves successful in the clinic, and secondly, it provides our medicinal chemistry honours and PhD students with invaluable insight into the pharmaceutical manufacturing and marketing world," Dr Dillon said.

Phebra is an Australian based specialty pharmaceutical company which develops, manufactures and markets critical medicines in Australia and across the world.