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

**Version:** 1  **Date:** 28 October 2008

**Reviewer:** Koumavi Didier k EKOUÉVI

**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

First author: Walter Jan

General comment

• The idea of comparing transmission rate of two subsequent pregnancies is quite interesting and brings additional information on this topic and confirms the two papers describing this issue in Côte d’Ivoire, South Africa and Uganda.

• The main limitation of this paper and also the two previous already published is the sample size. It is not easy to have two consecutives pregnancies of HIV-infected women who received SDNVP

• Generally the paper is well written expected the discussion section which is too vague

• The findings are encouraging and are consistent with the two previous data published

Specific Comment

Abstract

• Clear

• Specify the outcome for the logistic regression analysis

Background

• Paper is well written

• The justification is limited, is based on the sample size, however the sample size of this study is considered as one of the limitation of this work. One of the justification is to bring additional information on the reuse of sdNVP and its effectiveness

Methods

• Why the authors included only live birth infants? Please justify?
• Page 4, L3-L7: It’s the objective of this paper, please remove it place at the end of the background

• Do you use sign rank test? Or McNemar test?, need to be specified it in the foot note

Results

• Why do you exclude primiparous women?

• The first paragraph of the result is the description of the figure 1, need to be more concise

• What is the meaning of RPR (define it in foot note) see table 1 and table 2

• Please check result in table 2: CD4 count and viral load value (CD4 count et VL decrease together, very confusing regarding the natural evolution of CD4 count and VL)

• Page 9, L10-L13, this paragraph is not clear and harmonise log and copies when presenting the data on VL

• Figure 1 clear, but too redundant with the first paragraph

• Table 1
  o Check percentage for HIV viral load (99 %?,)
  o Why do use chi2 trends test?, commonly Chi2 test is convenient
  o Missing data for CD4 count, please specified?

• Table 2
  o Suggestion: received SDNVP one; received SDNVP two times and not first and second delivery (inappropriate terms)
  o How do you explain the decrease of VL and CD4 count in women (second delivery)

Discussion

• Not well written, need to be improved

• Page 11, L6; L7, sentence in the first paragraph is in complete opposition with the data presented in table 2

• Page 11, line 11-16 the discussion is only focused on the impact of the resistance mutation of NVP, but there is no genotypic analysis to support this issue

• The authors should acknowledge that there is no genotypic analysis

• The sample size and power calculation are not discussed (see table 2)

• Conclusion should be rewritten,

**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.