

Stop TB Partnership
New Diagnostics Working Group

**New Diagnostics Working Group E-news
(Jan 2014)**

New scientific articles

[Diagnostic accuracy of interferon gamma-induced protein 10 for tuberculosis: a meta-analysis.](#)

Guo SJ, Jia LQ, Hu QJ, Long HY, Pang CS, Wen FQ. Int J Clin Exp Med. Jan 2014

[GeneXpert MTB/RIF Version G4 for Identification of Rifampin-Resistant Tuberculosis in a Programmatic Setting.](#)

Osman M, Simpson JA, Caldwell J, Bosman M, Nicol MP. J Clin Microbiol. Feb 2014

[Point-of-Care System for Detection of *Mycobacterium tuberculosis* and Rifampin Resistance in Sputum Samples.](#)

Castan P, de Pablo A, Fernández-Romero N, Rubio JM, Cobb BD, Mingorance J, Toro C. J Clin Microbiol. 2014 Feb

[Variability of the QuantiFERON®-TB Gold In-Tube Test Using Automated and Manual Methods.](#)

Whitworth WC, Goodwin DJ, Racster L, West KB, Chuke SO, Daniels LJ, Campbell BH, Bohanon J, Jaffar AT, Drane W, Sjoberg PA, Mazurek GH. PLoS One. 2014 Jan

[Analysis of miRNA expression profiling in human macrophages responding to *Mycobacterium* infection: induction of the immune regulator miR-146a.](#)

Liu Z, Zhou G, Deng X, Yu Q, Hu Y, Sun H, Wang Z, Chen H, Jia C, Wang D. J Infect. 2014 Jan

[Gold nanoprobe for multi loci assessment of multi-drug resistant tuberculosis.](#)

Pedrosa P, Veigas B, Machado D, Couto I, Viveiros M, Baptista PV. Tuberculosis (Edinb). 2014 Jan

[Phylogenetic polymorphisms in antibiotic resistance genes of the *Mycobacterium tuberculosis* complex.](#)

Feuerriegel S, Köser CU, Niemann S. J Antimicrob Chemother. 2014 Jan

[A rapid fluorescence polarization-based method for genotypic detection of drug resistance in *Mycobacteriumtuberculosis*.](#)

Sun Y, Li S, Zhou L, Zhou L, Zhong Q, Fang S, Chen T, Bi L, Mat WK, Zhao C, Xue H. Appl Microbiol Biotechnol. 2014 Jan

[Xpert® MTB/RIF assay for pulmonary tuberculosis and rifampicin resistance in adults](#)

Steingart KR, Schiller I, Horne DJ, Pai M, Boehme CC, Dendukuri N. Cochrane Database Syst Rev. 2014 Jan

[Point-of-care urine test for assessing adherence to isoniazid treatment for tuberculosis.](#)

Soobrattee MR, Whitfield R, Subramaniam K, Grove G, Carver A, O'Donovan GV, Wu HH, Lee OY, Swaminathan R, Cope GF, Milburn HJ. Eur Respir J. 2014 Jan

[Evaluation of two line probe assays for rapid detection of *Mycobacterium tuberculosis*, tuberculosis drug resistance, and non-tuberculosis mycobacteria in HIV-infected TB suspects.](#)

Luetkemeyer AF, Kendall MA, Wu X, Lourenço MC, Jentsch U, Swindells S, Qasba SS, Sanchez J, Havlir DV, Grinzstein B, Sanne IM, Firnhaber C. J Clin Microbiol. 2014 Jan

[Application of lipoarabinomannan antigen in tuberculosis diagnostics: current evidence.](#)

Sarkar P, Biswas D, Sindhwan G, Rawat J, Kotwal A, Kakati B. Postgrad Med J. 2014 Jan 15

[Performance of the MTBDRsl assay in Georgia.](#)

Tukvadze N, Bablishvili N, Apsindzelashvili R, Blumberg HM, Kempker RR. Int J Tuberc Lung Dis. 2014 Feb

Second-line drug susceptibility breakpoints for *Mycobacterium tuberculosis* using the MODS assay.

Trollip AP, Moore D, Coronel J, Caviedes L, Klages S, Victor T, Romancenco E, Crudu V, Ajbani K, Vineet VP, Rodrigues C, Jackson RL, Eisenach K, Garfein RS, Rodwell TC, Desmond E, Groessl EJ, Ganiats TG, Catanzaro A.
Int J Tuberc Lung Dis. 2014 Feb

Evaluation of Xpert MTB/RIF for the diagnosis of tuberculous meningitis.

Nhu NT, Heemskerk D, Thu do DA, Chau TT, Mai NT, Nghia HD, Loc PP, Ha DT, Merson L, Thinh TT, Day J, Chau Nv, Wolbers M, Farrar J, Caws M. J Clin Microbiol. 2014 Jan

Nitrate reductase assay for rapid detection of isoniazid, rifampicin, ethambutol and streptomycin resistance in *Mycobacterium tuberculosis*: a systematic review and meta-analysis

Coban AY, Deveci A, Sunter AT, Martin A. J Clin Microbiol. 2014 Jan

Interferon-gamma immunospot assay of pleural effusion mononuclear cells for diagnosis of tuberculous pleurisy

Liao M, Yang Q, Zhang J, Zhang M, Deng Q, Liu H, Graner MW, Kornfeld H, Zhou B, Chen X. Clin Vaccine Immunol. 2014 Jan

Significant reduction in the rate of indeterminate results of QuantiFERON-TB Gold In-Tube test by shortening incubation delay

Yun JW, Chung HS, Koh WJ, Chung DR, Kim YJ, Kang ES. J Clin Microbiol. 2014 Jan

Key Publications

WHO Executive Board recommends post-2015 global TB strategy to Assembly

- [Resolution developed by the Executive Board](#)
- [WHO report on the proposed post-2015 TB Strategy and targets \(as presented to the Executive Board\)](#)
- [Short summary of the proposed post-2015 TB Strategy and targets](#)

WHO

Review of the National Tuberculosis Programme in the Republic of Moldova

WHO Europe

New report: Collaborative action on tuberculosis and alcohol abuse in Estonia

WHO Europe

TB Care I Annual Report Year 3

TB Care I

Other Publications

Spectinamides: a new class of semisynthetic antituberculosis agents that overcome native drug efflux.

Lee RE, Hurdle JG, Liu J, Bruhn DF, Matt T, Scherman MS, Vaddady PK, Zheng Z, Qi J, Akbergenov R, Das S, Madhura DB, Rathi C, Trivedi A, Villegas C, Lee RB, Rakesh, Waidyarachchi SL, Sun D, McNeil MR, Ainsa JA, Boshoff HI, Gonzalez-Juarrero M, Meibohm B, Böttger EC, Lenaerts AJ. Nat Med. 2014 Jan

Evolution and transmission of drug-resistant tuberculosis in a Russian population.

Casali N, Nikolayevskyy V, Balabanova Y, Harris SR, Ignatyeva O, Kontsevaya I, Corander J, Bryant J, Parkhill J, Nejentsev S, Horstmann RD, Brown T, Drobniowski F. Nat Genet. 2014 Jan

Encoded library technology as a source of hits for the discovery and lead optimization of a potent and selective class of bactericidal direct inhibitors of *Mycobacterium tuberculosis* InhA.

Encinas L, O'Keefe H, Neu M, Remuiñán MJ, Patel AM, Guardia A, Davie CP, Pérez-Macías N, Yang H, Convery MA, Messer JA, Pérez-Herrán E, Centrella PA, Alvarez-Gómez D, Clark MA, Huss S, O'Donovan GK, Ortega-Muro F, McDowell W, Castañeda P, Arico-Muendel CC, Pajk S, Rullás J, Angulo-Barturen I, Alvarez-Ruiz E, Mendoza-Losana A, Pages LB, Castro-Pichel J, Evindar G. J Med Chem. 2014 Jan

Tuberculosis elimination: theory and practice in Europe

D'Ambrosio L, Dara M, Tadolini M, Centis R, Sotgiu G, van der Werf MJ, Gaga M, Cirillo D, Spanevello A, Ravaglione M, Blasi F, Migliori GB; on behalf of the European national programme representatives. Eur Respir J. 2014 Jan

ERS/WHO Tuberculosis Consilium: reporting of the initial 10 cases

D'Ambrosio L, Tadolini M, Dupasquier S, Tiberi S, Centis R, Dara M, Blasi F, Migliori GB. Eur Respir J. 2014 Jan

Circulating Mycobacterium bovis Peptides and Host Response Proteins as Biomarkers for Unambiguous Detection of Subclinical Infection.

Lamont EA, Janagama HK, Ribeiro-Lima J, Vulchanova L, Seth M, Yang M, Kurmi K, Waters WR, Thacker T, Sreevatsan S. J Clin Microbiol. 2014 Feb

Infectious disease: New leads for resistant tuberculosis.

Harrison C. Nat Rev Drug Discov Jan 2014

Mozambique faces challenges in the fight against tuberculosis.

García-Basteiro AL, López-Varela E, Manhiça I, Macete E, Alonso PL. Lancet. 2014 Jan

Tuberculosis: progress and challenges in product development and delivery.

Pai M, Dowdy D. Lancet Respir Med. 2014 Jan

Long-term outcomes of patients with extensively drug-resistant tuberculosis in South Africa: a cohort study

Pietersen E, Ignatius E, Streicher EM, Mastrapa B, Padanilam X, Pooran A, Badri M, Lesosky M, van Helden P, Sirgel FA, Warren R, Dheda K. Lancet. 2014 Jan 16.

Sterilization of granulomas is common in active and latent tuberculosis despite within-host variability in bacterial killing

Lin PL, Ford CB, Coleman MT, Myers AJ, Gawande R, Ioerger T, Sacchettini J, Fortune SM, Flynn JL. Nat Med. 2014 Jan

Mycobacteria manipulate macrophage recruitment through coordinated use of membrane lipids

Cambier CJ, Takaki KK, Larson RP, Hernandez RE, Tobin DM, Urdahl KB, Cosma CL, Ramakrishnan L. Nature. 2014 Jan

Role of clofazimine in the treatment of multidrug-resistant tuberculosis: a retrospective observational cohort assessment

Xu HB, Jiang RH, Tang SJ, Li L, Xiao HP. J Antimicrob Chemother. 2014 Jan

Improving the health of the tuberculosis drug pipeline

Burki T. The Lancet Inf Dis. 2014 Jan

Tuberculosis drug discovery in the post-post-genomic era

Lechartier B, Rybníkář J, Zumla A, Cole ST. EMBO Mol Med. 2014 Jan

Fluoroquinolone resistance in *Mycobacterium tuberculosis*. What have we learnt?

Yew WW, Lange C. Int J Tuberc Lung Dis. 2014 Jan

News

Tackling drug-resistant TB in London

TB: how many young children are wrongly diagnosed as disease-free?

When Tb research meets innovative ideas