Reviewer's report

Title: Genetic Variability of Mycobacterium tuberculosis complex in patients with no known risk factors in the North-eastern part of Lima, Peru

Version: 3 Date: 8 August 2013

Reviewer: Midori Kato-Maeda

Reviewer's report:

This paper reviews the genetic diversity of M. tuberculosis from a group of patients with no risk factors for MDR TB. The aim of this study was to identify predominant circulating TB lineages in this population with no known risk factors for MDR-TB living in a hyper endemic neighborhood of Lima, and to investigate the relationship between the genotypes, primary drug resistance patterns and age. Their questions are clear and the methods are appropriate. The data is sound and the manuscript adheres to standards for reporting. Discussion, limitations and conclusions are acceptable.

The authors have answered my previous comments and modified the text accordingly. Based on the new focus I have the following Minor Essential Revisions:

1. Title: I suggest including in the title the risk factors that the authors are referring to.

2. Please clarify what interpretation is done with confidence based on the HGDI. Specifically, please elaborate/clarify the following sentence in the results section: "The HGDI was 91.8% allowing the interpretation of the results with confidence." It appears that this sentence contradicts a comment in the discussion in which the authors mentioned the limited resolution of spoligotyping.

3. The p value of the association between Harlem and not Harlem lineage and age group is different in the text and in the table. Please revise.

4. Table 2: Please review the frequency of MDR and non MDR which totals 199 instead of 197 as described in the text and footnote of the table.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests'