Reviewer’s report

Title: EFFECT OF PEEP AND I:E RATIO ON CEREBRAL OXYGENATION IN ARDS: AN EXPERIMENTAL STUDY IN ANESTHETIZED RABBIT

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Reviewer: Nadja Carvalho

Reviewer's report:

Research article: EFFECT OF PEEP AND I:E RATIO ON CEREBRAL OXYGENATION IN ARDS: AN EXPERIMENTAL STUDY IN ANESTHETIZED RABBIT

The research abstract is very well writing and refers to a very interesting topic on the field of mechanical ventilation and ARDS. The results are very interesting and well described. However I have few comments, please find it below:

# 1:
Line 38 of Materials and methods:
Please rephrase the following sentence: "… resulting in a tidal volume (VT) of approximately 6 ml/kg." or replace it on line 35, the way it is sounds as if the adjustment of the RR has an influence on the amount of the VT generated.

# 2:
There are different approaches to adjust the PEEP level very well described in the literature e.g. according with the compliance. Please justify why the PEEP levels of 6 and 9 cmH2O was used in the current work and justify why the authors decided not to use one of the approaches already described in the literature.

# 3: I am particularly curious why the authors used forced oscillation technique to measure respiratory mechanics. Considering that the animals were ventilated using control mode, it would be easier to apply the equation of motion and make the estimation of respiratory mechanics variables.

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.

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 am able to assess the statistics

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

Acceptable

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