

Dear editor,

Thank you for consideration our manuscript for publication on World Journal of Hepatology. The comments from reviewers provide us a great opportunity to improve our paper. The details of our revisions are listed below.

Reviewer 1 (Reviewer's code: 00053888):

*Comment:* This is a well written short report that advances the molecular knowledge of liver regeneration and suggests possible mechanisms for HCC development.

*Answer:* It is my great honor for the appreciation.

Reviewer 2 (Reviewer's code: 00182114):

*Comment:* This is very interesting paper about liver regeneration. I think YAP plays important part in liver regeneration. I think that Interactions between the TGF $\beta$  and Hippo-Yap signaling pathways stimulate hepatocytes to undergo an EMT-like response that is necessary for them to grow in a TGF $\beta$ -enriched microenvironment and regenerate injured livers. Please comment the relationship between TGF $\beta$  and YAP in liver regeneration.

*Answer:* The core of this study is to explain how hepatocytes avoid the inhibition of TGF- $\beta$  on cell growth during liver regeneration. TGF- $\beta$  has been reported to promote EMT in tumor cells by interacting with the Hippo-Yap1 signaling pathway, but it is not known whether there is a similar effect in normal adult hepatocytes. The conclusion of the paper is that TGF- $\beta$  and Yap1 cooperate to reprogram regenerating hepatocytes to a more primitive state, but the specific interaction patterns and temporal regulation of TGF- $\beta$  and Yap1 are not clearly demonstrated. My understanding is that Yap1, one of the downstream effector of TGF- $\beta$ , partially mediates TGF- $\beta$ -induced hepatocyte EMT during liver regeneration. Another important function of Yap1 is to promote cell proliferation. EMT induced by TGF- $\beta$  via Yap1 may play a role in relieving TGF- $\beta$ -induced inhibition of cell proliferation. In the process of liver regeneration, the key function of Yap1 is temporal regulation the EMT and proliferation of hepatocytes. However, the specific underlying molecular mechanism needs further exploration. Because the above comments are different from the focus of the opinion review, in order not to affect the integrity of the opinion review, I think it may be better not to incorporate it into the original text.

Reviewer 3 (Reviewer's code: 00053419):

*Comment:* The manuscript highlights the principal role of YAP in the regulation of liver cell fate with central implications in the control of liver regeneration and HCC. Based on the dual effect of YAP (either promoting regeneration or uncontrolled proliferation) it is proposed as a potential therapeutic target for chronically liver disease or HCC patients. The letter is comprehensively written and the message is clear and interesting for the community.

*Answer:* It is my great honor for the appreciation.

Reviewer 4 (Reviewer's code: 00053659):

*Comment:* Bai et al wrote a letter to the editor entitled "YAP at the intersection of liver cell fate

determination". Unfortunately, they did not follow the basic role of scientific journal and instruction. As long as ignoring the roles, it is little possibility for any reviewing process. However, the content of the text is interesting in the specific fields. I recommend you to resubmit it all. You have to present clearly what you want to insist and claim for the study. Furthermore, you have to follow the roles.

*Answer:* I've made all the necessary revision required by the editor, including abstract, core tips and resubmitted the manuscript.