Reviewer’s report

Title: Proteinuria and hematuria are associated with acute kidney injury and mortality in critically ill patients: a retrospective observational study

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Reviewer: Byung Ha Chung

Reviewer’s report:

General comments
This study investigated the role of proteinuria and hematuria in the development of acute kidney injury and mortality. This topic is interest and manuscript is well written and the patient number is impressive. However, I have some major and minor comments.

Major Compulsory Suggestions
1. Authors should describe more in detail about the role of hematuria on mortality. The increased risk of the development of AKI or the progression of CKD in patients with hematuria has been reported in many previous reports. However, there has been few report to prove the role of hematuria on the development of mortality. Authors should discuss the proposed mechanism or relationship between hematuria and mortality.

Minor Essential Suggestions
1. I recommend to present the number of patients who showed both proteinuria and hematuria in table 1. In addition, how about the outcome of patients with both hematuria and proteinuria compared to patients who showed solely proteinuria or hematuria? I am curious whether hematuria and proteinuria have synergistic effect on AKI or mortality.

2. I recommend to include DM, which has been proved as strong prognostic factor for AKI and mortality in many previous reports, as covariate in multivariate analysis in table 2-4.

3. I recommend to add ROC curve about hematuria or proteinuria for the prediction of AKI. Addition of it would help readers to understand easily the role of hematuria or proteinuria in the development of AKI.

Discretionary Suggestions
1. I recommend to move some sentences in ‘Conclusions’ to ‘Discussion’ part or to omit some of them because they are repeated. For example, you already mentioned about the limitation of this study in the last paragraphs of discussion, but you describe it again in conclusion.
2. I do not understand why author present both table 2 and table 3. I think many contents of them overlapped.

**Level of interest:** An article of importance 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'