

for the severe form of the disease ([dengue haemorrhagic fever](#)) with around 12,500 deaths.

Current treatment for dengue fever consists of either oral or intravenous rehydration for mild or moderate cases, and intravenous fluids and blood transfusion for more severe cases. The economic burden of clinical cases has been estimated at US\$12 billion per annum.

Monash University researchers, led by Professor David Jans in the Department of Biochemistry, have developed a novel screening approach for identifying new classes of antiviral drugs.

"Our screening approach focuses on a specific interaction between a virus and its host during an infection. This interaction is the critical point at which the virus accesses and takes over the control centre (the nucleus) of the host cell," Professor Jans said.

"This screening approach enables us to identify drugs that specifically target the virus in this interaction so we can stop it spreading the infection in the body."

Professor Jans said that this novel approach targeted at dengue virus made it possible to identify Fenretinide as a drug with great potential to treat dengue.

Fenretinide has been previously investigated for potential use in the treatment of cancer.

"The discovery of Fenretinide as a dengue focused antiviral drug validates the power of our novel screen to find new classes of drugs against such viruses. We are excited about partnering our work with 60P and seeing this validation progress into the clinic and beyond," said Professor Jans.

60P is a biotechnology company founded in 2010 with a mission to discover, develop and distribute new medicines for treatment and prevention of tropical diseases.

60P CEO Dr Geoffrey Dow said: "60P is delighted to partner with an organisation like Monash that shares our vision in taking first class research and translating it into new and affordable medicines that treat and prevent neglected diseases such as [dengue](#)."

Dr Michael Bettess, Senior Business Development Manager in the Faculty of Medicine, Nursing and Health Sciences at Monash University said: "This partnership has the potential to benefit not only [dengue fever](#) patients but also people suffering from related viral infections, and may lead to more research in drug discovery and development from our validated platform."

Provided by Monash University

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