

Top 5 adult ID papers

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Top 5 adult ID papers from Southern Africa

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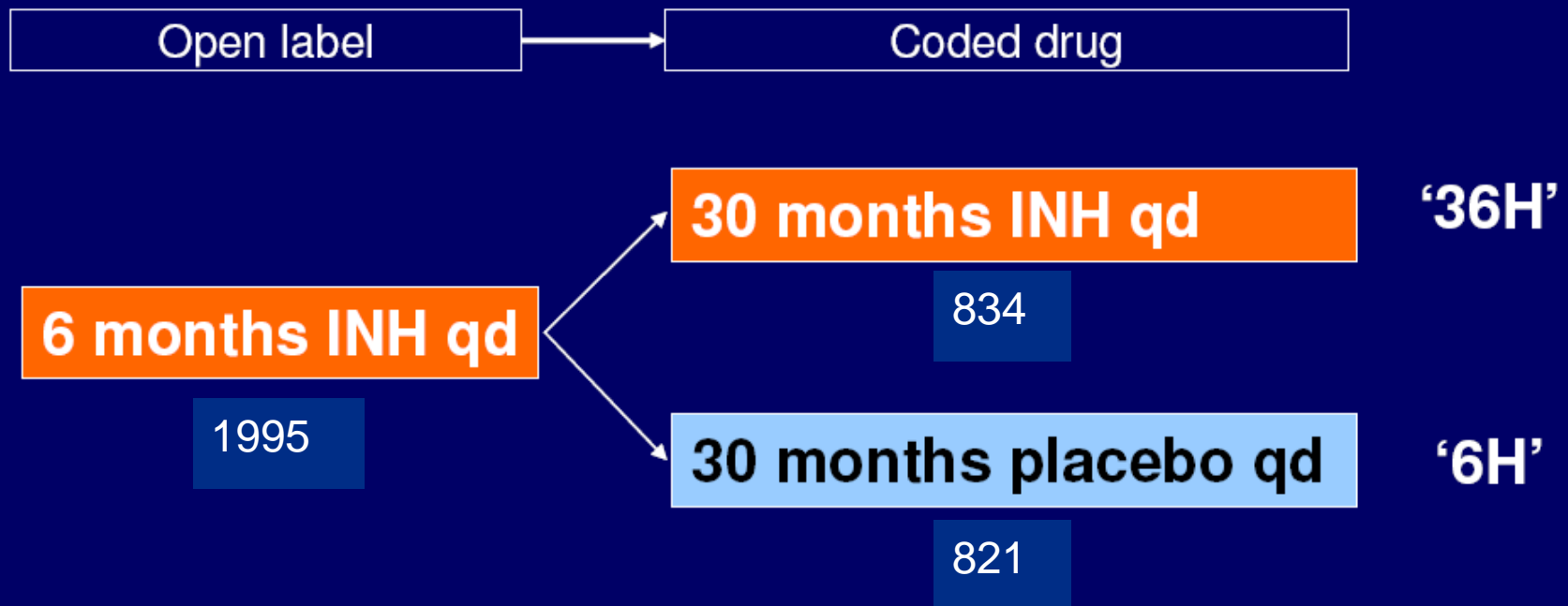
6-month versus 36-month isoniazid preventive treatment for tuberculosis in adults with HIV infection in Botswana: a randomised, double-blind, placebo-controlled trial

Taraz Samandari, Tefera B Agizew, Samba Nyirenda, Zegabriel Tedla, Thabisa Sibanda, Nong Shang, Barudi Mosimaneotsile, Oaitse I Motsamai, Lorna Bozeman, Margaret K Davis, Elizabeth A Talbot, Themba L Moeti, Howard J Moffat, Peter H Kilmarx, Kenneth G Castro, Charles D Wells

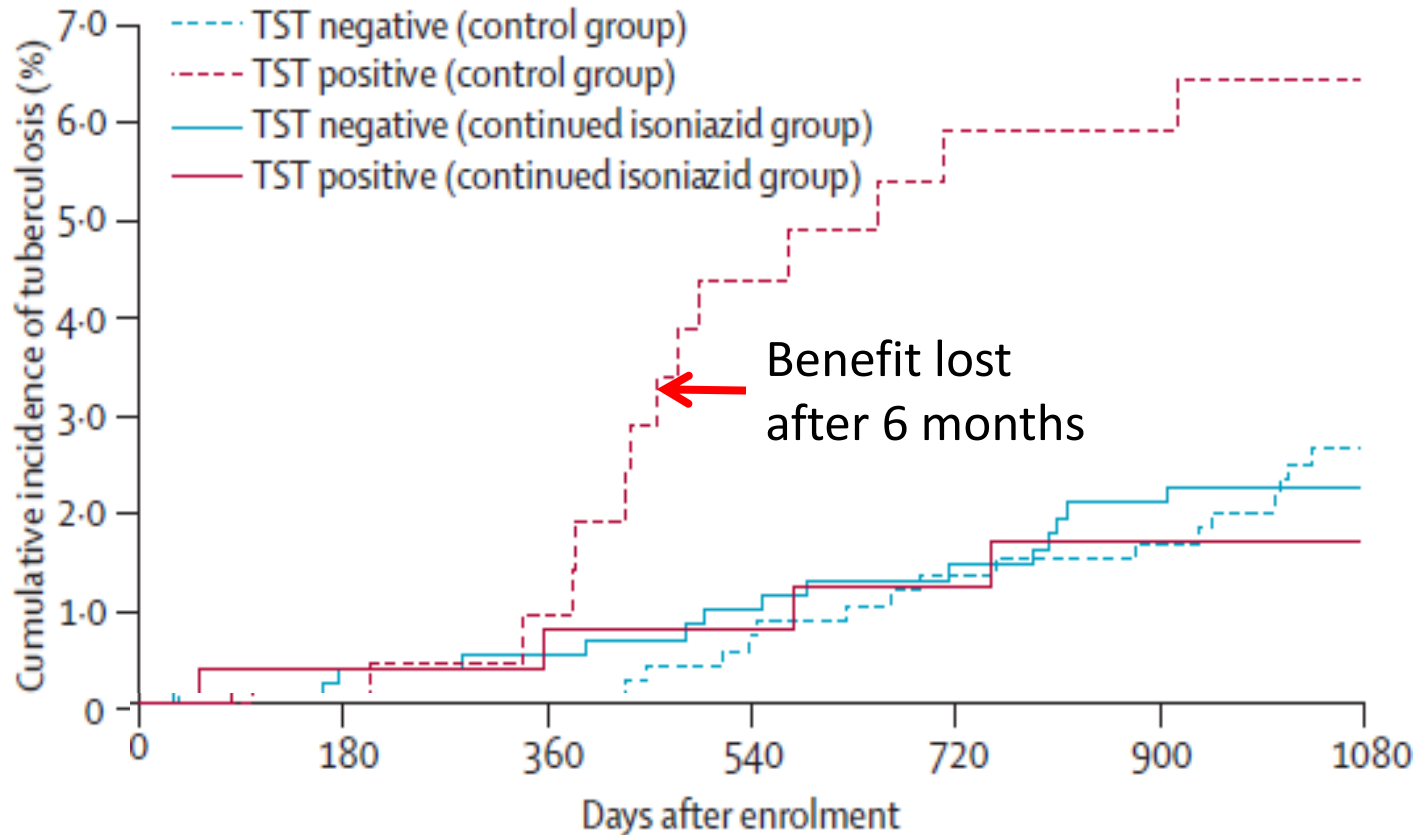
BOTUSA study

Randomized Double-Blind Placebo Controlled Trial

98% not on ART at start

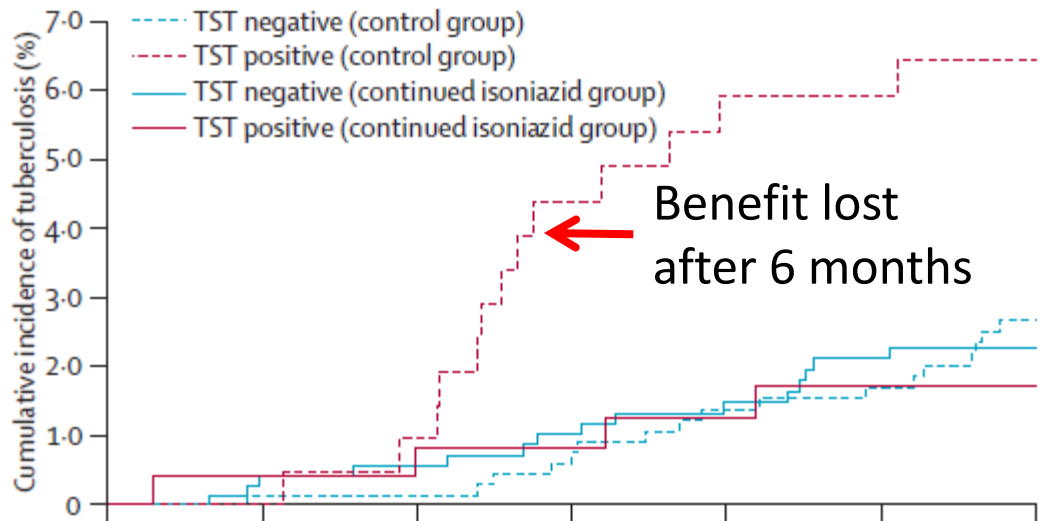


Incidence of TB



TST+ HR 0.08 (0.01–0.61)

TST- HR 0.86 (0.38–1.89)



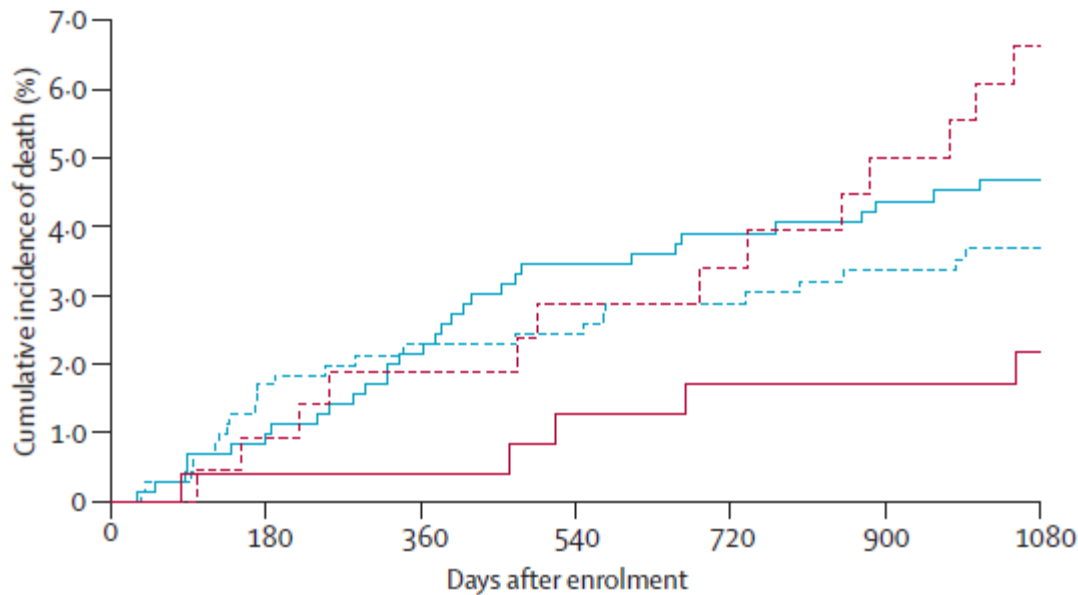
TB

HR 0.57 (95% CI 0.33–0.99)

TST+ HR 0.08 (0.01–0.61)

TST- HR 0.86 (0.38–1.89)

B



Death

TST+ HR 0.28 (0.08–1.03)

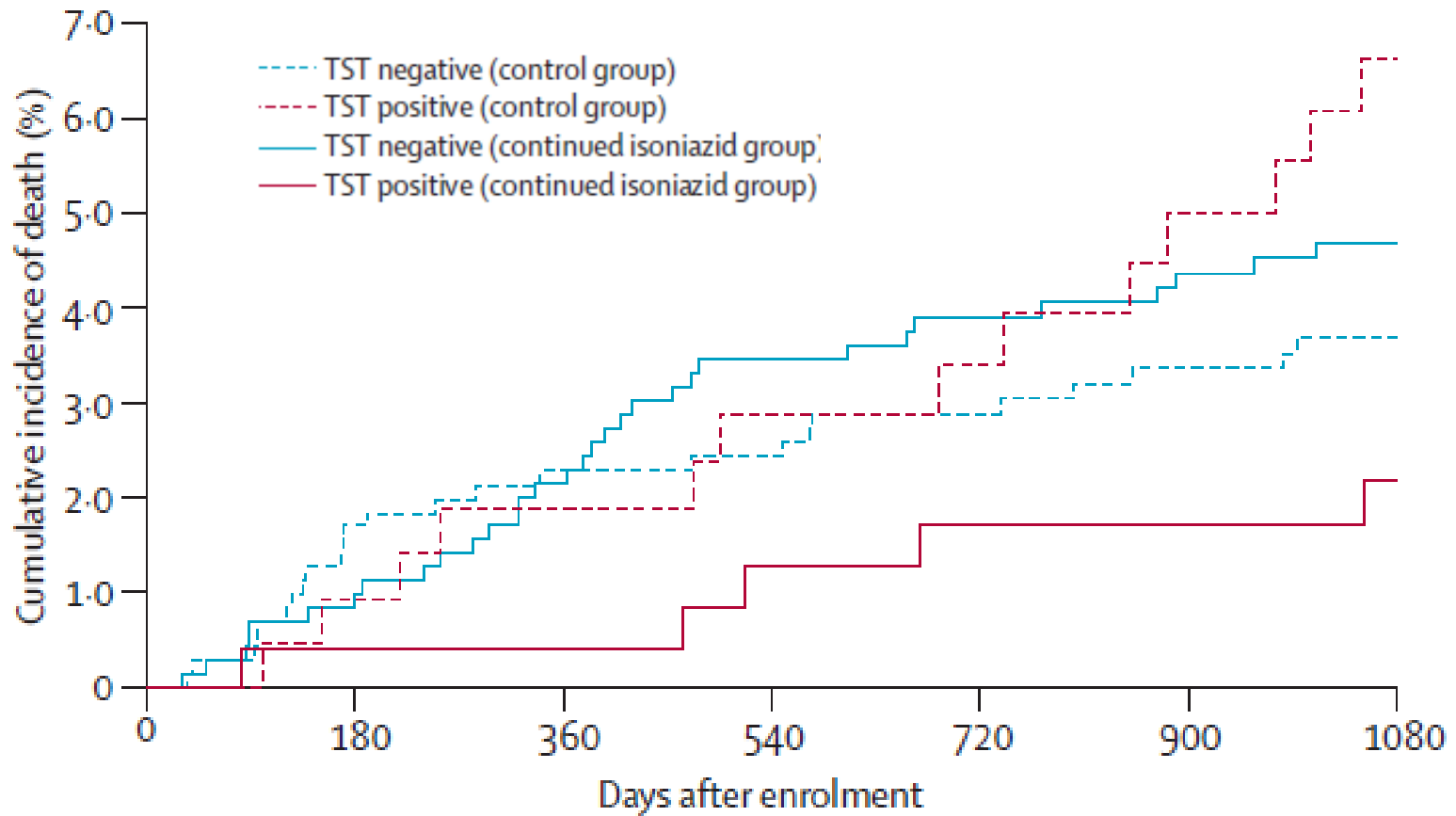
TST- HR 2.99 (1.27–7.04)

Severe AEs >6 months

1% placebo

1.3% INH

Incidence of death



TST+ HR 0.28 (0.08–1.03)

TST- HR 2.99 (1.27–7.04)

IPT & ART - BOTUSA

	Tuberculin skin test negative		Tuberculin skin test positive	
	Adjusted hazard ratio (95% CI)	Reduction (%)	Adjusted hazard ratio (95% CI)	Reduction (%)
Antiretroviral therapy (control group)				
None	1.00 (referent)	..	1.00 (referent)	..
180 days	0.76 (0.58–0.99)	24%	0.76 (0.58–0.99)	24%
270 days	0.61 (0.39–0.98)	39%	0.61 (0.39–0.98)	39%
360 days	0.50 (0.26–0.97)	50%	0.50 (0.26–0.97)	50%
540 days	0.33 (0.11–0.94)	67%	0.33 (0.11–0.94)	67%
Antiretroviral therapy (continued isoniazid group)				
None	0.92 (0.40–2.1)	8%	0.08 (0.01–0.63)	92%
180 days	0.69 (0.29–1.64)	31%	0.06 (0.008–0.49)	94%
270 days	0.56 (0.22–1.44)	44%	0.05 (0.006–0.40)	95%
360 days	0.45 (0.16–1.30)	54%	0.04 (0.005–0.35)	96%
540 days	0.30 (0.08–1.15)	70%	0.03 (0.003–0.27)	97%

We calculated adjusted hazard ratios using the same Cox regression model as is described in figure 4.

Table 3: Multivariable analysis of the effect on tuberculosis incidence of antiretroviral therapy

1 year of ART reduced TB by 50%.

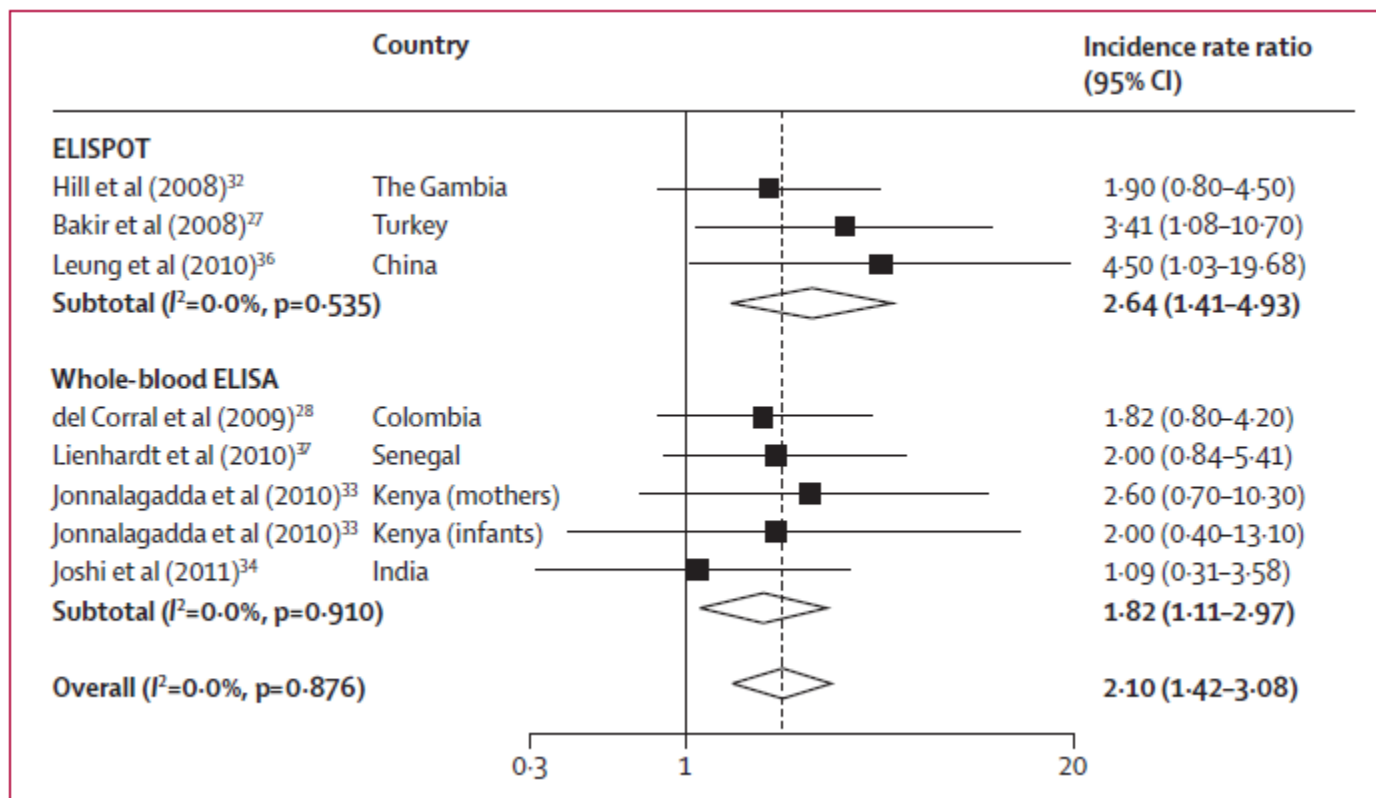
No significant additional effect in TST+ on 36 months INH

Predictive value of interferon- γ release assays for incident active tuberculosis: a systematic review and meta-analysis

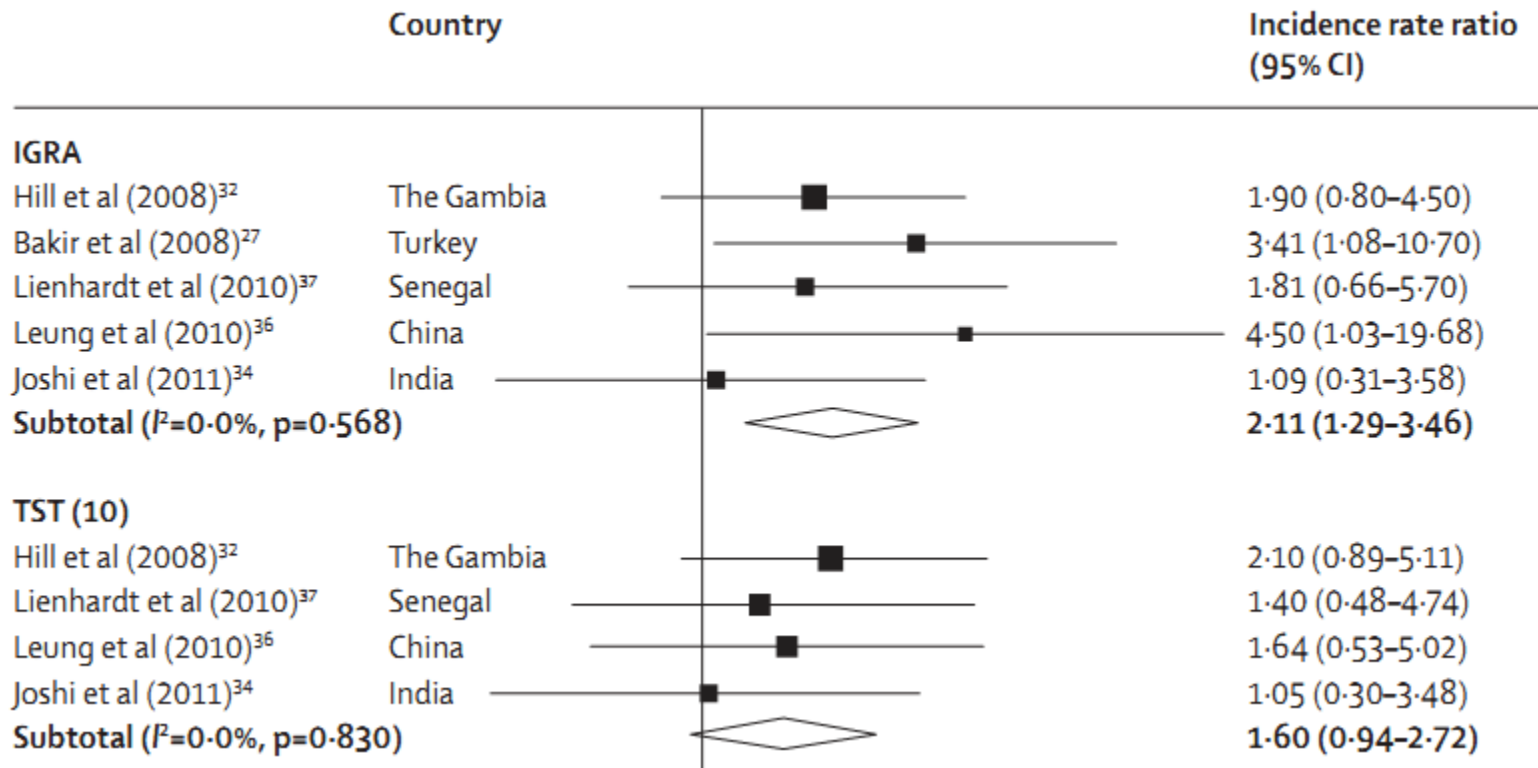
Molebogeng X Rangaka, Katalin A Wilkinson, Judith R Glynn, Daphne Ling, Dick Menzies, Judith Mwansa-Kambafwile, Katherine Fielding, Robert J Wilkinson, Madhukar Pai

Diagnosing latent TB infection

- Immune response (γ -IFN production) to specific antigens for *M. tuberculosis* (ESAT-6 & CFP-10), therefore no cross reaction with BCG or environmental mycobacteria
- No need for patient to return to read result
- Already accepted (NICE, CDC) but unclear if IGRAs are better than tuberculin skin tests at predicting the development of active TB



IGRA vs TST for predicting TB excluding studies with incorporation bias

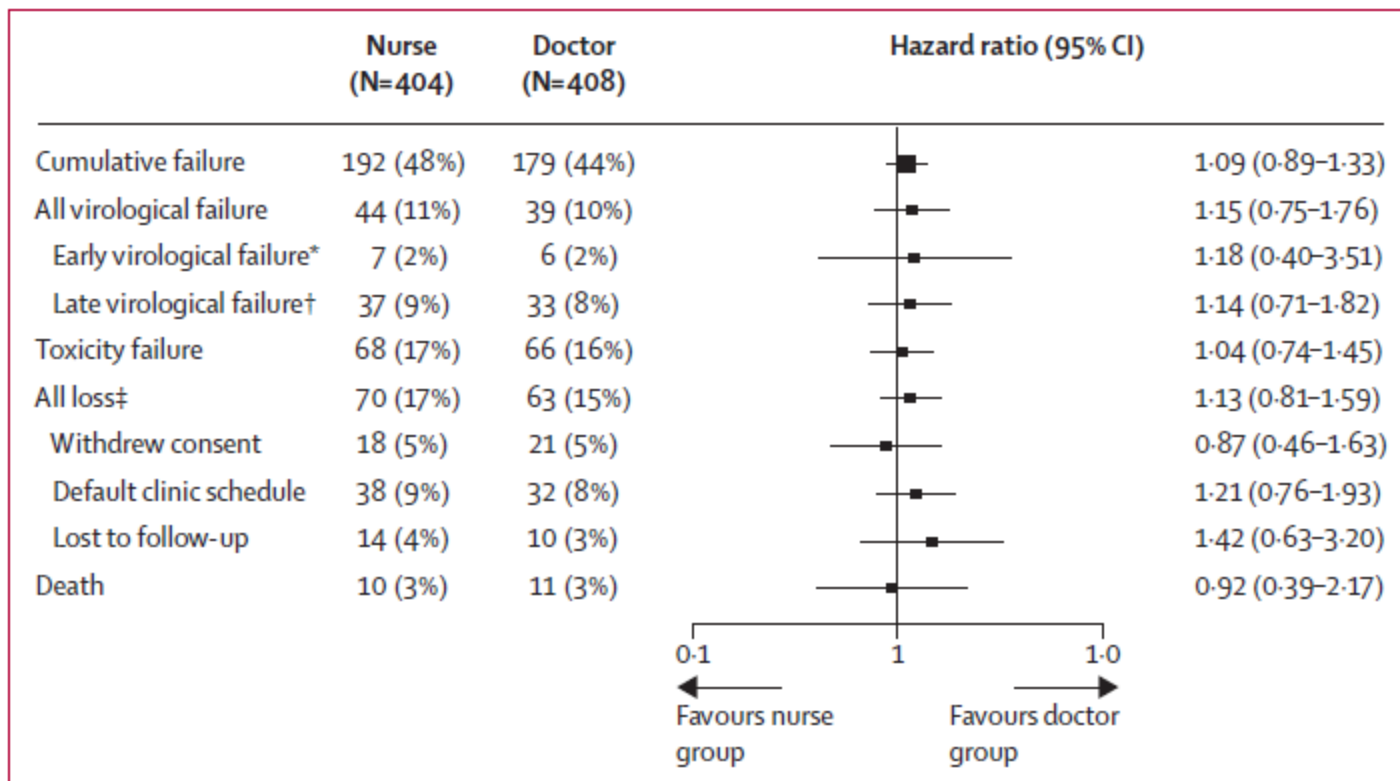


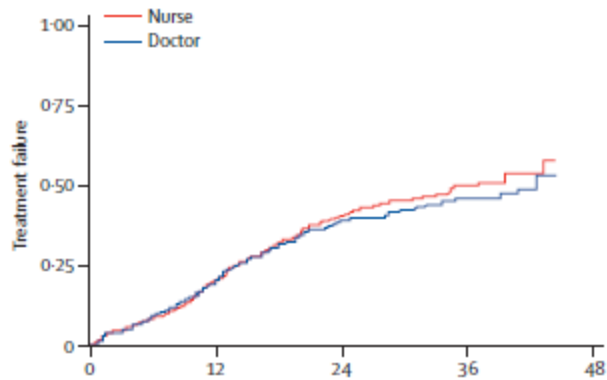
Nurse versus doctor management of HIV-infected patients receiving antiretroviral therapy (CIPRA-SA): a randomised non-inferiority trial

*Ian Sanne, Catherine Orrell, Matthew P Fox, Francesca Conradie, Prudence Ive, Jennifer Zeinecker, Morna Cornell, Christie Heiberg, Charlotte Ingram, Ravindre Panchia, Mohammed Rassool, René Gonin, Wendy Stevens, Handré Truter, Marjorie Dehlinger, Charles van der Horst, James McIntyre, Robin Wood, for the CIPRA-SA Study Team**

Nurse vs doctor ART management

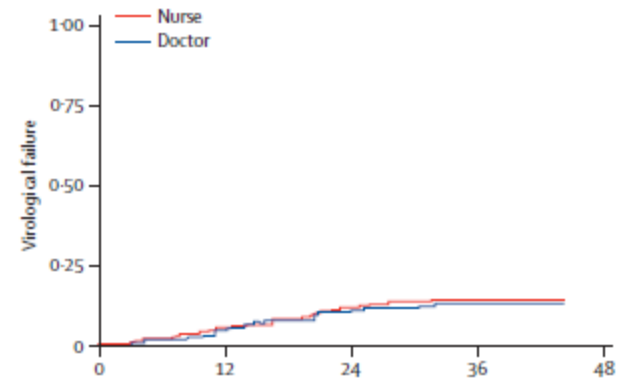
- Composite primary endpoint:
 - Mortality, LTFU, VL failure, toxicity (ART interruption ≥ 42 days), HIV disease progression
- Non-inferiority trial
 - HR upper 95% CI < 1.4 for treatment failure
- All ART doctor-initiated
- CD4 < 350
- 812 randomised



A

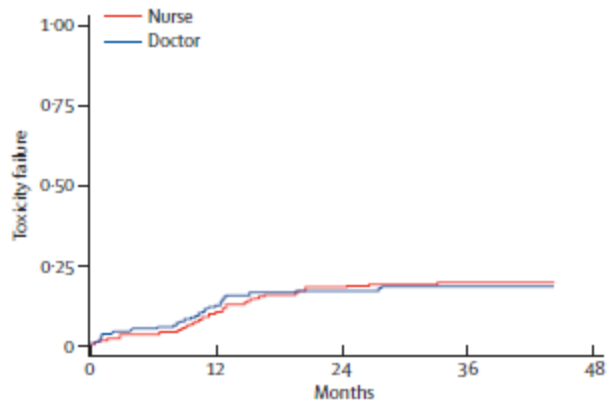
Number at risk (events)

Nurse	404	(83)	319	(78)	234	(27)	61	(4)	0
Doctor	408	(82)	324	(75)	241	(19)	65	(3)	0

B

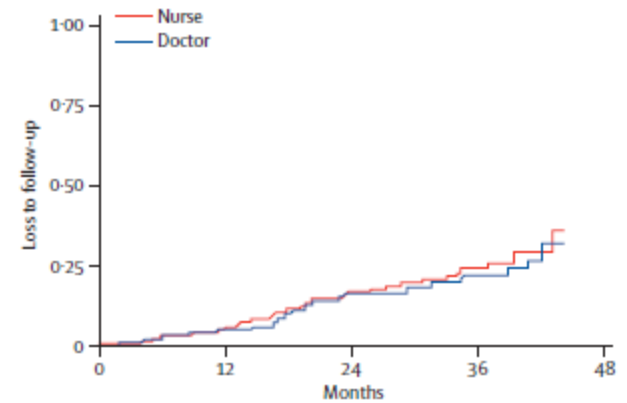
Number at risk (events)

Nurse	404	(20)	319	(19)	234	(5)	61	(0)	0
Doctor	408	(15)	324	(18)	241	(6)	65	(0)	0

C

Number at risk (events)

Nurse	404	(38)	319	(26)	234	(4)	61	(0)	0
Doctor	408	(44)	324	(18)	241	(4)	65	(0)	0

D

Number at risk (events)

Nurse	404	(19)	319	(32)	234	(15)	61	(4)	0
Doctor	408	(14)	324	(37)	241	(9)	65	(3)	0

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Antiretroviral Therapies in Women after Single-Dose
Nevirapine Exposure

S. Lockman, M.D. Hughes, J. McIntyre, Y. Zheng, T. Chipato, F. Conradie, F. Sawe, A. Asmelash, M.C. Hosseinipour, L. Mohapi, E. Stringer, R. Mngqibisa, A. Siika, D. Atwine, J. Hakim, D. Shaffer, C. Kanyama, K. Wools-Kaloustian, R.A. Salata, E. Hogg, B. Alston-Smith, A. Walawander, E. Purcelle-Smith,* S. Eshleman, J. Rooney, S. Rahim, J.W. Mellors, R.T. Schooley, and J.S. Currier, for the OCTANE A5208 Study Team†

Effect of sdNVP for PMTCT on response to ART

- After intrapartum sdNVP 60-80% of women have NNRTI resistant mutations
- Cohort data suggest that responses to subsequent NVP-based ART are good provided >12 months elapse after sdNVP

Octane trials

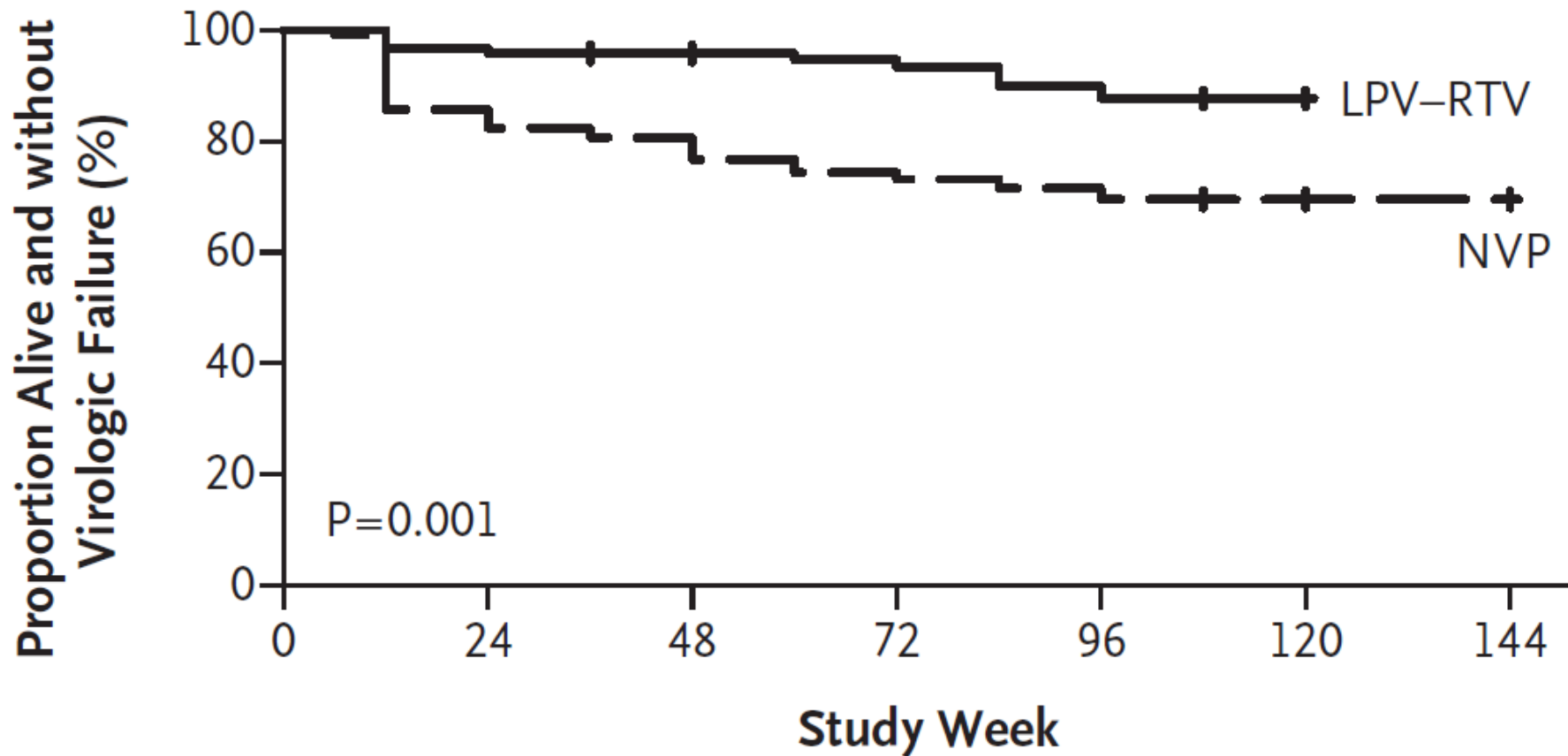
- RCT TDF + FTC with either NVP or LPV/r
- Two trials
 - Trial 1 women with sdNVP exposure
 - Trial 2 women without sdNVP exposure

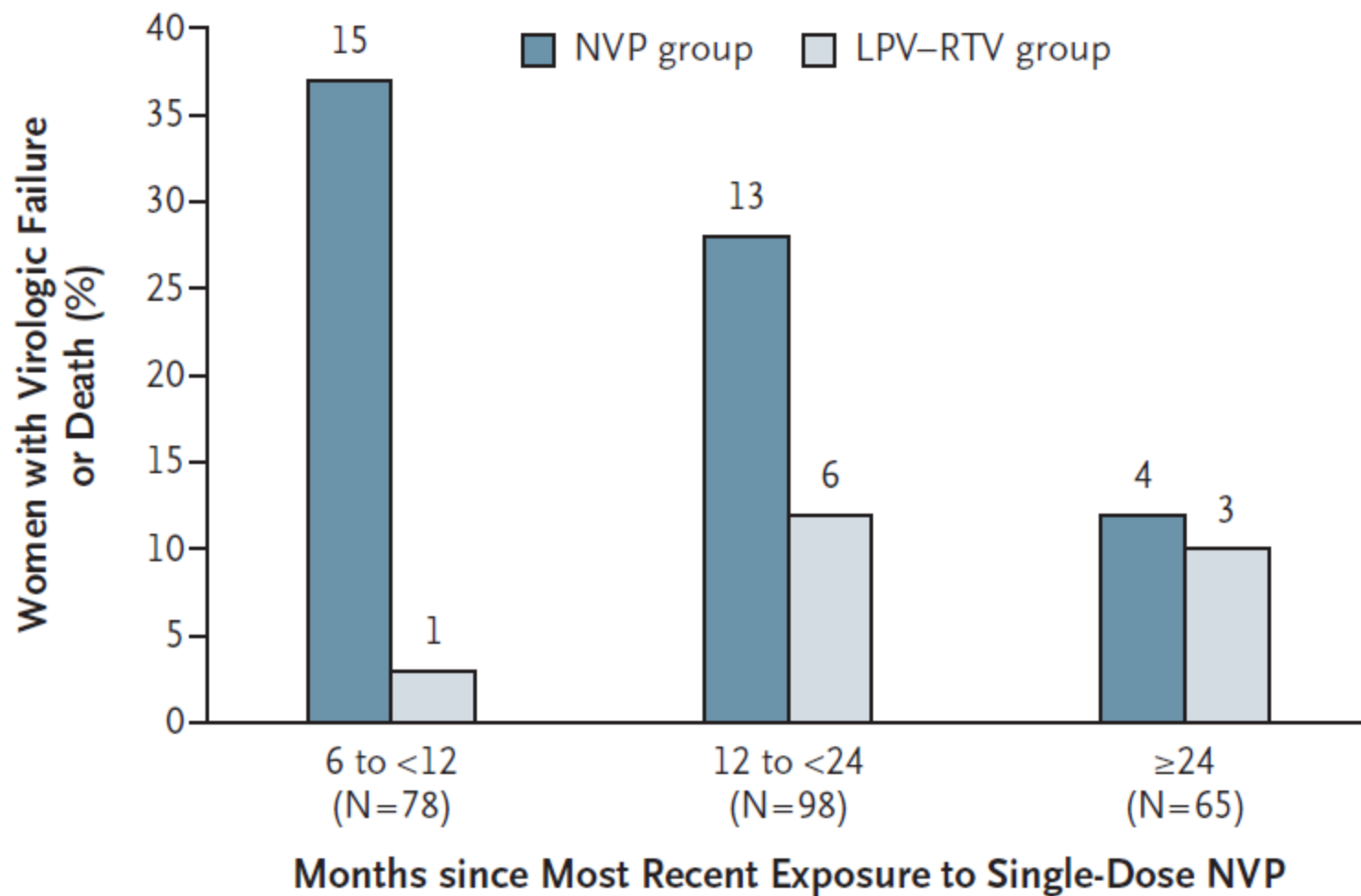
Trial 2

No difference between NVP & LPV/r arms

Hazard ratio 0.97; 95% CI, 0.6 to 1.6

Trial 1





Feasibility, diagnostic accuracy, and effectiveness of decentralised use of the Xpert MTB/RIF test for diagnosis of tuberculosis and multidrug resistance: a multicentre implementation study

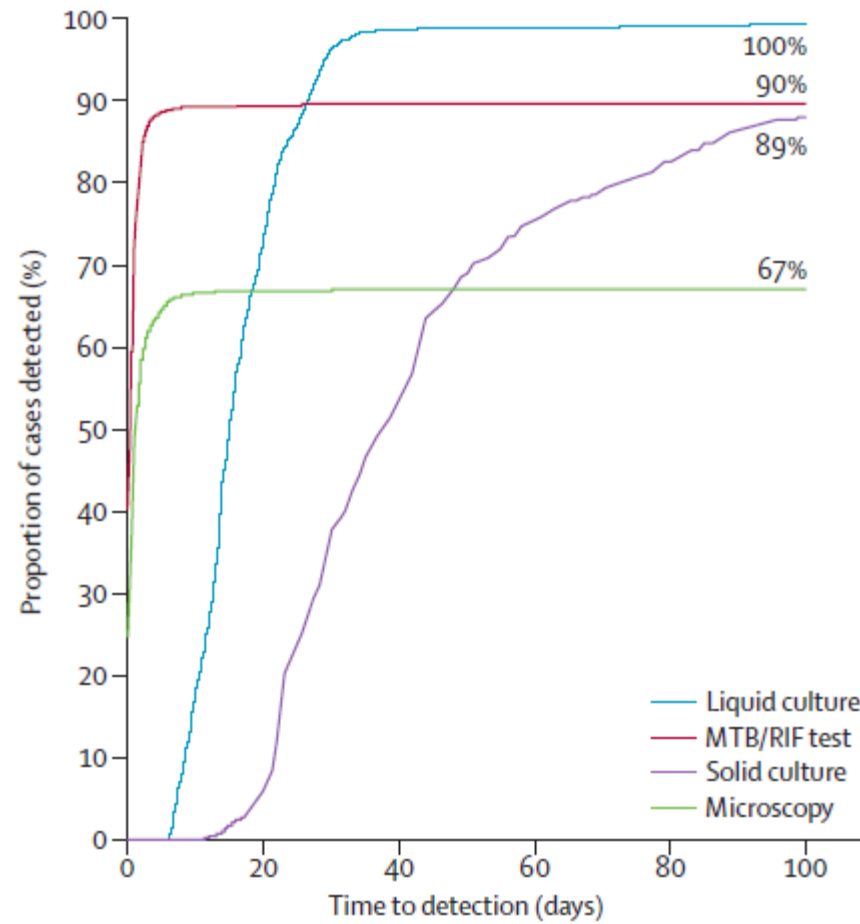
Catharina C Boehme, Mark P Nicol, Pamela Nabeta, Joy S Michael, Eduardo Gotuzzo, Rasim Tahirli, Ma Tarcela Gler, Robert Blakemore, William Worodria, Christen Gray, Laurence Huang, Tatiana Caceres, Rafail Mehdiyev, Lawrence Raymond, Andrew Whitelaw, Kalaiselvan Sagadevan, Heather Alexander, Heidi Albert, Frank Cobelens, Helen Cox, David Alland, Mark D Perkins

Lancet 2011; 377: 1495–1505

- Xpert MTB/RIF real time PCR with potential for point of care diagnosis
- Multicentre study of PTB found sensitivities of 98.2% in smear+ & 72.5% in smear- & specificity 99.2% with one specimen
 - Done in reference laboratories
- ?performance in district and subdistrict health facilities in resource-poor countries

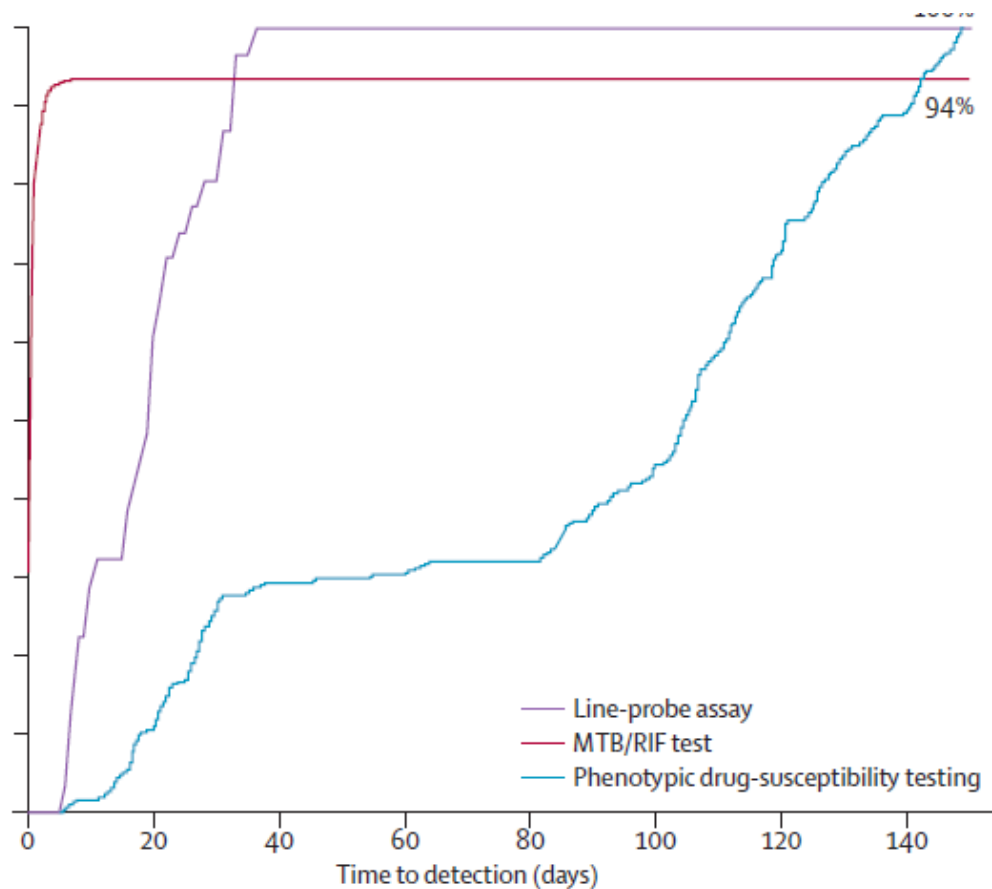
Diagnosis of TB

Sensitivity			Specificity
Smear +	Smear -	Total	
98.3%	76.9%	90.3%	99%



Diagnosis of rifampicin resistance

Sensitivity 94.4%; specificity 98.3%



Effect on time to treatment

