

12th October 2021

**Prof. Subrata Ghosh and Prof. Andrzej S Tarnawski,
Editors-in-Chief
World Journal of Gastroenterology**

Dear Professors,

Many thanks for your consideration and for kindly reviewing our manuscript entitled: **“Artificial Intelligence in the diagnosis and management of colorectal liver metastases”** for publication by the World Journal of Gastroenterology as an Invited Review (**Number ID: 03479136**) that we are pleased to re-submit the after addressing the reviewers’ comments as follows.

Thank you for your consideration.

Yours sincerely

On behalf of all Authors

Gianluca Rompianesi
MD PhD FEBS

1. Preoperative non-invasive identification of predominant HGPs could further explore the ability of HGPs as a potential biomarker for clinical treatment strategy, reflecting different biological pathways. This is the research base of MR radiomics to predict HGPs classification in the "Histology-based models" section. The value of HGPs classification maybe needs to be clarified.

- We sincerely thank the Reviewer and completely agree with his comment. We therefore added in the “Histology based models” section a paragraph regarding HPG classifications and their role as prognostic and predictive biomarkers.

2. The conclusion is too long, and most of which belong to the limitations of current clinical application of AI, including the studies of colon cancer liver metastasis. The limitations are recommended to write in a separate part.

- We agree with this comment and shortened the “Conclusions” by reporting the limitations in a separate paragraph.

3. It is recommended to add a table to briefly analyze and arrange the existing research, including sensitivity, specificity, and accuracy, size of training dataset and verification

dataset, machine learning model, study design, etc., so that readers can obtain information more intuitively.

- We completely agree with the Reviewer, and provided a summary table reporting schematically the available studies and their main results (Table 1).