

Actionable Surveillance and Neglected Disease Control and Elimination (ADVANCE) Newsletter

April 2026



Diagnostics spotlight

New malaria rapid diagnostic tests for better infection detection

Working in collaboration with institutions and manufacturers, the ADVANCE program is developing robust next-generation (NextGen) rapid diagnostic tests (RDTs) that address the recent onset of deletion mutations that allow the parasite to evade detection by current RDTs. In October 2025, we renewed our partnership with the University of Queensland Protein Expression Facility to continue developing [high-quality proteins](#) that are critical to the design and qualification of lifesaving diagnostic tests. This continued agreement helps expand availability and access to these essential tools.

ADVANCE has two ongoing clinical studies in distinct settings to evaluate the performance of the leading NextGen malaria RDTs. Together, these studies are generating critical evidence on how these tools perform in different use cases and how they can support malaria control and elimination strategies:

- Our study in the Lao People's Democratic Republic (Lao PDR) is evaluating the sensitivity and specificity of the NextGen *Plasmodium falciparum*/*Plasmodium vivax* RDT in elimination settings. As of January 31, 2026, 4,291 participants had been enrolled and recruitment is ongoing, with results dissemination targeted for late 2027.
- Our study in Papua New Guinea has completed its start-up activities, including an orientation for the nurses involved in the study's health facility surveillance component and an on-site training at three health care facilities, led by Papua New Guinea Institute of Medical Research staff. Following the training, enrollment kicked off in three study sites. As of December 31, 2025, 381 participants had been enrolled, marking an important milestone as the study moves into full implementation.

Helping detect people at risk of relapsing *Plasmodium vivax* malaria with new serology-based diagnostics

In collaboration with the Vivax Serology Partnership (VISPA), the ADVANCE program is developing and assessing sero-diagnostic tests to identify people with hidden liver-stage hypnozoites at risk of relapsing infection. We're working on these tests in both the research and development and clinical workstreams, ensuring both new tools and critical evidence of their use are generated, including:

- The laboratory-based Luminex® test has been further standardized. Training resources, including an [assay video](#), are now available on the [VISPA website](#). Negotiations are underway with Tetracore for onboarding of the assay.
- Two point-of-contact tests have reached the proof-of-principle stage with strong correlation evident in antibody responses compared to the laboratory-based assay.
- Preparation is underway for clinical studies in Indonesia using biobanked samples and for field testing of usability in the Philippines.

Strengthening pipelines for glucose-6-phosphate dehydrogenase deficiency tests for safer malaria treatment

Expanding access to diagnostic tests for glucose-6-phosphate dehydrogenase (G6PD) deficiency brings us closer to safer treatment and the elimination of *P. vivax* malaria. Here's how the ADVANCE program is currently working on building a stronger, more sustainable pipeline for these important new diagnostic tools:

- **Generating evidence to support regulatory approval.** We're conducting critical clinical studies to strengthen the evidence base needed for regulatory approval of G6PD deficiency point-of-care tests. We completed sample collection in late December, in collaboration with Hanoi Medical University, and data analysis began in late January. A presentation of the

results is expected soon. This will help inform the path toward broader introduction and use of these essential diagnostics.

- **Expanding access to newborns.** This study aims to establish normal G6PD activity ranges in newborns for point-of-care tests for G6PD deficiency, which will lay the foundation for the expanded use of point-of-care G6PD tests in screenings for newborns. Our team is advancing rapidly through the study design process and currently submitting protocols to local and international ethics review boards. Approvals are anticipated in a few weeks, and study kickoff is expected shortly after.

- **Identifying effective and sustainable models for implementation and financing for G6PD deficiency testing.** We're partnering with national malaria programs in Cambodia, Lao PDR, and Vietnam to identify practical, long-term approaches for implementing and financing G6PD deficiency testing.

Guaranteeing sustainable access requires not only strong diagnostics, but also systems that support delivery, procurement, and long-term affordability. Recently, our team conducted a landscape analysis including a literature review and more than 50 semi-structured interviews with key stakeholders. The findings highlight several priorities for sustainable access:

strengthening documentation and distribution systems; building staff capacity to support cost-effective implementation; identifying durable financing and procurement mechanisms; and exploring opportunities to expand the use of G6PD point-of-care tests beyond malaria to increase market demand and help reduce unit costs. These insights are being used to inform the development of a roadmap to guide sustainable financing and scale-up of G6PD testing across the region.

Throughout the first quarter the ADVANCE team has been working with national governments to host dissemination workshops across Laos, Vietnam, and Cambodia. These events highlighted key results from the landscape and next steps for expanding access to G6PD and tafenoquine for *P. Vivax* malaria.



Huyen Nguyen and Chi Nguyen leading consultations with hospital staff. Source: PATH



Participants at the Vietnam dissemination event. Source: PATH

Exploring opportunities for gender equality, disability, and social inclusion in our programming



Rhea Longley presenting on sex/gender impact on antibody responses to Plasmodium infections. Source: WEHI

The Walter and Eliza Hall Institute of Medical Research (WEHI) presented its gender equality, disability, and social inclusion work to date at Melbourne University, receiving a new investment to collaborate with Murdoch Children's Research Institute (MCRI) to further explore biological sex impacts on the immune response following infection.

WEHI also presented its ADVANCE portfolio of work, focusing on sero-diagnostics for *P. vivax* malaria, to a group of 16 Aboriginal and Torres Strait Islander high school and university students in Sydney. This included a workshop

featuring hands-on experience with the point-of-care tests and discussion on career pathways and opportunities for further study. This was in support of the Young Indigenous Women in STEM Academy.

Event Spotlight

ADVANCE hosted its second in-person Expert Project Advisory Committee meeting in Bangkok, Thailand in February 2026. The meeting brought together six leading malaria experts from Southeast Asia along with staff from PATH, WEHI, the Burnet Institute and Papua New Guinea Institute of Medical Research. The team present on project progress and received strategic advice and direction for the next phase of the project.



Gonzalo Domingo (PATH) demonstrating how to use the SD BIOSENSOR's STANDARD G6PD to EPAC and ADVANCE team members. Source: PATH

Recent events

- Medical Society of Papua New Guinea Annual Medical Symposium, August 2025
- American Society of Tropical Medicine & Hygiene Annual Meeting, November 2025
- EPAC meeting, February 2026
- Gates Foundation *P. vivax* stakeholders convening, February 2026

ADVANCE at upcoming events

- Asia Pacific Malaria Elimination Network Vivax Working Group, April 2026

This work is made possible with support from the Australian Government through the Partnerships for a Healthy Region initiative. The Product Development and Access Partnership brings together the expertise of [PATH](#), [the Burnet Institute](#), and [WEHI](#) (Walter and Eliza Hall Institute of Medical Research). Together, we are accelerating malaria elimination progress under the Actionable Surveillance and Neglected Disease Control and Elimination (ADVANCE) program through research and development, clinical evaluations, and ensuring equitable and sustainable access to improved malaria diagnostic technologies.