Reviewer’s report

Title: Genetic variants in Forkhead box O1 associated with predisposition to sepsis in a Chinese Han population

Version: 0 Date: 14 May 2019

Reviewer: Evangelos Giamarellos-Bourboulis

Reviewer's report:

This is a study on sepsis genetic predisposition with a novel study design i.e. WES of selected cases followed by SNP analysis in a validation cohort. I have some major concerns for this submission:

* The authors need to explain the criteria of selection of the 10 sepsis patients for WES. Why did they not select extreme phenotypes? How do they explain that PCT levels in survivors and non-survivors of these depicted cases were similar? This is contradictory to what is reported by others.

* Where p-values adjusted for multiple comparisons? The reported p-values of Tables 5 and 6 as significant are close to 0.05.

* The authors need to explain the decrease of FOXO1 protein in sepsis. Is this an effect of sepsis-induced immunosuppression? Why levels do not differ between AA/AG and GG genotypes within the sepsis subgroup? This makes the genetic finding not translated to protein significance.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics
Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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