Reviewer’s report

Title: Clinical outcomes and immune benefits of anti-epileptic drug therapy in HIV/AIDS

Version: 1 Date: 24 March 2010

Reviewer: Girish Modi

Reviewer’s report:

1. is the question posed by the authors well defined:

There are 3 questions posed by the authors - (i) frequency of AED use; (ii) effects of AEDs on immunologic and virologic markers in HIV/AIDS, (iii) interactions and S/E of AED’s in HIV/AIDS patients on cART

These are clearly well defined in the introduction as well as in the abstract

2. Are the methods appropriate and well described

Yes indeed the methodology is sound. I feel there should be some explanation if available as to why CD4 counts were higher in the viraemic vs aviraemic patients. The clinical aspect of the study is well controlled although it is not fair to have twice as many aviraemic vs viraemic patients. Is this corrected for with the statistics as assumptions and interpretations could be incorrect or would have to be re-validated.

3. Are the data sound

yes but again my main concern is focussed on the numbers of patients in the 2 groups and the impact of this on the statistical conclusions.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

5. Are the discussion and conclusions well balanced and adequately supported by the data?

6. Are limitations of the work clearly stated?

questions 4 to 6 are fine and the answers are yes to all three

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 Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

yes it appears from the discussion that they are building on the results obtained especially wrt the sodium and calcium channel effect on CD4 counts which is indeed intriguing and clearly requires further investigation in for instance cART naive patients.

8. Do the title and abstract accurately convey what has been found?
9. Is the writing acceptable?

questions 8 and 9 are also a resounding yes.

In conclusion I feel this is an excellent study that has brought out some interesting observations that will create interest in the HIV research community and therefore should be published.