

02. Building new treatment paradigms for TB programmes using PK/PD science

**THE 46TH UNION
WORLD CONFERENCE
ON LUNG HEALTH**

CAPE TOWN, SOUTH AFRICA
2-6 DECEMBER 2015

Wednesday, 02 December 2015, 09:00 - 16:00

Room Ballroom West

Type of session	Workshop
Track	Basic science
Track2 (optional)	Patient-centred care
Organised by	To be determined
Duration	Full-day
Max attendees	150
Meeting type	Open meeting
Description	This is a one-day workshop on pharmacometric approaches to optimising existing anti-TB regimens, combining new molecules with existing drugs to build better regimens, and using prior information to design more informative clinical trials to test those regimens. The workshop will provide an overview of PK/PD sciences role in chemotherapeutics, optimisation of traditional regimens, and development of new regimens for the treatment of TB.
Target audience	<ol style="list-style-type: none"> 1. Clinicians and trialists 2. Scientists 3. Policy-makers
Objectives	<ol style="list-style-type: none"> 1. Provide principles of the PK/PD of anti-TB drugs, including dose selection, therapeutic targets & role of public-private partnerships in TB therapeutics 2. Delineate principles of therapeutic drug monitoring in TB 3. Identify knowledge gaps in PK/PD sciences and the need to design more informative clinical trials 4. Build a plan of action for workshop participants to contribute to filling gaps and strengthen programmes
Expected outcome	1) Participants will finish the workshop with appreciation of the role of pharmacokinetics and pharmacodynamics (PK/PD) science for the TB programme. 2) A consensus document on use of drug concentrations in optimising clinical outcomes that will be published.
Keywords	Pharmacokinetics and pharmacodynamics (PK/PD); therapeutic drug monitoring; TB drug development
Coordinator(s)	Jotam Pasipanodya (USA), Beki Magazi (South Africa)
Chair(s)	Helen McIlleron (South Africa), Tawanda Gumbo (USA)
Presentations	<ol style="list-style-type: none"> 1. PK/PD, drug development & the role of public-private partnerships Debra Hanna (USA) 2. PK/PD basics: models, therapeutic targets etc Eric Nuermberger (USA) 3. Pathogen factors: stupid MIC! MIC, stupid! Beki Magazi (South Africa) 4. Principles of pharmacokinetic variability of anti-TB agents Helen McIlleron (South Africa) 5. Non-linear analytical tools to design better clinical trials and optimise patients' outcomes Jotam Pasipanodya (USA) 6. How to implement PK monitoring in TB programmes: a practical approach Jan-Willem Alffenaar (Netherlands) 7. Monitoring drug concentrations in patients with drug-resistant tuberculosis Scott Heysell (USA) 8. Latest treatment regimens for adults' and children with/out drug-resistant TB Soumya Swaminathan (India) 9. The future is now! Bayesian adaptive dosing in TB programmes Tawanda Gumbo (USA) 10. DISCUSSION: Towards a consensus on clinical standards for minimal inhibitory concentrations (MIC) and pharmacokinetic monitoring in treatment of TB Helen McIlleron (South Africa), Tawanda Gumbo (USA)