Reviewer’s report

Title: Risk stratification by abbMEDS and CURB-65 in relation to treatment and disposition of the septic patient at the emergency department: a cohort study

Version: 3  Date: 17 May 2015

Reviewer: Bin Du

Reviewer’s report:

The authors, in a group of 725 patients with sepsis presenting to emergency department, compared the predictive value of abbMEDS and CURB-65, with regards to antibiotic treatment and disposition.

Major compulsory revisions

1. The discriminatory values of both abbMEDS and CURB-65 are only moderate, not good, with ROC AUC of 0.77 and 0.73. The reviewer believes that, in a group of patients with very low mortality rate such as CAP, mortality rate is not an appropriate endpoint to compare the predictive value.

2. The authors reported no significant difference in terms of adequate versus inadequate antibiotic treatment, which is different from findings of many other studies. Could the authors provide a detailed explanation of this finding?

3. If the authors think that abbMEDS provides a better match of current clinical decision than CURB-65, the reviewer believes that it is important to explain the benefit of such a difference. For example, 9.4% of high risk patients by CURB-65 but none by abbMEDS were treated without IV broad-spectrum antibiotics. Then how about the outcome of these 9.4% of high risk patients? Although there might not be no fatalities, is there any evidence suggesting more harms, such as ICU admission, prolonged antibiotic treatment, or prolonged LOS?

4. Data presented in Table 3 are very difficult to understand.

Minor comments

1. There is no p value in Table 1.

2. The reviewer believes that data in table 3 and Figure 3 are redundant.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

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 interests.