Reviewer’s report

Title: Neurally Adjusted Ventilatory Assist (NAVA) or Pressure Support Ventilation (PSV) during spontaneous breathing trials in critically ill patients: a crossover trial

Version: 0 Date: 05 May 2017

Reviewer: Vagheggini Guido

Reviewer’s report:

Very interesting study, aimed to evaluate the feasibility and the effectiveness of NAVA as ventilatory mode during spontaneous breathing trials in weaning from mechanical ventilation.

Methods are well explained, and results are relevant, well discussed and argumentated.

Some minor points need to be clarified:

1) patients underwent to the SBTs of the study as first weaning attempt or, before the study, have received other (failed) weaning trials? If possible it would be useful to include this information in Table 1

2) patient n° 4 failed SBT trial according to criteria adopted in the study (RR 39/min)

3) the subgroup of reintubated patients have a higher duration of MV (8.0±2.7 vs. 5.6±2.7 days. Is this difference clinically or statistically relevant? Please discuss.

4) Please discuss better the high reintubation rate and review reintubation rate in other studies with similar patient characteristics.

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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