Reviewer's report

Title: Predictors and outcomes of Mycobacterium tuberculosis bacteremia among patients with HIV and tuberculosis co-infection enrolled in the ACTG A5221 STRIDE study

Version: 2 Date: 24 October 2014

Reviewer: Willy Ssengooba

Reviewer's report:

Comments to the authors

In the manuscript “Predictors and outcomes of Mycobacterium tuberculosis bacteremia among patients with HIV and tuberculosis coinfection”, the authors present the predictors and outcomes of Mycobacterium tuberculosis bacteremia among participants receiving baseline mycobacterial blood culture in an ACTG clinical study. Good outcome of patients with Mycobacteremia, with higher conversion rates and similar outcomes compared to patients without mycobacteremia. While these are good findings, some concerns should be addressed.

Major Compulsory Revisions

Page 6, line 17-20 “Mycobacterial blood cultures were not required by the protocol, were not standardized across sites, but were collected prior to the administration of tuberculosis treatment”.

It remains unclear whether the patients in ACTG A5221 consented or they were re-consented for Mycobacterial blood cultures.

Page 6, line 18-19 “Mycobacterial blood cultures were not standardized across sites…

It would be good to give a brief description on how blood cultures were done and interpreted. The culture methods used, manual vs. automated systems. The volume of blood collected for culture etc. Since mycobacteremia is the main concept of this manuscript, consistency in the methods used across sites is vital.

Page 6; Since mycobacterial blood cultures were not part of the main study, at what point was blood collected? After starting ART or before? At what point did death occur?

Minor Essential Revisions

Statistical analysis section; Consider mentioning the predictors as well as defining the outcome measure for the time-to-event in this section.

Page 8 line 9-10. The first statement is not clear. Consider a flow diagram showing how eligible participants were enrolled from the main studies. The total 88 and 90 participants is not clear.
Page 8 line 16-18. Description on study sites should be under method section
Page 9 line 1-7. This section should be under statistical analysis section
Page 9 line 9. Consider clarifying the “0. 10 level. Also consider presenting results in sub-sections as bivariate predictors and multivariate predictors. Line 15-18, were these adjusted Odds ratios? If so, consider mentioning so.
Page 11 the subtitle should be discussion and not conclusions as it is currently. Line 13-16 should state that this was in agreement with the previous study otherwise the reference is not well placed.
Page 16; consider revisiting references in line with the statements as they are phrased in the manuscript.

The authors should consider continuous line numbering for quick reference during manuscript review.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests