Reviewer's report

Title: Adjudication of Etiology of Acute Kidney Injury: Experience from the TRIBE-AKI multi-center study

Version: 2 Date: 28 March 2014

Reviewer: Kent Doi

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Koyner and colleagues of the TRIBE-AKI investigation group evaluated the performance of new AKI biomarkers whether they could distinguish the etiologies of AKI (prerenal or ATN) that was judged by three independent nephrologists. Although virtually no biomarker could determined prerenal and ATN well, this result might be caused by discrepant judgment by nephrologists.

I have only minor comments.

1) Significant differences were observed among the three nephrologists for determining the etiology of AKI. It is quite interesting because post-cardiac surgery AKI has been recognized as a relatively homogeneous entity compared with other AKI such as septic AKI. This should be addressed in the discussion.

2) Table 2 indicates that severe AKI by the RIFLE criteria were judged by ATN. Could no biomarker distinguish the severity of AKI in this cohort?

3) Evaluation of biomarkers highly depends on the outcome definition (=gold standard). Gold standard in this study depends on a panel of three independent nephrologists; however their judgment might not be good for predicting the outcomes such as length of ICU stay. Could their judgments be validated by other way?

4) It may be interesting to show the raw data of each biomarker level in the cases that were assigned as 2IND; 1ATN, 2IND; 1PRA, and 1ATN; 1PRA; 1IND, i.e., very controversial cases.

Level of interest: An article of outstanding merit and interest in its field

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 interests.