A high-throughput diagnostic for relapsing liver malaria

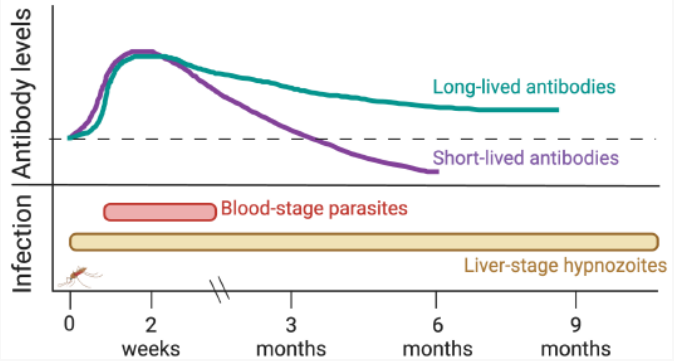
The Problem

- Endemic countries throughout the Asia-Pacific have committed to eliminate malaria by 2030
- *P. vivax* is very difficult to eliminate because dormant liver stages relapse and cause 79% of new infections
- Current diagnostic approaches cannot detect liver stages
- The need for a high-throughput test to detect P. vivax relapse is spelt out in Preferred Product Characteristics published in 2024 by the WHO[1]

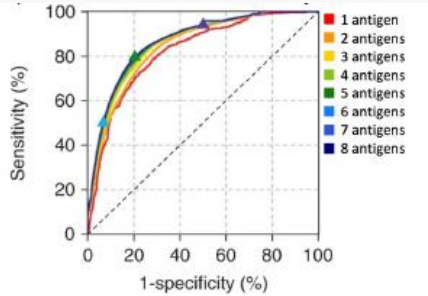
The Solution

- A novel Luminex Assay to detect recent (≤270 days) *P. vivax* infection (Longley 2020 Nature Medicine)
- Recently-infected individuals can then be treated with drugs that target malaria liver stages
- Modelling shows that such a "test and treat" approach could accelerate *P. vivax* elimination (clinical validation ongoing)

Underlying principle



Diagnostic Performance



Our Program

Progress: Patent-protected panel of *P. vivax* serological exposure markers; all IP owned by WEHI

Next steps: Development of a fully standardised and quality-controlled Luminex-based reference assay is underway

Looking to ***licence*** technology to an existing diagnostics company

Our Team

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[1]https://www.who.int/publications/i/item/9789240089846