Reviewer's report

Title: Immune Activation and Microbial Translocation in Liver Disease Progression in HIV/Hepatitis Co-infected Patients: Results from the Icona Foundation Study

Version: 1 Date: 14 November 2013

Reviewer: Andrew D. Redd

Reviewer's report:

The report describes a longitudinal study of HIV/Hepatitis co-infected individuals and examines the likelihood of liver disease in these individuals according to a limited number of immune activation and microbial translocation markers. The subject being addressed is of importance to the field of HIV and hepatitis research and the work could be a nice addition to this field if the major concerns listed below are met.

Major concerns-

1) The biggest concern is that the report is too brief. All four sections of the study need to be expanded.
   - Introduction - The authors should expand their literature search and background greatly to include other reports examining MT and HIV liver disease (Redd et al, AIDS research and Human retroviruses, etc).
   - Methods - There needs to be more information about the subjects and it might be helpful to split up HCV and HBV infected individuals. A greater explanation of the Fib-4 score is needed as well, and why the different cut-offs were used.
   - Results - The biggest omission here is the lack of longitudinal information on the HIV mono-infected individuals. Why were they not followed? If the authors are not going to add any information about the levels and the outcomes for these individuals then they should be eliminated from Table 1. However, the study would be greatly strengthened if they were included for all the measurements as a separate group.

In paragraph three of this section the authors comment that LPS was "non-significantly higher". If something is clearly not-significant than it is not reliably higher. This statement should be deleted.

- Discussion - The authors need to expand this section and add a section discussing how this differs from the study highlighted above. This is critical since the results presented here directly contradict the finding in Redd et al.

Minor points
- the figures should be rescaled to better show the differences in the two groups.

Level of interest: An article whose findings are important to those with closely
related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I do not have any conflicts