



# PRESS STATEMENT

PNG MEDICAL SYMPOSIUM 2012

IMR27/12  
6 September 2012

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## MALARIA: BETTER RAPID TESTS MEAN BETTER TREATMENT

Before treating malaria, first find out if you really have it! That's what the World Health Organization recommends and the malaria rapid diagnostic test (RDT) provides prompt diagnosis of malaria where microscopes are not available.

"In the malaria rapid diagnostic test, a drop of blood from your finger is placed on special filter paper. After 10 minutes, you will know if you have *Plasmodium falciparum* or another type of malaria, or if you don't have malaria at all," said Elisheba Malau, a scientific officer working with IMR in Goroka as part of her Honours program with the Walter and Eliza Hall Institute of Medical Research, Melbourne.

"However, the rapid diagnostic test results are sometimes distorted by genetic variations in *P. falciparum*, one of the four malaria parasites in PNG," Ms Malau said.

"Our study looked at genetic variations in genes coding for four *P. falciparum* proteins that are targeted by the rapid diagnostic tests. Our goal was to determine what effect these variations might be having on RDTs sensitivity in PNG.

Using samples from earlier malaria studies in the Madang and East Sepik Provinces, the team selected and tested 195 DNA samples known to be positive for *P. falciparum*.

"We found that while there were considerable genetic variations in *P. falciparum* in PNG, this shouldn't affect the results of the RDTs.

"Our study is ongoing, but we can confirm that RDTs continue to be an effective tool for the diagnosis of malaria for the people of PNG," Ms Malau said.

**Symposium Paper:** Investigation of polymorphisms in *Plasmodium falciparum* *hrp2*, *hrp3*, *aldolase* and *pldh* genes and their impact on the performance of malaria rapid diagnostic tests in Papua New Guinea.

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