

## 30515-Answering reviewers

### Reviewer 1

**Please provide the data of liver enzymes of each group, and compare them. Otherwise, the present result may not contribute to the clinical practice.**

To demonstrate the effect of Da-Cheng-Qi-Decoction on the liver injury in rats, it's unnecessary to detect liver enzymes. According to the results of histopathologic scores and the levels of the pro-inflammatory mediators, the liver tissues were obviously damaged in model group and decreased in treatment groups, accompanying with the increased anti-inflammatory mediators, which demonstrated the protective effect of Da-Cheng-Qi-Decoction on liver and might be a reference value for the clinical practice.

### Reviewer 2

- 1. The main problems with this paper lies in the fact that it is unclear as to what model of AP (mild or severe), the authors are trying to recreate experimentally.**

It was the model of severe acute pancreatitis and we have revised in the text.

- 2. Why do they believe that injection of taurocholate would induce liver changes.**

According to the comparison of histopathologic scores and the levels of the pro-inflammatory mediators between the normal group and model group with acute pancreatitis, the liver tissues were obviously damaged.

- 3. It is rather unclear as to how the experiment created mimics real AP in humans.**

As for the Na-taurocholate model, the detergent effect may account for focal necrosis mainly in the head of the pancreas. Na-taurocholate-induced model resembles the gallstone-induced pancreatitis in human, which was used as the standard method for acute pancreatitis all over the world.

### References

Laukkarinen JM, van Acker GJ, Weiss E, Steer ML, Perides G. A mouse model of acute biliary pancreatitis induced by retrograde pancreatic duct infusion of Na-taurocholate. *Gut* 2007; 56: 1590-8.

Yunan Wang, Abudurexiti Kayoumu<sup>1</sup>, Guotao Lu, Pengfei Xu, Xu Qiu, Liye Chen, Rong Qi, Shouxiong Huang, Weiqin Li, Yuhui Wang, George Liu. Experimental Models in Syrian Golden Hamster Replicate Human Acute Pancreatitis. *Sci Rep.* 2016 Jun 15; 6: 28014. doi: 10.1038/srep28014.

4. How do the authors propose that the liver is damaged in AP? Even in biliary pancreatitis, the effect on transaminases due to an obstructing stone is transient and does not need liver-specific therapy! The authors have failed to demonstrate the effects of AP on the liver.

The answer was the same with NO.2. We have described in the result section (red sign).