Reviewer's report

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

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Reviewer: Angela Lipshutz

Reviewer's report:

In this prospective observational study, Esteve et al. evaluate the utility of PaO2/FiO2 ratio to predict mortality in a large cohort of post-operative cardiac surgery patients. They perform a robust and sophisticated analysis, and find that a P/F ratio of < 202 at 3 hours after ICU admission is associated with increased ICU mortality. Although it is not surprising that patients with a lower P/F ratio fare more poorly, this has not previously been studied, and thus represents an interesting and novel addition to the literature on this topic.

The authors have adequately responded to my previous comments and I believe the manuscript is now suitable for publication.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.