The Xpert MTB/RIF Research Mapping Project

Anne Detjen, The Union/TREAT TB
Global collaboration and coordination of Xpert MTB/RIF roll-out

WHO: Monitoring of roll-out, procurement and procurement plans
Open Research Questions

WHO Xpert MTB/RIF Policy Statement

Interim diagnostic algorithms in different epidemiological and geographical settings and patient populations

Cost-effectiveness and cost-benefit in different programmatic settings

Extrapulmonary and paediatric TB

Impact of Xpert MTB/RIF in reducing diagnostic delay and treatment initiation

Impact on treatment access and treatment outcomes, especially among hard-to-reach populations

Operational issues: Calibration, power supply, shelf life, storage, waste management
Who is doing research?

Where?

What focus areas?

What are the lessons learnt?

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**Xpert Research Mapping project**

Create a platform for researchers, implementers, policy makers

Provide information, initiate exchange and discussion

Optimize research efforts related to implementation and scale-up
Online questionnaire to capture

- Information on research collaborations performing Xpert research
- Basic information on roll-out in the countries where research is performed
  - Research design (Setting, target populations, algorithms)
  - Research outcomes
- May 2011: Distribution of questionnaire via Union, Stop TB, NDWG and other newsletters and mailing lists
Welcome to the Xpert® MTB/RIF Mapping Tool

Xpert® MTB/RIF has recently been recommended by WHO as a promising new tool for the rapid diagnosis of TB, in particular drug-resistant TB. While implementation efforts are under way, there are still many unanswered questions around the tests’ optimal use within health systems and in different patient populations that warrant further research.

The Union, through the USAID-funded TREAT TB initiative, and supported by WHO, has developed this tool, which allows researchers and policy makers to globally map ongoing research activities around Xpert® MTB/RIF. The tool aims to be a comprehensive platform providing information and initiating exchange and discussion in order to optimize research efforts related to implementation and scale-up of Xpert® MTB/RIF.

There are currently 24 research projects in 16 countries listed.
Xpert Research Projects Worldwide

Click on a country below to produce a list of projects in that country.

Or click here to search by country name, organization, target population, level of health care system, or impact assessment.

24 projects in 16 countries
## Projects listing

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Site Location(s)</th>
<th>Research target population</th>
<th>Contact Name</th>
<th>Organizational Affiliation</th>
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<tbody>
<tr>
<td>Policy Relevant Outcomes from Validating Evidence on ImpacT (PROVE-IT) of Line Probe Assay and MTB/RIF on Presumptive Diagnosis of DR-TB in Brazil</td>
<td>Brazil</td>
<td>MDR suspects</td>
<td>AFRANIO LINEU KRITSKI</td>
<td>REDE TB / MEDICAL SCHOOL OF FEDERAL UNIVERSITY OF RIO DE JANEIRO FIOVR</td>
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<tr>
<td>Feasibility, impact and cost-efficiency of decentralizing molecular testing for detection of tuberculosis and rifampicin resistance using Xpert MTB/Rif</td>
<td>South Africa</td>
<td>All TB suspects</td>
<td>Andrew Whitelaw</td>
<td>NHLS / University of Cape Town</td>
</tr>
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</table>
Project Overview

- Project contact & collaborators
- Programmatic implementation
- Research Location
- Timelines
- Publications
- Study design
- Research Setting
- Outcomes
- Diagnostic algorithms
- Other new tools
- Source of Funding
Some Research Details

Target population

- All TB suspects (14)
- HIV-infected (9)
- MDR suspects (7)
- Children (4)
- Other: EPTB, smear negative suspects (2)

Most countries:
No implementation at programme level
Level

- Point of care (14)
- District (11)
- Central (7)
Outcomes (selected)

- Case finding compared to smear or culture
- Comparison of diagnostic algorithms
- Time to detection, time to treatment
- Mortality
- Yield from other samples (EPTB, blood, children)
- Xpert as rule-out test (pre IPT)
- Public Health implications
Impact assessment

- Health system costs (13)
- Patient costs (12)
- Health system requirements (12)
- Equity issues: gender inequality, access etc. (3)
Conclusions

- Multiple research projects ongoing
- There must be more!
- Comprehensive information on research approaches and anticipated outcomes
- Is it useful?
- Potential to inform research community and policy makers alike
Participate and enter your Xpert MTB/RIF research project:
www.xrmt.treattb.org

For questions: xpertmappingtool@theunion.org

Thank you: all the participants in the project
Christine Hunt, Cathriona MacCauley, Don Koller