Reviewer’s report

Title: Comparison of the Effects of Moderate and Severe Hypercapnic Acidosis on Ventilation-Induced Lung Injury

Version: 4 Date: 12 December 2014

Reviewer: Maria JC Carmona

Reviewer’s report:

The authors revised the text according to suggestions; although they decided do not include the justification of the sample size in the new version. The current manuscript is clearer and more complete.

The topic of this study is original and important, considering the potential protective effects of hypercapnic acidosis on lung injury and the uncertainty regarding appropriate PaCO2. The conclusion that moderate hypercapnic acidosis has a greater protective effect on high-pressure ventilation-induced inflammatory lung injury can orient future experimental and clinical studies.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

No conflict of interest