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Dear Editor and Reviewers:

Thank you for editor and reviewers' comments concerning our manuscript entitled "Hepatocellular Carcinoma: Can LI-RADS v2017 on Gadoxetic-acid Enhancement MR and Diffusion-weighted Imaging Improve the Diagnostic Accuracy?" (**Number ID: 02545570**). Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our research. We have studied all comments carefully and have made correction which we hope meet with approval. Revised portion are used track changes in the paper. The main corrections in the paper and the responds to the editor and reviewer's comments are as follows:

**Responds to reviewer's comments:**

**Reviewer 1**

*I am very grateful to your meaningful and professional comments for the manuscript. Considering the useful and professional comments that you have given. According with your comments, we have amended the relevant part in manuscript. All the questions were answered below:*

*1) Small differences were seen between the groups, as the Youden index were apparently only slightly different between groups. In order to confirm the significance of the findings, and superiority of the protocol combining DWI, a statistical test comparing the Youden index should be mandatorily performed.*

**Response:** Thank you very much for reviewer's very professional comments. This is a very important, meaningful and professional suggestion. It is really true as the reviewer said that no  $p$  value was given between the two groups. As youden index is a specific value which was calculated by using the equation:  $\text{Youden value} = \text{Sensitivity} + \text{Specificity} - 1$ ; and the higher youden value demonstrate a comprehensive good diagnostic. In addition, we have a hard working for searching the comparion of two youden value between groups, however, no

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comparision method was found as they also suggested that the youden value itself may have the diagnostic efficiency. Thank you again for the valuable comments of the reviewer!

*2) Fom figure 1, the addition of DWI to Gadoxetic-acid Enhancement MR apparently changes the numbers mainly between the borderline groups, LR-3 (intermediate probability of HCC) and LR-4 (probably HCC). There were no changes in LR-1, LR-2, LR-5 and LR-TIV; and, smaller changes were seen in LR-M. This point needs to be highlighted in the manuscript and better explained in the discussion. Would the authors consider this finding as an indication of the exam? A special situation where this exam should be reserved?*

**Response:** Thank you very much for reviewer's comments. This is a really important question as we neglect the better explanation in the discussion. In LI-RADS v2017, DWI is an ancillary feature that can be applied for category adjustment but cannot be used to upgrade to LR-5. In our study, observations classified as LR-5 strongly suggested HCCs based on major features and those classified as LR-1 strongly suggested benign lesions such as hepatic cyst or hemangioma; additionally, observations classified as LR-TIV in our study can be confirmed directly based on the features without the need of DWI. Accordingly, there were no changes in LR-1, LR-5 and LR-TIV.

## **Reviewer 2**

*I am very grateful to your meaningful and professional comments for the manuscript. According with your comments, we have amended the relevant part in manuscript.*

*1) lease check the numbers; e.g., section "LI-RADS lesion categories and diagnostic efficiency": "For LR-4/5/M, the values were 75.8%, 58.8%, and 70.2% without DWI (Youden index value=0.539) and 87.9%, 58.8%, and 78.4% with DWI, respectively. The Youden index value of this LI-RADS classification with DWI (Youden index value=0.467) was higher than that without DWI (Youden index value=0.346)." - A Youden index value of 0.539 does not seem to be consistent with the findings shown in Table 3 (LR-4/5/M,*

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*A-DWI). Minor Comments: Table 2, "Note": "Alphs-fetoprotein" -> Alpha-fetoprotein. Table 2: "1 (0.4%)" -> 1 (0.49%) [in order to be consistent with the lines above]. Section "Histologic results" and Table 2: "5.30 cm (range 1.10-12.80 cm)" -> 5.3 cm (range 1.1-12.8 cm).*

**Response:** Thank you for the professional and careful scrutiny of the reviewer. It is really true as the reviewer said that we indeed have made some errors in our manuscript. All the numerical values have been checked again and the errors have been revised. Thank you again for reviewer's careful scrutiny.

*Thank you again for your meaningful comments that do help us improve our paper. We would be glad to respond to any further questions and comments that you may have.*

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Dear Editor:

Thank you for JOURNAL EDITOR-IN-CHIEF's comments concerning our manuscript entitled "Hepatocellular Carcinoma: Can LI-RADS v2017 on Gadoteric-acid Enhancement MR and Diffusion-weighted Imaging Improve the Diagnostic Accuracy?" (Number ID: 02545570). Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our research. We have studied all comments carefully and have made correction which we hope meet with approval. Revised portion are used track changes in the paper. The main corrections in the paper and the responds to the editor's comments are as follows:

**Responds to editor's comments:**

*I am very grateful to your meaningful and professional comments for the manuscript. According with your comments, we have amended the relevant part in manuscript.*

*1) There are some typos along the text.*

**Response:** Thank you for your comment and careful scrutiny of this paper. We have re-adjusted the format of the reference in manuscript.

*2) I suggest to include in the end of the conclusion section that these results need to validating with studies in other centers in a prospective form.*

**Response:** Thank you very much for your professional comment. This is a really important question as we neglect the better description in the end of the conclusion section. We have added the sentence above in manuscript.

*Thank you again for your so professional and meaningful comments that do help us improve our paper. As a really expert like you can really do contributions in this field. We*

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*look forward to hearing from you regarding our submission. We would be glad to respond to any further questions and comments that you may have.*