

Potential new anti-malarial drug identified

February 6 2014, by Roddy Isles

A significant milestone in the development of a potential new antimalarial medicine has been reached by scientists at the University of Dundee, in partnership with the Medicines for Malaria Venture (MMV).

A compound developed in the Drug Discovery Unit at Dundee has been selected by MMV, following a positive recommendation by MMV's Expert Scientific Advisory Committee, to enter preclinical development.

Professor Ian Gilbert, Chair of Medicinal Chemistry at Dundee and one of the project leaders, said, 'This compound has impressive antimalarial properties. It has potential for a single dose treatment of malaria. It also has the possibility to protect people from getting malaria in the first place and in stopping malaria being spread from infected people to others (a feature known as transmission-blocking).'

Dr Kevin Read, co-project leader and also based at Dundee, said, 'We are very excited by this compound which belongs to a different chemical class to current [antimalarial drugs](#). This compound will now undergo scale-up and further safety testing with a view to it entering human clinical trials within the next 18 months.'

Every year, there are over 200 million cases of malaria across the globe, resulting in about 627,000 deaths from this disease. Most of the deaths occur in children under the age of 5 and pregnant women are particularly vulnerable. There is an urgent need for new, well-tolerated, effective and affordable drugs. One reason for this is that the parasite that causes malaria is developing resistance to current medicines.

The DDU team has been working with Medicines for Malaria Venture (MMV) to identify potential new treatments for malaria.

This project began when one of the DDU collections of [compounds](#) was screened against the parasite that causes malaria. This process identified a start point for a [drug discovery](#) programme. This start point was then modified through subsequent cycles of design, synthesis and testing by expert teams of chemists and biologists, resulting in the discovery of this new antimalarial compound.

'Identifying a compound like this is no small feat,' said Dr Paul Willis, one of MMV's Drug Discovery Project Directors. 'It's a great achievement, particularly given the exciting properties of the compound, which give it potential for use in the treatment, prevention and transmission-blocking of [malaria](#).'

Provided by University of Dundee

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