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 1U19AI053217 to K. M., L. G. B., and R. W., grant 1U19AI05321, and grant R01 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 Hasso 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.).

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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.

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

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The Journal of Infectious Diseases® 2015;211:1510–1

DOI: 10.1093/infdis/jiu629