PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (**http://bmjopen.bmj.com/site/about/resources/checklist.pdf**) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Role of sTREM-1 in Predicting Mortality of Infection: A Systematic review and Meta-analysis
AUTHORS	Su, Long-xiang; Liu, Dan; Chai, Wenzhao; Liu, Dawei; Long, Yun

VERSION 1 - REVIEW

REVIEWER	JL Vincent Université libre de Bruxelles, Brussels, Belgium I am the editor in chief of Critical Care
REVIEW RETURNED	21-Nov-2015

GENERAL COMMENTS	This is another meta-analysis on the value of presepsis in sepsis. The analysis is well done and the text well written, but the information is very similar to several recent meta-analyses published recently on the same subject. I am particularly worried about the meta-analysis just published in Critical Care by Zhang et al, and the one published in PLOSOne by Wu et al. and there are more similar meta-analyses submitted to journals. The authors do not mention any industry support : is it true ? There must be some link between these (at least 6) similar papers coming from different groups of Chinese investigators. We need more information before recommending publication.

REVIEWER	Thorsten Brenner, MD Department of Anesthesiology Heidelberg University Hospital 110, Im Neuenheimer Feld D-69120 Heidelberg Germany
REVIEW RETURNED	11-Feb-2016

GENERAL COMMENTS	**General comments** In the present systematic review and meta-analysis by Su et al., the prognostic value of sTREM-1 levels in predicting mortality at initial stages of infection was determined and critically discussed. In result, sTREM-1 concentrations were shown to be of moderate prognostic significance with regard to the assessment of mortality in adult patients with an infection respectively sepsis. It was therefore suggested, that sTREM-1 levels need to be included in a panel of biomarkers in order to predict outcome in these patients. The following suggestions need to be addressed in connection with the presented manuscript:

	Minor comments: – Figures: o The number of figures needs to be reduced significantly. I would suggest presenting figures 1, 3, 5, 7, 8 in the print version of the manuscript and to include figures 2, 4, 6 in the Supplementary. o For reasons of clarity, the name of the study group should be implemented in the title of figures 5 (all patients with an Infection) & 8 (patients with sepsis).

REVIEWER	Giovanni Sotgiu University of Sassari, Italy
REVIEW RETURNED	30-Mar-2016

GENERAL COMMENTS	Nice manuscript and appropriate methodology. No specific concerns related to the methodology.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1
Reviewer Name
JL Vincent
Institution and Country
Université libre de Bruxelles, Brussels, Belgium

Please state any competing interests or state 'None declared':
I am the editor in chief of Critical Care

Please leave your comments for the authors below
This is another meta-analysis on the value of presepsis in sepsis. The analysis is well done and the text well written, but the information is very similar to several recent meta-analyses published recently on the same subject.
I am particularly worried about the meta-analysis just published in Critical Care by Zhang et al, and the one published in PLOSOne by Wu et al. and there are more similar meta-analyses submitted to journals. The authors do not mention any industry support : is it true ? There must be some link between these (at least 6) similar papers coming from different groups of Chinese investigators.
We need more information before recommending publication.
Response:
We have answered the reviewer 1 last time.

Reviewer: 2
Reviewer Name
Thorsten Brenner, MD

Institution and Country
Department of Anesthesiology
Heidelberg University Hospital

110, Im Neuenheimer Feld
D-69120 Heidelberg
Germany

Please state any competing interests or state ‘None declared’:
None declared.

Please leave your comments for the authors below
In the present systematic review and meta-analysis by Su et al., the prognostic value of sTREM-1 levels in predicting mortality at initial stages of infection was determined and critically discussed. In result, sTREM-1 concentrations were shown to be of moderate prognostic significance with regard to the assessment of mortality in adult patients with an infection respectively sepsis. It was therefore suggested, that sTREM-1 levels need to be included in a panel of biomarkers in order to predict outcome in these patients. The following suggestions need to be addressed in connection with the presented manuscript:
Minor comments:
– Figures:
o The number of figures needs to be reduced significantly. I would suggest presenting figures 1, 3, 5, 7, 8 in the print version of the manuscript and to include figures 2, 4, 6 in the Supplementary.
o For reasons of clarity, the name of the study group should be implemented in the title of figures 5 (all patients with an Infection) & 8 (patients with sepsis).
Response:
We have only performed the figures modifications according to your recommendations. Thanks a lot.

Reviewer: 3
Reviewer Name
Giovanni Sotgiu

Institution and Country
University of Sassari, Italy

Please state any competing interests or state ‘None declared’:
No CoI

Please leave your comments for the authors below
Nice manuscript and appropriate methodology. No specific concerns related to the methodology.
Response:
Thank you for your comments.