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

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