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19th November 2021

Dr Vineeta Bajaj
Review Editor
JoVE

Dear Dr Bajaj,

Re: **JoVE62933_R1** “Optical Coherence Tomography Based Biomechanical Fluid-Structure Interaction Analysis of Coronary Atherosclerosis Progression”:

On behalf of my co-authors, I would like to thank the editorial board for their detailed comments. We have addressed each of the editorial and production comments below, making the requested revisions to improve the quality of our work. A revised version of both the video and manuscript has been re-uploaded, with the manuscript in the requested format. Both a clean copy of the manuscript and a version with highlighted changes have been uploaded.

Editorial and Production Comments

Changes to be made by the Author(s):

1. Reword lines 98-99, page 3, for clarity.

Response:

Text has been reworded, see lines 98-100:

‘This limited predictive ability hinders clinical decision-making around which non-culprit plaques to treat (e.g., by stenting)’

2. In the ethics statement please also include this was deidentified data.

Response:

The inclusion that data was deidentified has been made. Please see line 149, page 4. This has also been updated in the video.

‘The following deidentified data was analyzed from a patient recruited into the ongoing COCOMO-ACS- randomized-controlled trial’

3. Protocol section text should match video narration and be written in imperative tense.

Response:

The protocol section has been updated to match the video narration. Changes are highlighted in yellow throughout. The section numbering has also been adjusted in the manuscript to better reflect the sections presented in the video. The title cards in the video have also been adjusted to match these sections.

4. Please place all figure and table legends as continuous document, not embedded in a table, with a one-liner title for each.

Response:

Figure and table legends have been adjusted to be in continuous format in the document with a one-line title added for each image in bold. Please see the Figure and Table Legends section, beginning line 622, page 15.

As an example, the Figure 4 caption now reads:

'Figure 4: Outline of biplane angiogram catheter point selection and three-dimensional reconstruction. (A) Angiogram with scaling points and catheter curve highlighted. (B) OCT based cross-sections of the lumen (blue) rotated and placed along the three-dimensional catheter centerline (red points).'

5. Please place the ethics card before the beginning of protocol and after the introduction.

Response:

The ethics card has been moved to before the protocol title card.

6. Please use dip to black or cross dissolve in the beginning and end of the video.

Response:

Dip to black has been added at the beginning and end of the video.

7. 01:54 – 10.45 audio is low. Please increase the levels by 30% or +3dB and ensure audio level peaks average -9dB.

Response:

Audio levels from 01:54-10.45 have been boosted by +3dB.

We hope that with these changes the editorial board find our manuscript and video suitable for publication.

Yours sincerely,



Harry J Carpenter