**Pointwise rebuttal to Editorial comments**

**Dear Dr. Wu**

**Please find below the pointwise rebuttal to editorial comments.**

Comment: The manuscript has been modified and the updated manuscript, **58448\_R1.docx**, is attached and located in your Editorial Manager account. **Please use the updated version to make your revisions.**  
Response: Thank you for your comments, We have revised the manuscript in the light of the editorial comments. The revised version with and without track changes is uploaded. We have also revised the Figures and excel file with Materials and Reagents, and uploaded it.

Comment #1. Please take this opportunity to thoroughly proofread the manuscript to ensure that there are no spelling or grammar issues.

Response: We have proof-read the manuscript for typos and grammatical errors.

Comment #2. The Short Abstract is over the 50 word limit.

Response: We have revised the short abstract and in the R2 manuscript, it is within the 50 word limit.

Comment #3. JoVE cannot publish manuscripts containing commercial language. This includes company names of an instrument or reagent. Please remove all commercial language from your manuscript and use generic terms instead. All commercial products should be sufficiently referenced in the Table of Materials and Reagents. Examples of commercial language in your manuscript include histopaque, etc.

Response: The revised R2 manuscript is without any commercial language. The commercial products are included in the Table of Materials and Reagents.

Comment # 4. Please highlight complete sentences (not parts of sentences) for filming.

Response: In the revised R2 manuscript, complete sentences are used.

Comment # 5. Please define all abbreviations before use, e.g., PBS, etc.

Response: It is included in the revised R2 manuscript.

Comment # 6. Please use degree symbol instead of superscripted 0 for degree signal.

Response: It is corrected throughout the R2 manuscript.

Comment # 7. Step 1.1: Please write this step in imperative tense.

Response: It is corrected in the R2 manuscript.

Comment # 8. 2.3: How to open the thoracic cavity? Using what? How to remove blood?

Response: It is included in the R2 manuscript.

Comment # 9. 2.15: What’s the composition of CSCs maintenance?

Response: We used commercially available medium and in the revised R2 manuscript included it.

Comment # 10. 3.2: What’s the condition of the culture?

Response: In the revised R2 manuscript, we included the condition of culture. It is 37 ᵒC with 5% CO2.

Comment # 11. 5.3: What’s the composition of cardiomyocytes differentiation medium?

Response: We used commercially available medium and in the revised R2 manuscript included it.

Comment # 12. Please do not abbreviate the journal titles for all references.

Response: It is corrected in the R2 manuscript.