Reviewer's report

Title: Alpha-Fetoprotein Level as a Biomarker of Liver Fibrosis Status in 621 consecutive patients with Chronic Hepatitis B

Version: 1 Date: 10 September 2013

Reviewer: Anna Pecorelli

Reviewer's report:

Major Compulsory Revisions:

1) Materials and Methods, Patients, second paragraph: there are few data about study populations’ characteristics, for example: median value of ALT and AST, percentage of obese patients or patients with metabolic syndrome, diabetes or dislipidemia are included (these patients in fact could be affected by NASH which can contribute to liver damage.)

2) Materials and Methods, Patients, second paragraph: how HCC has been excluded? Which imaging techniques have been used? And which criteria has been adopted?

3) Materials and Methods, Methods, Liver biopsy and histopathology, first paragraph: it is no specified if biopsies were made by different clinicians. Different experience could influence for example the length of the tissue samples.

4) Materials and Methods, Methods, Liver biopsy and histopathology, first paragraph: if possible specify the median length of tissue samples. 15 mm is too small (a length of at least 25 mm is necessary to evaluate fibrosis accurately).

5) Results, Demographic characteristics, first paragraph: patients < 12 years old should be excluded because the possible different behavior of AFP in child.

6) Results, Demographic characteristics, first paragraph: no data are available on the HBV infection duration. Specify the median duration of CHB.

7) Results, Demographic characteristics, first paragraph: there are too many patients in inflammation and fibrosis stage 3-4 (more than half).

8) Results, Correlation of AFP versus liver inflammation and fibrosis stage: insert a figure with all values of AFP for each stage of inflammation and fibrosis, not just a table.

9) Discussion, first paragraph: it’s mandatory to evaluate the correlation between AFP and ALT, AST and Gamma-GT.

10) Discussion, first paragraph: it’s mandatory to evaluate the reproducibility of AFP test dosages.
11) Discussion, first paragraph: the discussion about age and gender should be included in the results not in the discussion.

12) Discussion, first paragraph: it is mandatory a multivariate analysis of age and sex.

13) Discussion, fourth paragraph: it is unacceptable not include ALT values for each patient, which is an inclusion criterion for the diagnosis of CHB as specified in the text.

**Level of interest:** An article of limited interest

**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 declare that I have no competing interests.