Response to Comments of Editor and Reviewers

35028-An integrated MELD model including serum lactate improves the short-term prognosis of HBV-related acute-on-chronic liver failure

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We would like to express our gratitude for the valuable comments of the editor and the reviewers which help us in improving significantly the quality of the paper. The comments are inspiring and we have done our best to revise the paper according to the comments. The revisions are marked in red in the revised paper.

We have spent great effort in revising the paper. We will be glad to revise it again if further improvement is required.

Reviewer #1

Conclusion: Minor revision

Classification: Grade B (Very good)

Language Evaluation: Grade B: minor language polishing

In the present study the authors compared several parameters in patients with HBV-related acute-on-chronic liver failure (ACLF) to improve the accuracy of prognosis. They enrolled 236 patients with HBV-ACLF and stratified them in a survival group and non-survival group. Among all parameters they observed that lactate levels correlated positively to MELD scores. The authors concluded that the combination of LAC and MELD scores very likely is able to increase prediction accuracy for ACLF prognosis. The manuscript has been well written and data well presented. My only concern is that no viral parameters have been evaluated and compared in the two groups of patients.

Response: Thank you for your suggestions. In accordance with your advice, We have added data about viral parameters of the two groups of patients (see Table 1 on the 5th page in revised paper).

Reviewer #2

Conclusion: Accept

Classification: Grade A (Excellent)

Language Evaluation: Grade A: priority publishing

The paper is well written and well presented. The paper is suited well for publication in WJG without any revision.

Reviewer #3

Conclusion: Major revision

Classification: Grade C (Good)

Language Evaluation: Grade B: minor language polishing

This is an interesting study in which the authors describe a modified MELD score, namely MELD lactate, in order to assess short term prognosis in acute on chronic liver failure in hepatitis B. The only problem is that the authors should discuss that there is the need of a prospective series to test the validity of the new score; they also should comment how many infections were present, since infections may be associated with increased lactate, and perhaps also perform Kaplan- Meyer survival analysis: it is not the same to die after 3-5 days than at the third month. English needs some revision.

Response: Thanks for reviewer's kind suggestion. For the suggestion, "a prospective series to test the validity of the new score", we add some limitations of this study and further research which would be done, as following: There are some limitations of this study. Our study indicated, for the first time, that an integrated MELD model including serum lactate was a better prediction model for the prognosis of HBV-related ACLF, with higher PPV and NPV. Therefore, further research will be required to combine this model into the classic model or develop a more accurate prognostic model. The patient population came merely from a single center in this study and it was a retrospective study; further research and verification need to be done in larger multi-center studies.

In accordance with your advice, this manuscript was edited for correct English language, grammar, punctuation, spelling, and overall style by more of the highly qualified

native-English-speaking editors.

The other two suggestions are very good. However, we did not get these data in our clinical study. we will take these two suggestions as the research elements into our further study.

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