Reviewer's report

Title: Early prediction of survival after open surgical repair of ruptured abdominal aortic aneurysms

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Reviewer: JONATHAN SOBOCINSKI

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Review BMC Manuscript – Jonathan Sobocinski

Early prediction of survival after open surgical repair of 1 ruptured abdominal aortic aneurysms

General notes:

This article is well written. The scoring and prediction of short, mid-term prognosis for those patients is still an issue. Nevertheless, several literature reviews and propensity scores have been proposed.

The description of methodology is appropriate even if the description of the chosen scores - that are not well known for vascular physicians – should be more developed.

Besides, many questions came to me:

1. You presented the predictive scores as “independent of the chosen treatment” so why did you decide to remove endo repair from your score evaluation? do you think those scores are not relevant and/or consistent for those latter patients? it should be discussed further

2. Several scoring methods (Glasgow,...) have previously been described and proposed to predict mortality for ruptured AAA? How did you consider them in comparison to yours?

Results are not clearly exposed – and are bit confusing; we understood that you achieved to define a higher sensitive cut-off within your scoring system. I suggest that you should present your results "score-by-score" and then go through with the comparison. How do you explain that the scores proposed are not discriminant after 3 days?

The significant difference of the age of patients between both cohorts remains a major bias in the final analysis – and should more discussed and documented (results of open AAA surgery with octogenarians...).

line 127: Results regarding the length of stay in the ICU are not relevant – patients in the second group are dead.

line 189: I do not agree, You cannot say that: we all know that the use of a score in clinical practice is always complicated – the more items you need to include the less the score will be applicable.
Those scores have already been evaluated and compared with other evolving pathologies (missing references) – discussion of those previous reports, their consistency and their applicability to the vascular field should be included and debated in the present discussion.

The bibliography and the literature review are a bit light – and should be enhanced with major references regarding AAA rupture and recent review of scoring systems.