

Report of the HIV/TB Research meeting held in conjunction with the 17th Conference on Retroviruses and Opportunistic Infections (CROI 2010) 16 February 2010, San Francisco, USA

The Stop TB Department of the World Health Organization and the Consortium to Respond Effectively to the AIDS/TB Epidemic organized an HIV/TB research frontiers meeting on behalf of the TB/HIV Working Group of the Stop TB Partnership affiliated with the 17th Conference on Retroviruses and Opportunistic Infections (CROI 2010) in San Francisco, USA on 16 February, 2010.

This was the fourth in a series of meetings organized by WHO and CREATE since 2007. The meeting was co-chaired by Dr Kenneth Castro, Assistant Surgeon General and Director of Division of Tuberculosis Elimination Centers for Disease Control and Prevention and Dr Alison Grant, Head of the Clinical Research Unit in London School of Hygiene and Tropical Medicine. The meeting was opened by Dr Diane Havlir, the chair of the TB/HIV Working Group who described the popularity of the meetings among HIV researchers to stimulate scientific debates and discussions around HIV/TB. The meeting was attended by more than 65 HIV researchers and public health policy makers.

The main objective of the meeting was to promote high level scientific interchange of ideas and debates around isoniazid preventive therapy (IPT) and its role in improving survival among people living with HIV so as to generate questions for future research. New data on the impact of IPT on mortality of people living with HIV was presented from Botswana, India and South Africa.

Presentations

Dr Craig Innes from Aurum Institute of South Africa presented the result of a <u>retrospective observational study</u> of more than 3200 patients on ART, which shows the combined use of IPT and ART may reduce the risk of death by nearly 50%.

Dr Soumya Swaminathan from the TB Research Center in Chennai, India presented a randomized controlled trial with a sample size of 752 that compares 6 month INH and Ethambutol versus 36 month INH which showed no statistically significant difference in mortality in both arms. She said most of the mortality occurred during the first 12 months and there was no difference in mortality based on tuberculin skin test (TST) status. Dr Taraz Samandari from CDC presented a preliminary report of mortality from the Botswana IPT randomized controlled trial with a sample size of 2000 that compares 6 month IPT versus 36 months. He reported that there was non-significant increase in mortality in the 36 months arm than the 6 months. They observed three fold increased death in TST negatives as compared to TST positives, in contrast to the Indian trial.

However, further clinical characterization of the two deaths that were attributed to hepatic encephalopathy (observed among TST negatives) was not conclusive.

Dr Richard Chaisson of John Hopkins and CREATE provided commentary on the role of IPT and mortality and underscored the primary objective of IPT is to prevent TB rather than improving survival. He stated the reasons for absence of significant gain in survival out of IPT including most studies are not powered to look survival benefit and patients enrolled in the trials are often not those with advanced stage of disease and are under active surveillance and follow-up.

Dr Haileyesus Getahun of WHO presented the outcome of a <u>primary patient meta-analysis</u> that was done to develop a rule to screen people living with HIV to put them on IPT and further investigations for TB or other diseases. He also shared the upcoming draft WHO recommendations on IPT and intensified TB screening among people living with HIV.

Dr Alison Grant of London School presented on the <u>role of IPT in settings with high rates of drug resistance TB</u>. She presented summary of the evidence and stated that IPT does not promote drug resistance TB and actually protection from IPT no is no worse with a background of INH resistance. However, she stated that there is scanty information that IPT may be less ineffective in individuals with latent INH resistant TB. There is no evidence about threshold prevalence of INH resistance at which IPT risks exceed benefits. Similarly there is no data on what to do for contacts with MDR TB cases and the available international guidelines are not consistent to each other. She suggested placebo controlled trials for MDR contacts using drugs like high dose INH, fluoroquinolones or new agents (e.g. TMC 207).