Reviewer's report

Title: Assessment of liver fibrosis and associated risk factors in HIV-infected individuals using transient elastography and biomarkers (Fibrotest)

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Reviewer: Patrick Ingiliz

Reviewer's report:

Vermehren et al. have conducted a study on liver fibrosis in a typical central European HIV collective with 17% coinfectected with HCV and 9% with HBV.

The paper is clearly written, the language is good and the study is of major importance as the impact of HIV infection, cART and metabolic factors on liver fibrosis in HIV positive individuals is not entirely understood.

Liver fibrosis was measured by non-invasive tools, namely Fibroscan and Fibrotest, and the cut-offs to define significant fibrosis/cirrhosis used here are those defined in HCV and HIV/HCV positive individuals.

In my opinion, the major finding is the percentage of significant fibrosis in HIV monoinfected individuals (4%), because patients were apparently randomly chosen and not for signs of liver disease.

Major comments:

1) As no liver biopsy has been performed, it is not possible to say which test would perform better to detect fibrosis in HIV patients. The Bordeaux algorithm (Castera et al., combination FS/FT) has been validated in patients with HCV infection and has proven it’s potential to avoid liver biopsy. However, one of the main findings here is the presence of significant fibrosis/cirrhosis in HIV monoinfected patients. I would suggest to consider instead the presence of fibrosis if one of the tests indicates it and analyse the data accordingly.

2) The number of patients with elevated GGT levels is high. As GGT is an independent marker of liver fibrosis, but may also indicate steatosis/steatohepatitis and, more importantly, nevirapine use, the authors should comment on the number of patients taking nevirapine at the time of blood draw. This is even more important as GGT is part of the Fibrotest algorithm which may explain the higher rates of significant fibrosis found in this analysis by Fibrotest compared to Fibroscan.

Minor comments

1) Table 2: "Factors associated with significant fibrosis..." or "Factors associated with liver stiffness values >= 7.1kPa and/or Fibrotest values >0.48...

2) In my opinion, the viral hepatitis coinfectected patients do not contribute positively to the quality of the manuscript: The group is small, longer infected, had more
d-drugs and the duration of HCV infection is not indicated.

**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