Reviewer’s report

Title: Occult Hepatitis B Virus infection in ART-Naïve HIV-Infected Patients seen at a Tertiary Care Centre in North India

Version: 2 Date: 12 June 2009

Reviewer: Jeffrey Mphahlele

Reviewer’s report:

1. Is the question posed by the authors well defined?
   The study investigated the prevalence of HBV among treatment-naïve patients who tested positive for HIV at a tertiary care centre in north India as well as the prevalence and clinical significance of occult HBV among those patients who were HBsAg negative or negative for HBV serological markers.

2. Are the methods appropriate and well described?
   The methods employed in the study are adequately described to allow reproducibility elsewhere.

3. Are the data sound?
   Study sampling and design are very sound, Analytical methods are adequately captured.

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?
   YES

6. Are limitations of the work clearly stated?
   YES

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
   Not applicable

8. Do the title and abstract accurately convey what has been found?
   YES

9. Is the writing acceptable?
Summary Report:

The study investigated the prevalence of HBV among treatment-naïve HIV patients at a tertiary care centre in north India as well as the prevalence and clinical significance of occult HBV among those patients who were HBsAg negative or negative for HBV serological markers. In particular, there are very few studies from India on occult infection in HIV-infected patients.

A total of 837 HIV patients tested in the laboratory from January 2002 to December 2007 were analysed. The HBsAg positivity rate was found at 7.28% in the study group (compared to only 1.4% in the control group of HIV-negative healthy blood and solid organ donors). Thus, active HBV prevalence was very high in the HIV infected group. Occult HBV (HBV DNA positivity in the absence of HBsAg marker) was seen in 5 (45.5%) of 11 cases with anti-HBs marker and 4 (30.8%) of 13 cases with sole “anti-HBc” marker. Occult HBV was significantly associated with CD4+ T-cell counts below 200 cells/cu mm.

The study, although retrospective, was well designed and meticulously conducted. The methods employed were straightforward and adequately described. The discussion and conclusion are balanced. I could not find typographical errors of serious concerns.

This study is worthy of a publication.