Reviewer's report

**Title:** Reuse of single-dose nevirapine in subsequent pregnancies for the prevention of mother-to-child HIV transmission in Lusaka, Zambia: A cohort study

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**Reviewer:** Michelle S. McConnell

**Reviewer's report:**

Reviewer response:
Reuse of single-dose nevirapine in subsequent pregnancies for the prevention of mother-to-child HIV transmission in Lusaka, Zambia: A cohort study

This is a very nice paper which summarizes the effectiveness of SDNVP when used for PMTCT in subsequent pregnancies in Zambia. While the numbers enrolled are still relatively small, the paper compliments and confirms the findings from Uganda and South Africa/Cote d’Ivoire. The authors clearly state the research question to be addressed, the methods are generally well described and the data appear sound. The writing is generally good, with minor typographical errors.

Discretionary revisions:

1. The overall transmission rate of 7% in both first and second pregnancies seems low in comparison to what has previously been demonstrated in the literature in other settings. Do the authors have any theories on why the transmission rate might be lower in this setting? Were there confidence intervals available for these transmission rate estimates? Finally, it might be helpful to present these overall transmission rates in the body of the manuscript, and not just in the abstract. (As is, only stratified results are presented in the text and tables.)

2. For women with 2 pregnancies in the study and previous NVP exposure (2 women), were there any descriptive findings about transmission rates in the 3rd pregnancy in these women?

3. The authors present the median time to delivery for the group of women with 2 pregnancies in the study, but it would also be useful to know what the median time between deliveries was for all 59 women (it appears most previous NVP exposures were confirmed by chart review) and whether any of these women had <1 year between pregnancies.

4. Discussion: the authors may consider “resistant viral variants … do not seem to interfere with the functional mechanism of nevirapine when given for PMTCT.” Resistant viral strains do seem to interfere with treatment in a subset of women and furthermore, there is some evidence to suggest nevirapine may not gain full efficacy until at least one year post-exposure, although these findings only
indicate a trend and are not significant. (See abstract from CROI 2008: Weidle P, Stringer JA, McConnell MS, et al. Effectiveness of NNRTI-containing ART in Women Previously Exposed to a Single Dose of Nevirapine: A Multi-country Cohort Study. 16th Conference on Retroviruses and Opportunistic Infections, Boston, Massachusetts, February 2008 (abstract 48)). While the Lockman paper did indeed find no difference in treatment outcomes for women initiating ART >6 months after exposure, that study did not break down exposure intervals for women before or after one year.

Minor essential revisions:

5. A minor point, but on the top of page 10, do the authors mean to say “…women who transmitted HIV at first delivery were identical…”?

6. Second paragraph of results: “women 45 (76%) had received…” seems to be in error.

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

Quality of written English: Needs some language corrections before being published

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.