PEER-REVIEW REPORT

Name of journal: World Journal of Hepatology
Manuscript NO: 74930
Title: GUT MICROBIOTA CONTRIBUTION TO HEPATOCELLULAR CARCINOMA MANIFESTATION IN NON-ALCOHOLIC STEATOHEPATITIS
Provenance and peer review: Invited Manuscript; Externally peer reviewed
Peer-review model: Single blind
Reviewer’s code: 05491748
Position: Peer Reviewer
Academic degree: PhD
Professional title: Associate Professor
Reviewer’s Country/Territory: China
Author’s Country/Territory: Lithuania
Manuscript submission date: 2022-01-15
Reviewer chosen by: AI Technique
Reviewer accepted review: 2022-02-14 01:23
Reviewer performed review: 2022-03-01 06:31
Review time: 15 Days and 5 Hours

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<th>Scientific quality</th>
<th>[ ] Grade A: Excellent</th>
<th>[ ] Grade B: Very good</th>
<th>[Y] Grade C: Good</th>
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<td>[ ] Grade D: Fair</td>
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<th>Language quality</th>
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<td>[ ] Grade C: A great deal of language polishing</td>
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<tr>
<th>Conclusion</th>
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<td>[ ] Minor revision</td>
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SPECIFIC COMMENTS TO AUTHORS
The present manuscript is a clear and comprehensive review describing clinical and experimental research on the gut microbiota role in the manifestation and promotion of HCC in NASH. Also, this paper provides a clear overview of microbiota alterations and dysbiosis consequences for the promotion of HCC in NASH patients and microbiota advantages and limitations as the early HCC diagnosis marker. However, please take a note on the following important points and provide necessary justification/modification:

Major points: 1. I suggest to reedit the Literature Search section as this methodology may not be able to cover the overall cited references (135 references were cited in the main manuscript and only 6 articles were screened based on literature search criteria). Please provide the search strategy adopted for the selection of the publications by reporting the inclusion and exclusion criteria. A flow chart diagram would be helpful. 2. Based on Literature search section and Figure content, it seems authors only summarized and updated 6 animal and human research in this review, but in fact the paper summarized and reviewed 135 references totally. Please correct/justify this logical coherence. 3. Too many “et al”s were used in the main context, it affects the readability of the overall manuscript (For example, the sentence: “For instance, in Behary et al., Ponziani et al. and Loomba et al.’s studies, Bacteroidetes increased in advance NASH [51], while Sydor et al.’s and Mouzaki et al.’s studies showed that NASH patients possessed a lower abundance of Bacterioidetes [14, 69]” at page 13 Paragraph 1). Please adjust and reedit the manuscript following WJG manuscript style. Also, I suggest to provide more details about those studies reported. 4. Please use correctly if authors prefer to use “et al” style (at page 5 paragraph 2: Moreover, Huang DQ et al. forecasted the increase ...... ).
Please, check and harmonise along the manuscript. 5. The sections “NASH-INDUCED HCC PATHOGENESIS ASSOCIATIONS WITH GUT MICROBIOTA” and “MECHANISMS OF MICROBIOTA CONTRIBUTION TO THE PERSISTENT LIVER INFLAMMATION AND HEPATOCARCINOGENSES” are too long and redundant. I suggest to draw a summary graph and interpret it shortly. 6. The manuscript writing needs to be improved with the proper structure following journal formatting requirements. Too many paragraphs with lack of logical order and transitions. 7. GENOTOXICITY section can be integrated with other sections as it conveyed little information relating to the manuscript’s main theme. Minor points: 1. First letter of keywords should be capitalized. 2. Please check and correct typos and grammatical mistakes in the manuscript, for example: at page 20 paragraph 2 (mesures, excises, ruther, full elucidated....)
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SPECIFIC COMMENTS TO AUTHORS
Interesting topic, well written.