

Breakout Group Summary Report

This document is intended to capture the key outputs of your breakout discussion, and to be representative of the group as a whole. Please denote your group's topic, presentations and research priorities before the start of the session, and dedicate the latter portion of your session to determining the key discussion points, knowledge gaps and recommended steps. Also, please indicate whether your group's recommendations align with the specified initial priority target. Your report will be shared on the NTD-SC website, and will inform future advisory panel discussions and donor priorities.

Section I

To be filled out before the session begins.

Breakout Topic:

3B: Lymphatic Filariasis and Onchocerciasis: The Promise and Reality of Antibody Testing

Presentations:

- Tom Nutman "Summary of Available Diagnostic Tools"
- Molly Brady "Brugia antibody data from Indonesia"
- Tom Unnasch "OEPA Experience"
- Alison Golden "RDTs"
- Katie Gass "Diagnostic Assay Cutoffs"
- Kim Won "The Gambia"
- Vita Cama "The Relationship between antibody responses and other indicators in Uganda"

Research priorities to be discussed:

To identify the gaps in knowledge related to antibody testing and prioritize research areas	

Form continues on the next page.



Section II

To be filled out as the session concludes.

What were your group's key discussion points?

- Should we continue to support laboratory-based antibody tests when RDTs are available and so much more practical in the field?
- How can we make use of confirmatory testing for both LF and oncho? Could an RDT serve as the first screening test to rule in areas with potential transmission followed by a laboratory assay or microscopy to confirm? At the community level xenomonitoring could be used as a confirmatory test.
- Is a threshold of 0.1% for onchocerciasis realistic? What is an appropriate antibody threshold for LF? What threshold do the models tell us?
- What age range should we be looking at for antibody tests? Given the poor sensitivity of the RDTs we may want to consider increasing our age range.
- How do we institute better quality assurance for lab-based assays?

What knowledge gaps (if any) did your group identify?

- What is the antibody prevalence that is reflective of interruption of transmission?
- How does antibody prevalence correlate with mf, antigen and xenomonitoring data (for both LF and onchocerciasis)?
- What is the age group we should be monitoring with antibody tests?

What next steps does your group recommend?

- Engage the modeling community to generate hypotheses regarding what the breakpoint thresholds, optimal age group we should be measuring and infection indicator relationships might be and then conduct the OR to test these hypotheses and further calibrate the models
- Conduct multi-site longitudinal studies to understand the relationships between antibody, infection and xenomonitoring for both LF and oncho in areas that are hypo-, meso- and hyper-endemic at baseline
- We need to move forward with the tools we have and develop thresholds that incorporate the imperfect sensitivity and specificity