Reviewer's report

Title: CoreSlicer: A Web Toolkit for Analytic Morphomics

Version: 0 Date: 25 Oct 2018

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

No - there are major issues

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

Not sure - key details are missing from the manuscript

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

Not sure - key details are missing from the manuscript

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

No - there are major issues

OVERALL MANUSCRIPT POTENTIAL - Could an appropriately REVISED version of this work represent a technically sound contribution?

No - manuscript has some fundamental flaw(s)

PEER REVIEWER COMMENTS:

GENERAL COMMENTS: This is an interesting and understated in the literature. However, this paper reads mostly like a review article about coreslicer and morphometrics than an original
research article. For example, no hypothesis was included in the introduction. If this is intended to be a research paper, then the abstract should be structured accordingly with a methods section. Likewise, the background information should be much more concise. Also, the title should be more specific to address the particular area of investigation: routine pre-operative CT scans during assessment for a heart valve procedure. Part of the conclusion is unsubstantiated by the study performed: CoreSlicer is a free and open-source web-based interface aiming to facilitate measurement of analytic morphomics on DICOM images by non-technically skilled clinicians. CoreSlicer features a full set of DICOM viewing tools and extensible plugin interface to facilitate rapid prototyping and validation of new morphomic markers by researchers.

REQUESTED REVISIONS:

The aim of the study with regard to routine pre-operative CT scans during assessment for a heart valve procedure is not clearly stated in the abstract or beginning of the manuscript. How do you define non-technically skilled? In the background of the abstract, However, uptake by healthcare -- adoption may be more suitable than uptake. Please include p-value for statistical significance of the results. The sample size is rather small. Please perform power analysis. How do the morphometric analyses contribute to preoperative planning in these cases?

Note: This reviewer report can be downloaded - see attached pdf file.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript
Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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