We are grateful to the review editor for their careful reading and thoughtful comments on the previous version of our submitted manuscript to the Journal of Visualized Experiments (**JoVE59170**). We have thoroughly examined each comment and carefully addressed them in our revised manuscript with changes highlighted in blue. Below is a summary of our modifications made in the revised manuscript, for addressing the Editorial comments and for improving the clarity and readability.

* Highlighted portions of the manuscript for filming have been adjusted to better illustrate our procedure in a concise manner.
* Figures and Tables have been added which better demonstrate how to establish the biaxial mechanical testing parameters.
* Greater clarity has been made on software-specific steps in the protocol, while also avoiding commercial language.

**Responses to Editorial Comments Added to Our Resubmitted Manuscript (as shown in Green)**

1. **6. Preconditioning Step and Duration Timing**

*It appears that each of these steps is a collection of numerous actions. It will be better to exclude this from filming, and allow readers to refer to the supplementary file instead. If you’d like viewers to see the supplementary file, please edit it to standardize the text color, and remove the rebuttal comments from it.*

This portion of the protocol has been greatly revised to include information that was previously presented in the supplementary file. Because of this revision we have suggested that this portion of the protocol be filmed, as it is important to the overall procedure.

1. **7. Biaxial Mechanical Testing**

*In order to film a step, it must be described in detail in the manuscript. This ensure that the portion to film is within our length limits (2.75 pages of highlighting). We have flagged steps that are lacking details for filming. Pleas expand the description of these items within this document.*

We apologize for not including greater detail of the procedure within the manuscript. We have expanded the descriptions of each step to better address how they are performed. This has also included the addition of two tables and 3 figures which better demonstrate the procedure.

1. 7.1.2) Retrieve data from the last two cycles of each loading ratio for the subsequent data processing and analyses described in Step 10.

*Please update.*

We apologize for our oversight in the numbering of our steps after subsequent revisions of the manuscript. This has been updated to state the correct step, **Step 9**.

1. 7.4) Sequentially run the three testing protocols constructed in Steps 8.1-8.3. After each testing protocol, move the tissue back to the original specimen size.

*Update?*

We apologize for our oversight in the numbering of our steps after subsequent revisions of the manuscript. This has been updated to state the correct step, **Steps 7.1-7.3**.