Correlation between circulating endothelial cell level and acute respiratory distress syndrome in postoperative patients

point-by-point response

Dear editors,

We thank anonymous reviewers for their helpful and valuable set of comments to improve the quality of our paper. We hereby provide a summary of point-to-point responses to the reviewers' comments and recommendations, as well as changes in the manuscript according to the comments.

Point-to-Point response to reviews

Review #1

Minor revision

Specific Comments to Authors: Thank you very much for asking me to review this manuscript by Min Peng et al. This is a retrospective study to explore the correlation between circulating endothelial cell level and severity of ARDS in patients postoperatively. The result of the study is of interest and may help evaluate the status and prognosis of ARDS and provide an objective reference for diagnosis and treatment. Overall, this study was well conducted with good methodology and intelligible English. It might be the first study to compare numbers of CECs in patients with ARDS. The number of participants in the study is large enough. Furthermore, minor comment that I would to proposed: 1. Title: Proper and cover all the core result from the study. 2. Abstract: Address all of the important component from the study. However, I recommend that the description in the methods be clearer and that the control group and other groups need to be clearly explained. 3. Key words: could cover this study. 4. Introduction: Describe the overall basic knowledge for this study. Moreover, the aim of the study is clear. 5. Method: The present study is methodologically well conducted. 6. Results: The result of this study is of interest. 7. Discussion: The manuscript clearly interprets the finding adequately and appropriately. In addition, the manuscript highlights the key points clearly. The previous significant paper involved were included in the discussion, I suggest to add the significance of the study, its current limitations, and what further research

is required. 8. Tables and figures: I congratulate the authors for the captions to the tables and figures very explicative and complete. 9. References: The manuscript reviewed previous related literature; however, the format of references should be modified.

Reply:

Thank you very much for your precious comments and we have made correction and supplement.

- For the Method part of the Abstract, we have modified it as followed: Methods Blood samples were collected from all patients on day 2 (d2) and day 5 (d5) after surgery. The control group comprised 32 healthy volunteers. Number of CECs was measured by flow cytometry, and operation time was recorded. Changes in various indexes of patients were monitored, and diagnosis of ARDS was determined based on ARDS Berlin definition. We comprised d2 CECs in different groups, correlation between operation time and d2 CECs, ARDS of different severity by d2 CECs, and predictive value of d2 CECs for ARDS in postoperative patients.
- 2. We have supplement significance of study, its current limitations, and what further research in manuscript as followed:

This research studied correlation between level of CECs and severity of ARDS, and preliminarily observed change trend of CECs at different time points. Limitations of this research and necessity of further experiments: sample size was still too small, and selection of CECs observation time point was simple. In future experiments, we needed to further expand sample size, collect more enrolled patients, refine grouping, and conduct hierarchical analysis, even one special group of patients were dynamically tracked detection and increase and refine CECS detection time point for better observe dynamic changes of CECs.

 We have modified format of references and made supplement, please see references section for details

EDITORIAL OFFICE'S COMMENTS

Issues raised: (1) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor; (2) The authors did not provide the approved grant application form(s). Please upload the approved grant application form(s) or funding agency copy of any approval document(s); (3) The "Article Highlights" section is missing. Please add the "Article Highlights" section at the end of the main text; And (4) PMID and DOI numbers are missing in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references.

Reply:

Thank you very much for EDITORIAL OFFICE'S precious comments and we have made supplement as followed:

- 1. We prepared and uploaded original picture.
- 2. We have uploaded approved grant application form(s)
- We have made supplement of "Article Highlights" at end of manuscript as followed:

Highlight: This research studied correlation between level of CECs and severity of ARDS, and preliminarily observed change trend of CECs at different time points. This is believed to be initiated research to compare CECs levels changes in patients with ARDS, and it had value of guiding treatment and evaluating prognosis for ARDS patients.

4. We have made supplement of PubMed numbers and DOI citation numbers to reference list and list all authors of references