Reviewer's report

Title: The effect of Isoniazid preventive therapy on tuberculosis incidence in adult HIV-infected patients under Pre-ART Care, Jimma University Specialized Hospital, South West of Ethiopia, Retrospective cohort study.

Version: 2 Date: 18 June 2014

Reviewer: Taraz Samandari

Reviewer's report:

In this manuscript, the authors use hospital records to examine TB incidence among pre-ART HIV-infected patients of a regional hospital to assess the impact of isoniazid preventive therapy. This is an important paper because Ethiopia is a high burden country and has a high proportion of HIV co-infected TB patients. Furthermore, IPT is a key intervention recommended by the World Health Organization and the Ethiopian programmatic experience must be told. Therefore I hope the editor will consider publishing this paper although considerable work needs to be done before it is ready.

Major Compulsory Revisions

1. The Introduction and Discussion both lack authority: the Introduction is too long and almost a list of statistics; the Discussion does not synthesize their findings well with previous publications, many of these publications are not programmatic studies and therefore more appropriate to compare with this Ethiopian study.
2. Authors should indicate whether Ethiopia’s IPT policy requires use of the tuberculin skin test prior to initiation
3. Materials and Methods: How TB was diagnosed is the critical measure. This is not described at all; neither is where the information was abstracted from. Was it from the hospital charts?
4. Materials & Methods (2.8): There is no such thing as an “unadjusted hazard ratio test”; this puts into question the authors’ statistical methods. This section needs to be reviewed.

Minor Essential Revisions

1. Throughout the manuscript the authors would benefit from a review of grammar, sentence structure, use of abbreviations.
2. The initials “G.C.” appear in numerous places and should be removed
3. The references are misplaced and many appear to be missing.
4. Introduction: “related mortality and the risk of acquiring TB” should probably be “related mortality and the risk of incident TB”
5. Materials & Methods (2.1): describe the catchment area for Jimma U Hospital
and population served

6. Materials & Methods (2.7): when did time begin for follow-up of IPT users? Was it when they initiated IPT or when they completed IPT? Was time in the clinics prior to IPT included?

7. Materials & Methods (2.7): What were the source records? Hospital paper charts?

8. Materials & Methods (2.8): What software was used for the statistical analyses?

9. “Table 5” is referred to in the text but I believe the authors intend “Table 4”

Discretionary Revisions

1. Results (3.1): provide median CD4 of entire cohorts and within each group

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

**Quality of written English:** Not suitable for publication unless extensively edited

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

**Declaration of competing interests:**

I declare that I have no competing interests