

Dear Editor:

I am pleased to resubmit for publication the revised version of ESPS **Manuscript NO: 17612** titled 'Characterization of Optimal Resting Tension in Human Pulmonary Arteries'. I appreciated the constructive criticisms of the Editor and the reviewers. I have addressed each of their concerns as outlined below.

**Editors Comments:**

In view of editor comments I revised the manuscript and made the suggested changes. The comment section with subheading has been added, references revised with the relevant PubMed citation numbers and DOI citation added to the reference list and reference numbers put in square bracket in superscripts. I am also sending the requested signed pdf files and audio core tip.

**Reviewer Comments:**

Reviewer 1 made specific suggestions, on the whole I agree with the reviewer's comments, and I followed his specific recommendations as closely as possible.

Reviewer 2 comments 'it is a valuable paper for physiology and pathology pulmonary arteries. The system will provide a basic for further research about pulmonary arteries and its-related diseases' and suggests no changes.

Specific concerns of reviewer 1:

1) It is not clear from the description how resting tension was determined.

*I have revised the description of how the resting tension was measured which makes clear to the reader*

2) It is not clear from the preparation if radial tension or longitudinal tension was measured.

*We measured the radial tension and this has been made clear in the manuscript and*

*highlighted in bold.*

3) Was there a difference among rings with greater diameter compared with rings with smaller diameter.

*The Internal diameter of vessels used ranged between 2-4 mm and the responses were similar in this range group. We suggest more studies to validate this data and also to look into whether optimal resting is different in different size pulmonary arteries.*

4) what is the clinical relevance of knowing the "optimal resting tension" of the pulmonary arteries.

*The aim of this study is to provide a baseline optimal resting tension value for performing experiments on human pulmonary artery rings. This study will provides the basis for further research about pulmonary arteries and its-related diseases.*