

Dear Editor,

We thank you and the reviewers for their time and effort. We have revised the manuscript and have made all the suggested changes.

**Reviewer #1:**

**Scientific Quality: Grade D (Fair)**

**Language Quality: Grade B (Minor language polishing)**

**Conclusion: Major revision**

**Specific Comments to Authors: The authors investigated the pulmonary functional test and pulmonary hemodynamics in patients who underwent left ventricular assist device (LVAD). The point of view of present study seems to be interesting. There have been several problems to be solved. #1 The major problem of present study was study collection. Judging from Figure 1, only 4 studies were left for analysis. It is unnatural to me. The authors should provide more information regarding the study collection in the detail. #2 The authors should show the methods of statistical analyses in the "Method" section. #3 The period from LVAD to the assessment of pulmonary function was unclear. The authors should show them. #4 Is the unit of pulmonary vascular resistance (PVR) right? The authors should confirm it.**

Answer: Thank you for the excellent suggestions. #1 We agree that only 4 studies were included, we performed a comprehensive literature search as shown in PRISMA flow diagram that there is paucity of literature. The technology is evolving and we believe that our study will open doors for more studies. We have mentioned in the limitations the paucity of data and need for more studies. We have provided details about the study selection criteria in methodology. #2 We have highlighted the statistical analysis methods in the analysis section. The statistical analysis was performed using the random-effects model (inverse variance) to calculate the mean difference and SD for continuous variables. #3 The mean follow up duration and timing of post-LVAD spirometry ranged from 6 months to 12 months. #4 Thank you for pointing this out, we have corrected the unit of PVR (Woods U).

**Reviewer #2:**

**Scientific Quality: Grade C (Good)**

**Language Quality: Grade A (Priority publishing)**

**Conclusion: Accept (General priority)**

**Specific Comments to Authors: Comments to the authors The meta-analysis is well designed and conducted. There are few studies, small samples, short follow-up period. The findings are not very relevant, there is more pulmonary restriction and improvement of the pulmonary vascular resistance. The authors are attentive to the limitations of the study. In my opinion the Meta-analysis should be published**

Answer: Thank you for appreciating our work. We have mentioned in limitations the need for more studies.

**Reviewer #3:**

**Scientific Quality: Grade C (Good)**

**Language Quality: Grade B (Minor language polishing)**

**Conclusion: Minor revision**

**Specific Comments to Authors: Your manuscript is interesting due to the approached topic and strategy. However some changes are required. a) Please revise the entire manuscript to avoid typo and grammar mistakes. b) Your plots should be clear and showing the error bars. c) Discussion should be a clear comparison to those findings for other authors exploring consequences in pulmonary function by LV-interventions.**

Answer: Thank you for appreciating our work. a) We have revised the entire manuscript and have made corrections. b) We have provided clear plots and error bars are provided in figure 2 for each study. c) We have made changes and have clarified the impact of LV intervention on pulmonary functions.

**In addition to above changes, we have also addressed the comments raised by the editor and editorial office. We have highlighted the changes. Please let us know if more changes are needed. These changes have certainly improved our manuscript.**

**Thanks**

**Waqas**

## Point-by-point response to second-round review

### Specific Comments To Authors:

1 The authors have revised their manuscript appropriately, however, I cannot find figure 1. Could you please make me confirm figure 1?

2 From my perspective, the article was improved. Please check the format. I suggest conclusions section would be clear. The conclusions are mentioned in the abstract, but not clear sentenced in the entire manuscript. Also, please check the inclusion of conclusions in your highlights.

### Answer

We thank the reviewers for their time and effort. We have revised the manuscript and have made all the suggested changes.

### Editor's comments

Before we can further process your manuscript, you are kindly requested to make the following corrections to meet the journal's requirements:

1. Please complete the "Aim" section in the abstract and the "Article Highlight" section in the main text. The guidelines for writing and formatting Article Highlights are as follows: (1) Research background The background, present status and significance of the study should be described in detail. (2) Research motivation The main topics, the key problems to be solved, and the significance of solving these problems for future research in this field should be described in detail. (3) Research objectives The main objectives, the objectives that were realized, and the significance of realizing these objectives for future research in this field should be described in detail. (4) Research methods The research methods (e.g., experiments, data analysis, surveys, and clinical trials) that were adopted to realize the objectives, as well as the characteristics and novelty of these research methods, should be described in detail. (5) Research results The research findings, their contributions to the research in this field, and the problems that remain to be solved should be described in detail. (6) Research conclusions (7) Research perspectives What experiences and lessons can be learnt from this study? What is the direction of the future research? What is/are the best method/s for the future research?

Reply: We have added the Aim section in the abstract and also written the article highlights according to the correct format.

2. Sorry to inform you that your Copyright Form does not meet our requirements, please complete the copyright license agreement form which has been signed manually by all authors.

Reply: All authors have signed the copyright form according to the journal requirements.

3. Please provide the decomposable figures, whose parts are all movable and editable, organize them into a PowerPoint file, and submit as "Manuscript No. -Figures.ppt" on the system, we

need to edit the words in the figures. All submitted figures, including the text contained within the figures, must be editable.

Reply: All figures have been edited as decomposable figures and organized into a PowerPoint file.

**In addition to above changes, we have also addressed the comments raised by the editor and editorial office. We have highlighted the changes. Please let us know if more changes are needed. These changes have certainly improved our manuscript.**

**Thanks**

**Waqas**