Reviewer's report

Title: Evaluation of the PaO2/FiO2 ratio after cardiac surgery as predictor of outcome during hospital stay.

Version: 3
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Reviewer: Gennaro Depascale

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TITLE
Evaluation of the PaO2/FiO2 ratio after cardiac surgery as predictor of outcome during hospital stay

The authors present a study where they investigated the role of postoperative PaO2/FiO2 ratio as predictor of mortality and ICU length of stay in patients undergoing cardiac surgery. Although it is well known that post-operative respiratory failure significantly impacts upon patients outcome, the paper describes a large prospective population following a clear and correct methodological method. The manuscript is well written. However I would like to address some minor essential revisions

Minor Essential Revisions

Methods: May the authors provide more details upon mostly common used intraoperative ventilatory strategies?

Page 6, line 13: please add corresponding to before an inconclusive outcome.

Table 5: please indicate in the table (or in the 'results' section) which variables were not included in the multivariate analysis since having p<0.1

Discussion paragraph: I would consider the absence of information regarding the reasons leading to low P/F ratio values a limit of the study.

Discussion paragraph, page 10, line 1-4: Please reformulate the sentence

Conclusions: I would shorten the second and last sentence

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests' below