**Answering Reviewers** 

To:

Prof. Lian-Sheng Ma

Editor-in-Chief

World Journal of Gastroenterology

28th June 2021

Dear Professor Lian-Sheng Ma,

Thank you very much for handling our paper titled: "Diagnosis of focal liver lesions with deep learning-based multi-channel analysis of hepatocyte-specific contrast-enhanced magnetic resonance imaging". We provide a detailed answer to the Reviewer's and the Science editor's comments below and have modified the manuscript's text accordingly. We corrected the figures, and we also attached the required files and documents. We hope that our answers will be getic factory to you

satisfactory to you.

Please, let us know if any further clarification is needed!

Best regards,

Dr. Bettina Katalin Budai

Reviewer #1:

**Scientific Quality:** Grade B (Very good)

**Language Quality:** Grade A (Priority publishing)

**Conclusion:** Accept (General priority)

**Specific Comments to Authors:** The paper deals with a highly interesting topic - the use of AI driven automatic analyses of imaging for liver lesions. The authors retrospectively use MR data and train a DL system to test different types of algorithms. The paper is interesting for the readership of the WJG.

**Response 1:** We agree with Reviewer #1 that the topic of our manuscript is highly interesting and thank him/her for his/her favorable comments.

## Science editor:

**Scientific quality:** This is an original article regarding the diagnosis of focal liver lesions with deep learning-based multi-channel analysis. The topic is within the scope of the journal. Classification: Grade B and A;

**Summarization of the Peer-Review Report:** According Both 2D and 3D-DenseNets can differentiate FNH, HCC and MET with good accuracy when trained on hepatocyte-specific contrast-enhanced multi-sequence MRI volumes.

**Format:** There are 5 figures (good quality) and 2 tables.

**References:** References are representative of the text.

**Language evaluation:** The authors provided a certificate and consequently english-language is acceptable.

**Academic norms and rules:** Approval of the study is report but an English-language document is needed.

There is no misconduct. The biostatistician's certificate has been reported. The informed signed consent is not clear.

**Supplementary comments:** Invited Manuscript; No funding Issues raised. The STROBE checklist must be added and proper reference added in the text. Discussion should be shortened (at least ½) and results section improved.

**Re-Review:** A re-review of the manuscript is required.

**Recommendation:** The study can be improved by responding to comments and I strongly suggest a further round of review.

We thank the scientific editor for his or her expert comments.

**Response 2:** We have attached the English language version of the Ethical approval document of our study.

**Response 3:** Patients were not required to give informed consent to this retrospective study because the analysis used only anonymized data that were obtained after each patient agreed to treatment by written consent and gave written informed consent to the MRI scan in compliance with our institutional protocol. We corrected the Footnote section to make it clear. And we have also attached our institutional informed consent statement document.

**Response 4:** We have added the STROBE statement to the Footnotes and cited it in the main text. We have also attached the completed STROBE Statement checklist.

**Response 5:** We have shortened the Discussion section and improved the Results section as the Science editor recommended.