

Author's response

Reviewer #1:

1. The exclusion criteria of this study should include patients with liver failure. Patients with liver failure (no HCC) often have high level of PIVKA-II in clinical practice. If the study include this part of patients, it will decrease the specificity of PIVKA-II.

Response) Thank you for your precise comment. We totally agree with the reviewer's suggestion, and reviewed our patient cohort. Finally, no patients with liver failure were included in this study. We added the exclusion criteria of **“(4) patients with liver failure”** in the method section.

Science editor:

(3) A total of 30 references are cited, including 10 references published in the last 3 years. There are 2 self-citations (Ref. 2, 21). The topic of Ref. 21 seems not related to this study.

(5) Authors should not cite their own unrelated published articles. Please check and remove any references not relevant to this study.

Response) Thank you for your kind comment. We removed the reference 21 and replaced it with **“21. Tsochatzis EA, Bosch J, Burroughs AK, et al. Liver cirrhosis. Lancet. 2014;383(9930):1749-61.”**, following the editor's suggestion.

5 Issues raised: (1) The “Author Contributions” section is missing. Please provide the author contributions;

Response) Thank you for your kind comment. We added the **“Author contribution”** in title page.

(2) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor;

Response) Thank you for your kind comment. We uploaded the PowerPoint file of Figure 1-3.

(3) PMID and DOI numbers are missing in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please revise throughout;

Response) Thank you for your kind comment, we revised the all reference list.

(4) The “Article Highlights” section is missing. Please add the “Article Highlights” section at the end of the main text;

Response) Thank you for your kind comment, we add the “Article Highlights” section at the end of the main text.