

03. Complexities of molecular and phenotypic diagnostics in clinical management

Wednesday, 29 October 2014, 13:30 - 17:00

Room 114



Type	Workshop
Track	TB Bacteriology and Immunology
Topic	TB diagnostics and drug susceptibility testing
Organised by	World Health Organization (WHO), Center for Disease Control and Prevention (CDC)
Duration	Half-day
Max attendees	100
Meeting type	Open meeting
Description	This workshop provides a platform for the continued debate on the complexities of molecular and phenotypic diagnostics in clinical management. Due to the overwhelming demand stemming from a symposium organized by the same group at the 44th Union World Conference, the session will navigate diagnostic challenges from both the TB clinicians and scientists' perspective. The workshop will consist of a series of presentations from a panel of TB experts followed by a discussion in which concerns and gaps in research can be identified. Delegates are encouraged to participate.
Target audience	TB and HIV clinicians, researchers, scientists, policymakers, guideline-development committee members, national TB programme heads, diagnostic industry, TB laboratory personnel and anti-TB drug development scientists
Objectives	<ol style="list-style-type: none"> 1. To present updated research data on gene mutations conferring resistance to TB drugs, including PZA 2. To provide a forum for clinicians to voice their interpretation of diagnostics in clinical management of TB 3. To identify key concerns and gaps in research appertaining to molecular and phenotypic diagnostics 4. To discuss development of a training manual on molecular and phenotypic diagnostics for clinicians 5. To engage in discussions with the panel regarding TB gene mutations and their clinical relevance
Expected outcome	Participants will complete the workshop with a deeper understanding of the advantages and pitfalls of molecular and phenotypic diagnostics when applied to clinical management. The delegates would have also contributed towards the first steps of developing a training manual on molecular and phenotypic diagnostics, for clinicians. A full workshop report will be written and disseminated.
Keywords	Clinical management; diagnostics; MDR-TB; XDR-TB; pre-XDR-TB; resistance; dissemination; HIV
Coordinator(s)	Lynsey Isherwood (South Africa), Siva Danaviah (South Africa)
Chair(s)	Stefan Niemann (Germany), Christopher Gilpin (Switzerland)
Presentations	<ol style="list-style-type: none"> 1. WHO Global Surveillance Project Christopher Gilpin (Switzerland) 2. Whole genome based diagnostics: the data to knowledge challenge (including PZA) Stefan Niemann (Germany) 3. To what extent can genotypic DST replace conventional phenotypic techniques? The case of fluoroquinolones and injectable drugs Van Deun Armand (Belgium) 4. The use of Xpert MTB/RIF for diagnosing rifampicin resistance and concordance with DST: the South African experience on 2million Xpert tests Wendy Stevens (South Africa) 5. rpoB genotyping:connecting the DOTS by reading between the lines Marinus Barnard (South Africa) 6. Evidence-based clinical decision making and public health policies with genotypic tests: what evidence? Richard Lessells (UK) 7. Making clinical decisions using genotypic data Antonino Catanzaro (USA) 8. Deciding what drugs to treat TB patients: lessons learnt (including Bedaquiline compassionate access) Francesca Conradie (South Africa) 9. Interpreting the Mutations that confer phenotypic drug resistance in M. tuberculosis: A primer for clinicians Timothy Rodwell (USA) 10. Navigating through genotypic and phenotypic diagnostics: insight from an epidemiologist