Reviewer’s report

Title: Association between sagittal balance and adjacent segment degeneration in anterior cervical surgery: A systematic review and meta-analysis

Version: 0 Date: 15 Apr 2019

Reviewer: Pedro Berjano

Reviewer's report:

I have reviewed the manuscript "Association between sagittal balance and adjacent segment degeneration in anterior cervical surgery: A systematic review and meta-analysis "

The authors have a relevant, well built research question and use sound methods to identify, select and analyze the available literature. Data extraction is correct and statistical analysis and reporting follows well accepted international standards. The manuscript is written in good English and the introduction and discussion are pleasant and informative reading.

With regard to the reliability of the conclusions, the study has one critical limitation. All the analysis and conclusions derives from information with substantial risk of bias: the original articles were non-randomized, 6 out of 7 were retrospective.

Though I suppose that the studies were not conducted with the main aim of answering to the authors’ research question, I was unable to verify this point because the studies included in the meta analysis are not included in the reference list (which I suppose to be the result of a simple mistake but notably weakens the quality of the manuscript).

Thus, apart from the need to edit the manuscript to include the appropriate references, I believe that the authors should provide a very strong statement in the discussion, conclusions and abstract regarding the substantial risk of bias of their conclusions, and this is because of the substantial risk of bias of the source data that cannot be cancelled by appropriate a posteriori analysis. Otherwise the readers would be invited to take as demonstrated conclusions that are supported by very weak evidence here. Without appropriate comment, this manuscript might add to the GIGO literature in spite of excellent work of data processing from the authors.

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

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

Yes

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.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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