Reviewer’s report

Title: Factors associated with paradoxical immune response to antiretroviral therapy in AIDS patients: a case control study.

Version: 1 Date: 4 August 2011

Reviewer: Stefano Rusconi

Reviewer’s report:

Nice paper on a clinical relevant issue.

Major comments:
In the entire paper: change AIDS to HIV infection.
Give a strong justification, both in the abstract and page 4, why the <350/mmC CD4 cut-off was chosen.
Abstract, page 2, results: "controls were randomly selected": this is not correct, since cases were chosen and controls were matched, as it is described in Figure 1.
Methods, page 4: more on the CD4 cut-off. There is a different approach for starting therapy, being associated to the natural history of HIV, or obtaining a response, thus being associated to a therapeutic success. Please discuss.
Methods, page 4, second to the last line: "controls were randomly selected", why not consecutively? (probably more correct);
Results, page 7, sampling of cases: please state that controls were derived from 272 medical records sequentially verified;
Discussion, page 10: "Other studies, however", please rephrase;
Conclusions, page 13: "...better strategies are made...", please rephrase.

Update ref 1 to the 2010 JAMA version of the guidelines.
Check carefully the concordance between ref numbers in the text and the references in the proper section.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.