Author’s response to reviews

Title: Prediction of Posthepatectomy Liver Failure Using Transient Elastography in Patients with Hepatitis B related Hepatocellular Carcinoma

Authors:

Jiewen Lei (sallyray@163.com)
Xiaoyu Ji (1260507636@qq.com)
Junfeng Hong (1432046251@qq.com)
Wanbin Li (1379394225@qq.com)
Yan chen (1591120384@qq.com)
Yan Pan (517466262@qq.com)
Jia guo (jia_guo@163.com)

Version: 1 Date: 09 Oct 2017

Author’s response to reviews:

Dear Editor,

Our response to comments of reviewers are as follows:

Response to Quirino Lai

The manuscript has been revised by someone providing professional editing service. In addition, I have revised the data presentation to meet the criteria of consistency as requested. Liver failure has been expressed as PHLF throughout the manuscript and explanation of ROI (Page 10 Line 15) has been given. We appreciate the comments of the reviewer. We developed ROC for predicting PHLF with INR (Figure 5). Results showed INR alone was not a good predictor for PHLF and thus further confirmed the validity of our model in PHLF diagnosis.

Response to Alessandro Cucchetti

As for the proposed definition of PHLF, I reviewed some literature and found that no consistent definition of PHLF exists. Although bilirubin level is generally used to define PHLF, some articles reported that could configure a very high risk of irreversible PHLF. (Balzan S, Belghiti J, Farges O, Ogata S, Sauvanet A, Delefosse D, et al. The "50-50 criteria" on postoperative day

Data has been expressed as mean ± standard deviation for those with normal distribution and as median for those with non-normal distribution.

As for logistic regression, we chose forward selection because of its advantages: only choose not tick, independent variables from scratch, from less to more. You can automatically remove highly dependent arguments. Because there are many factors that affect PHLF clinically, the backward method may not yield the correct result when the number of independent variables is high or some of the independent variables are highly correlated. Nevertheless, we considered the opinions of reviewers and conducted backward logistic regression analysis. We found that LSM and INR remained to be two factors related to PHLF, but it further confirmed that these two indicators for PHLF do have a great impact on what??

As for the validation requested by the reviewers, the challenge we are facing is insufficient data, especially data from the liver failure group. We have already begun to collect new data to validate our previous results.

Finally, thanks to the reviewers for their views.