Reply to Yates et al

To the Editor—We were pleased to see Yates et al [1] express interest in and share thoughts on our recent article [2]. They suggest that the modest effect size we reported for the odds of cluster index case patients being HIV-negative compared with HIV-positive patients may reflect slower clinical disease progression in HIV-negative patients, and we agree that this is probably part of the explanation for this finding.

In addition, Yates et al have hypothesized a differential effect of antiretroviral therapy (ART) on tuberculosis disease due to reactivation versus reinfection. This is an interesting hypothesis but one that our data are unable to address. In our high-burden setting, >60% of patients initiating ART have a history of previous or current tuberculosis disease [3]; therefore, the vast majority of tuberculosis diagnosed in patients receiving ART is retreatment tuberculosis. Given the high tuberculosis treatment completion rates and extremely high transmission rates [4] in the study community, the large tuberculosis disease burden in patients receiving ART is most likely predominantly due to recent *Mycobacterium tuberculosis* reinfection. Therefore, we believe our suggestion that “ART may not provide protection against progression to disease following recent infection” [2] is appropriate to this study setting.

Notes

Financial support. This work was supported by the National Institutes of Health through the
Comprehensive Integrated Programme of Research on AIDS (grant U19AI053217 to K. M., L. G. B., and R. W., grant U19AI05321, and grant RO1 AI058736-02 to R. W.), and the CIPRA-ZA Project 3 Extension 2007. In addition, funding was provided by the Royal Society (Pfizer award to L. G. B. in 2009), the Haso Plattner Foundation award via the University of Cape Town (to K. M.), and the Columbia University-Southern African Fogarty AIDS International Training and Research Program, funded by the Fogarty International Center, National Institutes of Health (grant D43TW00231 to K. M.).

Disclaimer. The content of this publication does not necessarily reflect the views or policies of the National Institute of Allergy and Infectious Diseases, nor does mention of trade names, commercial projects, or organizations imply endorsement by the US government.

Potential conflicts of interest. All authors: No reported conflicts.

All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

Keren Middelkoop,1,2 Barun Mathema,5,6 Andrew Whitelaw,3,4 Linda-Gail Bekker,1,2 and Robin Wood1,2
1Desmond Tutu HIV Centre, Institute of Infectious Disease & Molecular Medicine, 2Department of Medicine, University of Cape Town, 3Division of Medical Microbiology, University of Stellenbosch, and 4National Health Laboratory Service, Tygerberg Hospital, Cape Town, South Africa; 5Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, New York; and 6Public Health Research Institute Tuberculosis Center, New Jersey Medical School-Rutgers, State University of New Jersey, Newark

References


Received 27 October 2014; accepted 28 October 2014; electronically published 11 November 2014.