

## New Diagnostics Working Group

New Diagnostics Working Group E-News  
October 2013

### New scientific articles

[Comparative Evaluation of GenoType MTBDRplus Line Probe Assay with Solid Culture Method in Early Diagnosis of Multidrug Resistant Tuberculosis \(MDR-TB\) at a Tertiary Care Centre in India.](#)

Yadav RN, Singh BK, Sharma SK, Sharma R, Soneja M, Sreenivas V, Myneedu VP, Hanif M, Kumar A, Sachdeva KS, Paramasivan CN, Vollepore B, Thakur R, Raizada N, Arora SK, Sinha S. PLoS One. 2013 Sept

[Rifampicin heteroresistance in Mycobacterium tuberculosis cultures detected by phenotypic and genotypic drug susceptibility test methods.](#)

Folkvardsen DB, Thomsen VO, Rigouts L, Rasmussen EM, Bang D, Bernaerts G, Werngren J, Toro JC, Hoffner S, Hillemann D, Svensson E. J Clin Microbiol. 2013 Sep

[Bio-microfluidic platform for gold nanoprobe based DNA detection--application to Mycobacterium tuberculosis.](#)

Bernacka-Wojcik I, Lopes P, Catarina Vaz A, Veigas B, Jerzy Wojcik P, Simões P, Barata D, Fortunato E, Viana Baptista P, Aguas H, Martins R. Biosensor and Bioelectronics 2013 Sept

[Combination of multiplex PCR with denaturing high-performance liquid chromatography for rapid detection of Mycobacterium genus and simultaneous identification of the Mycobacterium tuberculosis complex.](#)

Chen R, Gao XB, Liu ZH, Shen XB, Guo AZ, Duan YY, Liu ZL, Wu XW, Zhu DZ. Diagn Microbiol Infect Dis. 2013 Sept

[Xpert MTB/RIF for diagnosis of tuberculosis and drug-resistant tuberculosis: a cost and affordability analysis.](#)

Pantoja A, Fitzpatrick C, Vassall A, Weyer K, Floyd K. ERJ. 2013 Sept

[Evolution of high-level ethambutol-resistant tuberculosis through interacting mutations in decaprenylphosphoryl- \$\beta\$ -D-arabinose biosynthetic and utilization pathway genes.](#)

Safi H, Lingaraju S, Amin A, Kim S, Jones M, Holmes M, McNeil M, Peterson SN, Chatterjee D, Fleischmann R, Alland D. Nat. Gen. 2013 Sept

[Characteristics of IFN- \$\gamma\$  responses in IGRA among pulmonary TB suspects in a TB-endemic area.](#)

Feng JY, Huang SF, Lee MC, Ting WY, Chen YC, Lin YY, Lee YC, Su WJ. Diagn Microbiol Infect Dis. 2013 Sept

[Xpert® MTB/RIF in pleural fluid for the diagnosis of tuberculosis \[Short communication\].](#)

Porcel JM, Palma R, Valdés L, Bielsa S, San-José E, Esquerda A. Int J Tuberc Lung Dis. 2013 Sep

[Incremental value of T-SPOT.TB for diagnosis of active pulmonary tuberculosis in children in a high-burden setting: a multivariable analysis.](#)

Ling DI, Nicol MP, Pai M, Pienaar S, Dendukuri N, Zar HJ. Thorax. 2013 Sept

[Rifampicin-resistant and rifabutin-susceptible Mycobacterium tuberculosis strains: a breakpoint artefact?](#)

Schön T, Juréen P, Chryssanthou E, Giske CG, Kahlmeter G, Hoffner S, Angeby K. J Antimicrob Chemother. 2013 Sep

[Factors influencing discordant results of the QuantiFERON-TB Gold In-tube test in patients with active TB.](#)

Jeon YL, Nam YS, You E, Yang JJ, Kim MJ, Cho SY, Park TS, Lee HJ. J Infect. 2013 Sept

[The sensitivity of an interferon- \$\gamma\$  release assay in microbiologically confirmed pediatric tuberculosis.](#)  
Schopfer K, Rieder HL, Bodmer T, Steinlin-Schopfer JF, Chantana Y, Studer P, Laurent D, [Richner B.](#) Eur J Pediatr. 2013 Sept

## Other Publications

[Multidrug-resistant tuberculosis in children: evidence from global surveillance.](#)  
Zignol M, Sismanidis C, Falzon D, Glaziou P, Dara M, Floyd K. ERJ. 2013 Sept

### [Threat Report 2013](#)

This report, Antibiotic resistance threats in the United States, 2013 gives a first-ever snapshot of the burden and threats posed by the antibiotic-resistant germs having the most impact on human health. Centers for Disease Control and Prevention. 2013 Sept

[Costs of tuberculosis disease in the EU – a systematic analysis and cost calculation.](#)

Diel R, Vandeputte J, de Vries G, Stillo J, Wanlin M, Nienhaus A. ERJ. 2013 Sept

[Out-of-Africa migration and Neolithic coexpansion of Mycobacterium tuberculosis with modern humans](#)

Comas I, Coscolla M, Luo T, Borrell S, Holt KE, Kato-Maeda M, Parkhill J, Malla B, Berg S, Thwaites G, Yeboah-Manu D, Bothamley G, Mei J, Wei L, Bentley S, Harris SR, Niemann S, Diel R, Aseffa A, Gao Q, Young D, Gagneux S. Nat Genet 2013 Sept

[Tuberculosis Medicines Technology and Market Landscape](#)

UNITAID. 2013 Sept

[Management of tuberculosis and HIV coinfection](#)

The WHO Regional Office for Europe is revising five clinical protocols on treatment of and care for people with HIV and AIDS, which were part of the 13 protocols set combined in one volume in 2007. EURO WHO. 2013 Sept

[Best practices in prevention, control and care for drug-resistant tuberculosis. A resource for the continued implementation of the Consolidated Action Plan to Prevent and Combat Multidrug- and Extensively Drug-Resistant Tuberculosis in the WHO European Region, 2011–2015](#)

EURO WHO. 2013 Sept

[Complex genetics of drug resistance in Mycobacterium tuberculosis.](#)

Warner DF, Mizrahi V. Nat. Genet. 2013 Sept

[Antibacterial Activity of and Resistance to Small Molecule Inhibitors of the ClpP Peptidase](#)

CL Compton, KR. Schmitz, RT. Sauer, JK. Sello. ACS Chem Biol 2013 Sept

## News

[First-ever targeted roadmap outlines steps to end childhood TB deaths](#)

Global TB leaders recently launched the *Roadmap for Childhood TB: Towards Zero Deaths*, which includes ten actions that, if implemented, could help save tens of thousands of children's lives, including children infected with both TB and HIV. The actions include training and fostering leadership among health workers, actively seeking out children at risk and providing preventative therapy, and closing the funding gap for childhood TB.

[UK Commits £1 Billion to the Global Fund](#)

The UK's Secretary of State for International Development announced that the UK will contribute £1 Billion (US\$1.6 billion) to the Global Fund to Fight AIDS, Tuberculosis and Malaria for the 2014-2016 period, the second-largest pledge by any government so far.

[TB REACH calls for applications for fourth wave of projects](#)

TB REACH, an initiative of the Stop TB Partnership that aims to increase the number of people with tuberculosis (TB) who are found and provided with quality care, has launched a call for applications for its fourth wave of funding.

### Largest ever roll-out of GeneXpert® rapid TB test machines in 21 countries

UNITAID has invested US\$ 25.9 million to purchase over 220 GeneXpert® machines and 1.4 million test cartridges for 21 countries in Africa, Eastern Europe and Asia. This is the largest ever roll-out of Xpert MTB/RIF, a diagnostic test that shortens the time to diagnose drug-resistant strains of TB from weeks to only a few hours. Co-ordinated by the World Health Organization and the Stop TB Partnership, this project – known as TBXpert– is estimated to save an additional 62,000 lives.

### How much does TB cost in Europe

R. Alagna. Blog TBInnovation. 2013 Sept.

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