

Australian researchers close in on malaria vaccine

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Australian researchers said Tuesday they were closing in on a potential vaccine against malaria, with a study showing their treatment had protected mice against several strains of the disease.

Michael Good, from Queensland's Griffith University, said the vaccine led to naturally existing white blood cells, or T-cells, attacking the potentially deadly malaria parasite which lives in [red blood cells](#).

"A single vaccination induced profound immunity to different malaria parasite species," the study, published Tuesday in the Journal of Clinical Investigation, states.

Good said the team's research was focused on inducing the white blood cells to attack the parasite, whatever the [malaria strain](#).

"The T-cells ([white blood cells](#)), when they're induced to kill malaria, can recognise proteins throughout the parasite, even internal proteins in the parasite," he told the ABC.

"So that's where we think the novel aspect is: we've been able to induce a form of [immune response](#) which can recognise molecules in the parasite which are present in every single strain."

Good said he believed it was the first time that a vaccine had been shown to protect against more than two strains of malaria in mice.

The vaccine was expected to be cheap and easy to manufacture, he added, meaning that—if applicable to humans—it could have a significant impact in poor countries where malaria kills thousands each year.

"But we don't want to get ahead of ourselves; we want to demonstrate, first and foremost, that the vaccine is effective in humans," Good told the broadcaster.

In 2010 an estimated 219 million people were infected with the disease and some 660,000 died, most of them African children aged under five, the UN's World Health Organisation said in December.

A study published in the *Lancet* in February 2012 said the global death toll was more likely to be around 1.2 million a year.

More information: Cross-species malaria immunity induced by chemically attenuated parasites, *J Clin Invest.* [doi:10.1172/JCI66634](https://doi.org/10.1172/JCI66634)

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