PROJECT NUMBER

20626

Rapid quantitative malaria diagnosis through portable optical detection and automated analysis of hemozoin

Applications: Malaria diagnostics, Community screening, Disease surveillance, Clinical research, Drug response monitoring



Features	Benefits
Back-scattering dark-field microscopy with crossed-polarisation imaging enables direct detection and quantification of hemozoin crystals	Enables quantitative disease and treatment monitoring using a genetically conserved malaria biomarker
Low-magnification optical architecture	Enables lower-cost, faster testing by avoiding expensive optics and scanning a larger sample volume in each field of view
Disposable cartridge with integrated blood-cell lysis	Simple sample preparation reduces handling requirements
Automated hemozoin detection and counting	Reduces reliance on operator judgement, leading to more consistent and objective diagnostic results

Features	Benefits
Portable, robust, digitally connected platform	Reduced infrastructure requirements enable testing in resource-limited settings

Awaiting patent and Available for

- Co-development
- Consulting
- Licensing

To find out more, contact enquiries@innovation.ox.ac.uk and quote the project number.

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