Reviewer's report

Title: High rate of pneumococcal bacteremia in a prospective cohort of older children and adults in an area of high HIV prevalence in rural western Kenya

Version: 1 Date: 8 March 2010

Reviewer: Stephen Gordon

Reviewer's report:

1. Is the question posed by the authors well defined?
   Yes

2. Are the methods appropriate and well described?
   Yes

3. Are the data sound?
   Yes

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
   Don't know

5. Are the discussion and conclusions well balanced and adequately supported by the data?
   ** The introduction is somewhat surprising in that it offers a limited view of the available literature. In both the introduction and discussion, the authors state that pneumococcal infections are the most common infection in HIV infected adults - this rather ignores the published data which suggest that both mycobacteria and salmonellae are very common when sought. This study was set up to offer pneumococcal surveillance and the clinical indications for blood sampling reflect that interest. In my view, it would be appropriate in both introduction and discussion to acknowledge this other literature.

6. Are limitations of the work clearly stated?
   **Yes, the statistical and methodological limitations of the method used are discussed. In view of the clinical importance, perhaps there should be some mention of the fact that the study provided a necessary resource in a limited situation for only a proportion of the population. Bacteraemia is common in HIV infected adults; this study provided a sampling strategy but not a clinical service. Best care would provide blood culture facilities when needed. The conclusion about vaccination is valid; so too would a conclusion stating the need for more microbiology provision in this population.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
The authors are well known international experts.

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

9. Is the writing acceptable?
The writing is excellent

- Major Compulsory Revisions
None

- Minor Essential Revisions
1. ** The introduction is somewhat surprising in that it offers a limited view of the available literature on bacteraemia in HIV infected adults. In both the introduction and discussion, the authors state that pneumococcal infections are the most common infection in HIV infected adults - this rather ignores the published data which suggest that both mycobacteria and salmonellae are very common when sought. This study was set up to offer pneumococcal surveillance and the clinical indications for blood sampling reflect that interest. In my view, it would be appropriate in both introduction and discussion to acknowledge this other literature.

2. **The statistical and methodological limitations of the method used are well discussed. In view of the clinical importance, perhaps there should be some mention of the fact that the study provided a necessary resource in a limited situation for only a proportion of the population. Bacteraemia is common in HIV infected adults; this study provided a sampling strategy but not a clinical service. Best care would provide blood culture facilities when needed. The conclusion about vaccination is valid; so too would a conclusion stating the need for more microbiology provision in this population.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**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