Symposium and panel discussion

Overview

In this meeting, we will review activities by the New Diagnostics Working Group as a coordination and communication platform to enable effective collaboration of stakeholders for accelerating progress in TB diagnostic research and development. We will particularly report outcomes of recent meetings that the NDWG convened with partners to facilitate sharing and integration of sequencing data and to build consensus on high-priority Target Product Profiles. The session will also present progress in biomarker research for development of paediatric TB diagnostics, as well as latest study results on new technologies for multiplex drug susceptibility testing and for improved detection of TB at point-of-care and microscopy centre levels.

How can countries effectively use genotypic methods for managing MDR-TB?

In the second part of the session, a panel of clinical and laboratory experts will explore the state of genotypic and phenotypic testing in the context of low- and middle-income countries with a high burden of MDR-TB. While the knowledge correlating phenotypic and genotypic methods is rapidly evolving and promises to transform detection of drug resistance, the evidence to recommend genotypic methods as a replacement for phenotypic drug susceptibility testing is not yet available. The session will provide perspectives for considering genotyping approaches as the only feasible solution for high-burden countries which don’t have sufficient capacity for phenotypic testing. The panel will also discuss the challenges related to scaling-up genotypic methods into national guidance for treatment and management of MDR-TB in the low-income setting.

Fostering development of new TB diagnostics

• NDWG activities in support of sequencing data sharing
  Daniela Cirillo, San Raffaele Scientific Institute, NDWG Co-Chair
  Claudio Köser, Cambridge University
  Outcomes of GLI-NDWG consensus meeting and approved versions of TPPs
  Claudia Denkinger, FIND
  Diagnostics for paediatric TB and harmonization of research on paediatric biomarkers
  Devasena Gnanashanmugam, NIH/DAIDS

Coffee break

PART II

Breaking news: Latest study results on promising new diagnostic tools for TB

• ProteinLogic unique TB biomarker signature - Preliminary results for differentiating latent infection and active TB
  Jane Cunningham, Sheffield University Teaching Hospital
  Andy Wende, PON Applications, Qiagen

• Lipids to detect tuberculosis
  Christopher Gwenin, Bangor University
  Luis Cuevas, Liverpool School of Tropical Medicine

• TBDx automated platform for fluorescence smear microscopy - Evaluation in Abuja, Nigeria
  Gary Schoolnik and Gregory Dolganov, Stanford University

• A highly multiplex CMOS biochip TB drug resistance platform
  Camilla Rodrigues, Hinduja Hospital

• Q&A

Panel discussion

How can countries effectively use genotypic methods for managing MDR-TB?

Moderator: Daniela Cirillo, San Raffaele Scientific Institute, NDWG Co-Chair
Coordinator: John Ridderhof, Centers for Disease Control and Prevention

Panelists:
• Catharina Boehme, FIND, NDWG Co-Chair
• Petra de Haas, Médecins Sans Frontières
• Leen Rigouts, Institute of Tropical Medicine
• Camilla Rodrigues, Hinduja Hospital
• Angela Starks, Centers for Disease Control and Prevention