# Advances in TB Diagnostic Services: Transforming TB Care & Control

# 5<sup>th</sup> Global Laboratory Initiative (GLI) Partners Meeting

Jointly organised by World Health Organization & Fondation Mérieux

Les Pensières, Veyrier-du-Lac, France 15 - 18 April 2013

#### **Background**

The Global Laboratory Initiative (GLI) is a network of international partners dedicated to accelerating and expanding access to quality assured laboratory services in response to the diagnostic challenges of tuberculosis (TB), notably HIV-associated and drug-resistant TB. The GLI provides a focus for TB within the framework of a multi-faceted yet integrated approach to laboratory capacity strengthening. Scaling up laboratory services to meet the diagnostic challenges of drug-resistant and HIV-associated TB require a paradigm shift in laboratory policy development, setting laboratory norms and standards, guiding and coordinating technical assistance, and accelerating knowledge transfer.

In recognition of the critical constraints of TB diagnostics and laboratory services, unprecedented efforts in improving and expanding TB laboratory capacity are currently under-way, spearheaded by the WHO, GLI and a network of international partners. At the same time, the TB diagnostics pipeline is growing, new technologies are regularly assessed by WHO leading to rapid policy development and deployment, and innovative partnerships are being formed, mobilizing and optimizing resources while ensuring that laboratory quality standards, appropriate infrastructure, and adequate technical capacity are put in place.

Membership of the GLI has continued to grow and more than 100 international partners have joined forces to accelerate and expand access to quality assured TB diagnostic services within integrated laboratory systems. The GLI works closely with National TB Programmes, nongovernmental organizations, technical and financial agencies, scientific and academic institutions, and WHO offices at country and regional levels in strengthening TB laboratory services.

Global Forum of Xpert MTB/RIF Implementers

Since WHO recommendation of the Xpert MTB/RIF assay in December 2010, 77 countries have adopted the technology and over 1,000 GeneXpert instruments have been deployed globally. At the Xpert MTB/RIF Early Implementers meeting, associated with the 4<sup>th</sup> GLI Partners Meeting in 2012, countries and their technical partners convened to share their early experiences with using the diagnostic. At this year's Global Forum, countries and their technical partners again will come together to share lessons learned and challenges for scale-up, with a focus on evidence of impact and linking scaled-up diagnosis with scaled-up access to treatment.

#### Consultation of the Supranational Reference Laboratory Network

The Supranational TB Reference Laboratory Network (SRLN) is a key technical resource of GLI providing support to countries. The on-going scale up of laboratory services in countries and increased number of diagnostic options available present an urgent need for expanded focus for SRLN activities. An immense amount of technical assistance and guidance is being provided by the current members of the network but at the same time this work varies depending on the geography, location of the individual SRLs. Irregular technical, human resource capacity and sometimes a crucial lack of funding are main challenges. In addition, the level of technical support provided to countries by each SRL differs widely and country needs on laboratory strengthening do not necessarily match available expertise within individual SRLs. Urgently addressing the issue of sustained and expanded technical support from SRLN to countries, rolling out of new TB diagnostics and satisfying widening need of laboratory strengthening services required, are therefore critical to ensure efficient translation of new policies into actions at country level and leventually changing the dynamics of TB control. **Organization** 

#### Goal

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The overall goal of the Partners meeting this year is to bring together leading global agencies, international technical and funding partners, representatives from research organizations, non-governmental agencies, cour control programmes, patient communities and other key stakeholders work highlight achievements and experiences of Gl ers and countries improving laboratory services and advancing new diagnostics for TB.

#### **Meeting Objectives**

- Disseminate developments in WHO policy guidance on TB diagnostics, laboratory biosafety and accreditation;
- Provide an update on TB diagnostics pipeline and the potential impact of new technologies on laboratory strengthening efforts in different epidemiological and resource settings;
- Review progress with implementation of GLI projects including EXPAND-TB and TBXpert Projects;
- Discuss the need of scaling up technical assistance to countries for effective strengthening of laboratory networks;
- Share lessons learned and challenges for wide-scale implementation of Xpert MTB/RIF:
- Update country and technical partner plans for scale-up of Xpert MTB/RIF to ensure effective use of resources and identify possible synergies; and
- Evaluate the status of the SRL network and its activities.

#### **Expected outcomes**

- GLI partners are informed on the priority areas for TB laboratory strengthening;
- Update on GLI Partner support for global laboratory strengthening initiatives;
- Roll-out of Xpert MTB/RIF in different epidemiological and resource settings: lessons learned, impact and future plans;
- Roadmap for expanding activities of the SRLN in view of technical assistance requirements of linked countries; and
- Refined mechanisms for co-ordinating the SRLN activities.

#### **Participants**

The meeting will include representatives from international institutions and initiatives, academic institutions and associations, high-burden TB country health programmes, non-governmental organizations, research institutes from developed and developing countries, industry representatives and funding agencies.

## 5<sup>th</sup> GLI Meeting

	Monday, 15 April 2013	
8:00	Registration	
9:00	Welcome and opening	Mario Raviglione, WHO Stop TB Department Lucica Ditiu, Stop TB Partnership Alain Mérieux, Fondation Mérieux
SESSION 1	1: ADVANCEMENTS IN TB DIAGNOSTICS AND NEV	V GLI TOOLS
		Chair: Tom Shinnick
9:25	Achievements of the GLI and tools under development: Progress in reaching the targ of the Global Plan to Stop TB	Tom Shinnick gets
10:00	Advancements in TB diagnostics	
	<ul> <li>Update on WHO TB diagnostics policies</li> <li>New diagnostics pipeline</li> </ul>	Chris Gilpin Mark Perkins
10:30	Uganda SRL achievement	
10:40	< Break >	
11:10	TB Laboratory accreditation  ❖ Approaches to improving lab quality  ❖ Country experiences in working towards accreditation: Uganda national reference laboratory  ❖ Uganda SRL achievement  Łaboratory network accreditation	Linda Oskam Moses Joloba K. W. Lwamafa John Ridderhof Sabira Tahseen Celestin Hakiruwizera
	Country experiences in working towards	

# AGENDA: 5th GLI Meeting, Global Forum of Xpert MTB/RIF implementers, Supranational Reference Laboratory Network Consultation

16:30	Facilitated discussion: EXPAND-TB country experiences	Fuad Mirzayev
16:00	< Break >	
14:50	EXPAND-TB country experiences  India  Kyrgyzstan  Cameroon  Mozambique	C.N. Paramasivan Gulmira Kalmambetova Sarah Eyangoh Sofia Viegas
14:30	EXPAND-TB Project overview	Chair: Rumina Hasan  Daniel Orozco
	2: LABORATORY STRENGTHENING INITIATIVES	
13:00	< Lunch >	
12:30	Facilitated discussion: What is needed to assist country uptake of new GLI tools	Amy Piatek
	accreditation: Pakistan's laboratory network Progress in roll-out of SLIPTA  •	

	19:00	Welcome dinner
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# Global Forum of Xpert MTB/RIF Implementers

	Tuesday, 16 April 2013	
SESSION 3	SESSION 3: XPERT MTB/RIF ROLL-OUT AT GLOBAL AND COUNTRY LEVEL: IMPACT AND	
LESSONS L	<b>LEARNED</b> Chair	: Karin Weyer
9:00	Xpert MTB/RIF global roll-out update	Fuad Mirzayev
9:20	Country experiences, impact and plans	
	❖ <u>Brazil</u>	Draurio Barreira
	❖ South Africa	Wendy Stevens
10:20	Discussion	
10:30	< Break >	
11:00	Global initiatives to roll-out Xpert MTB/RIF,	Wayne van Gemert
	including TBXpert and EXPAND-TB projects	
11:20	Update on USG support for Xpert implementation	Heather Alexander
		Amy Piatek
11:50	KNCV (TB CARE I) roll-out of Xpert MTB/RIF	Manuela Rehr
12:15	Cost effectiveness of Xpert MTB/RIF in different	Andrea Pantoja
	<u>diagnostic algorithms</u>	
12:40	Discussion	
13:00	< Lunch >	
14:30	Country experiences, impact and plans (cont'd)	
	❖ Moldova	Andrei Mosneaga
	❖ China	Zhao Yanlin
	❖ <u>Viet Nam</u>	Nguyen Van Hung
	Philippines	Celia Carlos
15:45	Discussion	
16:00	< Break >	
16:30	MSF projects: roll-out of Xpert MTB/RIF	Martina Casenghi
16:45	TB REACH – wave 2 results	Jacob Creswell
17:00	Discussion	

9:00 A private sector social business model: TBXpert Aamir Khan  9:20 Diagnostics: What will it take to get to Zero TB Deaths?  9:40 Experience with implementation of Xpert MTB/RIF Kuldeep Singh Sachdeva in India  10:00 Quality assurance and proficiency testing for Xpert MTB/RIF and other molecular methods  10:20 Discussion  10:30 < Break >  11:00 Revised WHO definitions and reporting framework for TB as a result of Xpert MTB/RIF roll-out  11:20 Discussion  11:30 Panel: Electronic recording and reporting systems for Xpert MTB/RIF  \$\frac{Cepheid}{\display} Abt-GxAlert \$\frac{Abt-GxAlert}{\display} Amir Khan  12:30 Discussion and closing: next steps and needs  Fuad Mirzayev		Wednesday, 17 April 2013		
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Diagnostics: What will it take to get to Zero TB Deaths?       Colleen Daniels         9:40       Experience with implementation of Xpert MTB/RIF in India       Kuldeep Singh Sachdeva in India         10:00       Quality assurance and proficiency testing for Xpert MTB/RIF and other molecular methods       Tope Adepoyibi         10:20       Discussion         10:30       < Break >         11:00       Revised WHO definitions and reporting framework for TB as a result of Xpert MTB/RIF roll-out       Dennis Falzon         11:20       Discussion         11:30       Panel: Electronic recording and reporting systems for Xpert MTB/RIF Jan Steuperaert Jeff Takle Abt- GxAlert Amir Khan       Abt- GxAlert Aamir Khan         ★			Chair: Maarten van Cleeff	
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MTB/RIF and other molecular methods         10:20       Discussion         10:30       < Break >         11:00       Revised WHO definitions and reporting framework for TB as a result of Xpert MTB/RIF roll-out         11:20       Discussion         11:30       Panel: Electronic recording and reporting systems for Xpert MTB/RIF for Xpert MTB/RIF Jan Steuperaert         ❖ Cepheid	9:40		Kuldeep Singh Sachdeva	
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for Xpert MTB/RIF  Cepheid  Abt- GxAlert  IRD  Jan Steuperaert  Jeff Takle  Aamir Khan  IRD	11:20	Discussion		
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❖ Abt- GxAlert       Aamir Khan         ❖ IRD       Discussion and closing: next steps and needs       Fuad Mirzayev		for Xpert MTB/RIF	Jan Steuperaert	
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		<b>❖</b> IRD		
12:00	12:30	Discussion and closing: next steps and needs	Fuad Mirzayev	
13:00	13:00	< Lunch >		

### Supranational Reference Laboratory Network Consultation

- July 1 di 11 d	ational Rejerence Laboratory Network	Consultation	
	Wednesday, 17 April 2013		
SESSION 5: UPDATE ON SRLN ACTIVITIES AND SRL TASKFORCE RECOMMENDATIONS  Chair: Sabine Ruesch- Gerdes			
14:30	Current status of the SRLN, priorities and challenges:  ❖ SRL taskforce recommendations  ❖ TORs for SRLN  ❖ Governance for an SRLN core group  ❖ SRLN factsheet  ❖ Current funding	Chris Gilpin	
15:00	Discussion		
15:15	Presentation of activities from 4 SRLs:  SRL Gauting, Germany  SRL Kampala, Uganda  SRL Milan, Italy  SRL Stockholm, Sweden	Harald Hoffman; Moses Joloba; Daniela Cirillo; Sven Hoffner	
16:15	Discussion		
16:30	< Break >		
16:45	DST proficiency testing:  ❖ Distribution of panels for DST  ❖ Performance of SRLs and non-SRLs  ❖ Rationalizing QA for DST	Armand van Deun	
17:30	Discussion		
18:00	Closing		

Thursday, 18 April 2013			
SESSION 6: T	SESSION 6: THE WAY FORWARD FOR THE SRLN		
		Chair: Michael Iademarco	
9:00	Research priorities for the SRLN:		
	Pathway to a new DST	Tom Shinnick	
	Evaluation of new tools		
9:45	Options for Improving the functioning of the	Chris Gilpin	
	<u>network</u>		
10:00	Discussion		
10:30	< Break >		
11:00	The SRLN Business Plan	Michael lademarco	
11:30	Discussion		
12:00	Summary of recommendations and closing	Chris Gilpin	
12:30	< Lunch >		

14:30-18:00 GLI CORE GROUP MEETING (closed session)