Reviewer's report

Title: Antiviral Resistance and Predictors of Virologic Failure in the first Cohort of HIV-Infected Children Gaining Access to Structured Antiretroviral Therapy in Lima, Peru: A Cross-Sectional Analysis

Version: 2 Date: 16 September 2012

Reviewer: Paula Vaz

Reviewer's report:

The article is about findings in a 2002-05 pediatric cohort in Peru. The main findings related to the evaluation of DNA OLA and RNA OLA are interesting, but the remaining information is a bit out of interest. I would like to ask some questions:

1. Why did you choose to not talk about the limitations of this work?
2. Any explanation of why PMTCT did not affect treatment success as it did in other settings? PMTCT regimen was not well described
3. You say that “children who had reporting missing > 50% of doses (according to a questionnaire) were more like to experience virologic failure”. Was the questionnaire complemented with any other adherence measurements? pill counting? medications returned? 50% is a fairly low level of adherence and higher levels of adherence are reported to be related to virological failure
4. Why do you think there is a clinical worsening on year 3, despite good immunological outcomes?
5. Do you have any indications on growth for your cohort?
6. In the discussion you state that “there are 2 aspects quite unique in this patient cohort: a) all patients received the same first-line antiretroviral regimen and b) patients, on average, were in advanced stages of HIV/AIDS.” Why unique? in 2002-05 all pediatric HIV-infected cohorts in resource-limited settings presented similar characteristics.
7. Please check Pg 19 The DNA-OLA was very indicative for the presence of resistance (..) , but less indicative for the absence of resistance (..) in comparison to the DNA-OLA; there is an error.

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 have no competing interests