Reviewer's report

Title: Risk factors for loss to follow-up prior to ART initiation among patients enrolling in HIV care with CD4+ cell count greater than or equal to less than 200 cells/uL in the multi-country MTCT-Plus Initiative: a cross-sectional study

Version: 3  Date: 25 August 2014

Reviewer: Becky Genberg

Reviewer's report:

This study examines losses-to-follow-up among pre-ART patients enrolled in care through PMTCT programs in several sites in sub-Saharan Africa. The analysis presented identifies risk factors for losses occurring prior to the initiation of ART. The analysis presented is thorough and well conceived. There are a few areas of potential improvement detailed below.

Major concerns:

1. The sample included anyone who had a CD4 count of >=200 and WHO clinical stage <=2 at enrollment and then follows this group forward for LTFU. Over time patients selected into the study would have become eligible for ART and this is potentially important to explaining losses-to-follow. However updated CD4 information was not included. What is the justification for not including this information? If updated CD4 data was available for a sub-sample, could a sensitivity analysis be performed to examine losses occurring by ART eligibility status as a time-dependent covariate?

2. Is there the possibility of informative censoring? Specifically CD4 at enrollment is very likely to be related to the hazard of death and losses to follow up, such that traditional methods are not appropriate. Losses may be occurring more often in the higher CD4 group because both ART initiation and death (censoring events) are more commonly occurring in the lower CD4 groups.

3. Were all women not pregnant at the time of enrollment? Why were some women who were not pregnant at baseline enrolling in a PMTCT program? Is this because some women were postpartum? How long since their delivery date, on average, were they enrolling in care? How relevant are these findings in the context of the expansion of B+?

Minor/discretionary issues:

4. In the first sentence of the Discussion, the phrase “at enrollment” should be included following “who were not ART eligible.”

5. In the methods section, there are 9 geographic locations mentioned and the text states that two programs in South Africa and Mozambique were excluded. In the results, however, there is information on 11 programs and these are listed in
Table 1. The number of programs and geographic locations should also be clarified in the text.

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

**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.