

**16:30 Session 3: TB Treatment****Chair: Carlton Evans**16:30 Improving the diagnosis of pleural TB - *Marco Tovar*16:45 Tuberculin skin tests, nutrition and disease status
– *Antonino Curatola*17:00 Human anti-TB immunity is augmented by treating intestinal
worms - *Karine Zevallos*17:15 Weight loss predicts tuberculosis treatment failure and MDRTB
- *Antonio Bernabe***Human anti-TB immunity is augmented by treating intestinal worms**

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Intestinal helminth infections can suppress cellular-immunity and have similar epidemiology to TB so we hypothesized that treating helminths may augment anti-mycobacterial immunity. A double-blind, randomized, placebo-controlled trial was performed in 144 healthy adults in the Amazon. Anti-mycobacterial immunity was quantified *in vivo* using tuberculin skin-testing and *in vitro* as interferon- γ secretion in response to specific TB antigens. These tests and stool parasitology were performed at recruitment and four weeks after deworming with three daily doses of 400 mg albendazole or placebo. Deworming augmented the response to the tuberculin skin test following albendazole therapy ($P=0.03$) but not after placebo. Similarly, the *in vitro* quantification of anti-mycobacterial interferon- γ responses increased after albendazole therapy ($P=0.02$) but not placebo. Consequently, 38% (53/138) of baseline Quantiferon assays were positive at recruitment and albendazole caused 17% (9/53) of the initially negative tests to become positive, compared with 0/49 after placebo ($P=0.003$). Therefore, antihelminthic treatment may modify the interpretation of these TB infection tests and antihelminthic therapy should be evaluated as a strategy for reducing TB susceptibility.

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