Reviewer’s report

Title: suPAR as a prognostic biomarker in sepsis

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Reviewer: Hector Wong

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Dr. Donadello and colleagues have provided a Mini-Review of suPAR as a biomarker in sepsis. Based on the available literature the authors conclude that suPAR is not particularly useful as a diagnostic biomarker, but may have some value as a stratification biomarker. The data supporting its utility as a stratification biomarker are actually not very impressive. The following suggestions may improve the manuscript.

1. In the abstract, the last sentence states that suPAR may be useful for assessment of response to therapy. This is not consistent with what the authors state in the body of the manuscript (page 9).

2. Regarding the data supporting suPAR as a stratification biomarker: it would be useful to know when the levels were drawn in the various studies. This information is not consistently provided in the text. If available, this information is important to include as “timing” is important in judging the performance of a stratification biomarker. A stratification biomarker that is robust during the first days of admission is probably more useful than one that provides a prediction later in the course of the ICU course.

3. The authors allude to the fact that suPAR plasma/serum levels are affected by renal function. Do they have a sense of how well this confounding factor was analyzed in the various studies?

4. The studies reviewed regarding suPAR and stratification are relatively small, individually, and there does not appear to be any evidence of validation. As such, are the data amenable to some sort of formal meta-analysis to derive a suPAR “range” for prognostication?

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 interest