

PATH, Quansys Bio develop new diagnostic tool for malaria

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PATH and Quansys Biosciences, Inc. have announced the launch of a new diagnostic tool designed to help researchers develop more sensitive and reliable malaria rapid diagnostic tests (RDTs) and to support public health surveillance. The Q-Plex™ Human Malaria Array (5-Plex) is a quantitative immunoassay that simultaneously measures multiple malaria antigens.

Many current RDTs function by detecting the histidine rich protein 2 (HRP2) to identify *P. falciparum* malaria and the *Plasmodium* lactate dehydrogenase (pLDH) antigen to diagnose *P. vivax* malaria and all other human malaria species. As RDTs improve in quality, there is a need to understand how these antigens behave in a malaria exposed population so that the performance of these RDTs and their potential to support malaria elimination can be fully assessed.

With a single sample, the Q-Plex™ Human Malaria Array can measure HRP2 and pLDH at low concentrations, as well as quantify *P. vivax*- and *P. falciparum*-specific LDH epitopes to distinguish between malaria species and C-reactive protein (CRP) as an indicator of inflammation.

Researchers can use the Q-Plex™ Human Malaria Array (5-Plex) as a reference test to evaluate RDTs in the development pipeline that detect malaria infections with low parasite concentrations and address the challenge of diagnosing *P. falciparum* malaria parasite strains that do not produce HRP2 and therefore are not detected by RDTs designed to identify the antigen.