Reviewer's report

Title: The effect and mechanisms of tight junctions protein occludin in ventilation induced lung injury

Version: 4 Date: 7 August 2013

Reviewer: Guochang Hu

Reviewer's report:

This is a revised manuscript addressing the role and mechanisms of tight junction protein occludin in ventilator-induced lung injury. To some extent, the current manuscript is improved. However, I still have some concerns.

1. The manuscript needs carefully editing. Please pay particular attention to grammar, spelling and sentence structure.

2. The results section in Abstract and the method section in Immunohistochemical staining and Western blot should be simplified.

3. Please make sure whether the results in group L and L+PKC inhibitor are reasonable. For example, did the W/D in group L (normal tidal volume ventilation for 4 h) really increase?

4. The occluding expression pattern in L group in Figure 3 is not consistent with that in Figure 5. Please check them carefully.

5. The results related to immunohistochemical staining and Western blot need more details.

6. Please make sure that all figure legends are correct.

7. The discussion is too long. Please simplify it.

8. PKC has several isoforms. Why is PKC-alpha important in ventilator-induced lung injury?

9. In Reference section, Chinese should be translated into English.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.