Reviewer’s report

Title: The association between the ratio of monocytes:lymphocytes at age 3 months and risk of tuberculosis (TB) in the first two years of life.

Version: 2 Date: 12 June 2014

Reviewer: Harriet Mayanja

Reviewer’s report:

1. Is the question posed by the authors new and well defined? 
   Yes. Line 143-146

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work? 
   Yes, well presented

3. Are the data sound and well controlled? 
   Appear good, with a clear Table 1 (hope the overlap of figures in the last column is only electronic, and not actual)

4. Does the manuscript adhere to the relevant standards for reporting and data deposition? 
   Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data? 
   Discussions has been revised, in particular to better explain clinical significance of ML ratio unit increase.

I however do find the conclusion rather vague and unclear. It could better mirror the clinical significant findings that are well captured in figure one, as the generalised paragraph as below. On the contrary, the conclusion within the abstract is very good.

327 Our study extends observations on ML ratio and risk of TB disease previously seen in HIV-infected adults to HIV-exposed infants [18]. This association may be of value in stratifying risk beyond or in combination with current tools such as TST or IGRA and in suggesting novel pathophysiological mechanisms of TB disease susceptibility.

6. Do the title and abstract accurately convey what has been found? 
   The title clearly mirrors the methods and findings.

The abstract is good; however, this double negative could be revised. Also the
"association being specific to Mtb infection" is not quite clear, as I do not see the reference for this statement in the main body of the abstract.

The association was statistically not dissimilar between HIV infected and HEU children. The association was specific to TB disease and Mycobacterium tuberculosis infection, and stronger when restricted to probable and definite TB (HR 1.50; 95% CI 1.19-1.89, p = 0.006).

7. Is the writing acceptable?

Good

Overall the authors have done a very good job in point by point response to the issues considered. The responses made good efforts to respond to the queries.

In reviewing the revised manuscript, please consider whether the authors have answered your points sufficiently well to allow their manuscript to be published. As before, we would like you to divide your comments into the following three categories:

Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore).

As shown above in blue. Main conclusion at the end of the discussion could be revised and made more clear to reflect overall findings.

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.