Reviewer’s report

Title: Reliability of pleth variability index in predicting preload responsiveness of mechanically ventilated patients under various conditions: a systematic review and meta-analysis

Version: 0 Date: 19 Feb 2019

Reviewer: Issam Tanoubi

Reviewer’s report:

Thank you for soliciting my opinion for the review of the manuscript "Reliability of a variable susceptibility index in the preload of mechanically ventilated patients under various conditions: a systematic review and meta-analysis"

The authors perform a meta-analysis focusing on the pleth variability index response in predicting preload responsiveness. The study is properly conducted. Additional review from a statistician may be needed.

Few major comments.

The pages are not numbered, which makes the review difficult.

Background, from "under the monitoring ... cardiac surgery [28]": This whole part should be integrated into the discussion section.

Do not include captions of figures and tables in the main text.

Please do not include results in the conclusion

The authors conclude that « the PVI can play … such patients after cardiac surgery and shock patients ». Although PVI seems reliable in these cases, these patients often have other invasive monitoring, often more reliable to predict preload responsiveness or have peripheral blood flow impairments, which further limits the use of PVI (should be added in the limitation section).

I hope this will help.

Issam.

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.

No

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

Yes

**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 recommend additional statistical review

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

Needs some language corrections before being published

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