Reviewer’s report

Title: Biomarker Enhanced Risk Prediction for Development of AKI after Cardiac Surgery

Version: 1 Date: 10 Mar 2018

Reviewer: Rakesh Malhotra

Reviewer's report:

Reviewer Comments: Manuscript is much improved. However following points need further clarification.

Minor comments:
1) Please remove last sentence from conclusion: "An independent validation set was not performed".
2) Please define and abbreviate when used first time. For example: Acute Kidney Injury (AKI) is repeated in line 7 and line 9. ICU is not defined in line 13. Similarly, RIFLE and KDIEGO not defined in line 20. Define IL-18 in line 58. Serum creatinine is repeated multiple times in introduction. Whole manuscript is filled with such errors. Please double check whole manuscript.
3) Some Sentence structures are too big. For example: "AKI after cardiac surgery is associated with increased short-term and long-term mortality, increased length of ICU and hospital stay, increased ventilator days, increased cost of hospitalization, and increased risk of developing chronic kidney disease (CKD) and end-stage renal disease (ESRD)". Please revise manuscript as needed. I believe additional efforts are required to make manuscript more reader friendly.
4) Please describe how baseline serum creatinine was defined? Add text in the manuscript.
5) Why authors decided to use Thakkar Cardiac Surgery risk score? There are multiple scores available for example: predictive model by Bernie et al demonstrated better discrimination compared with the Cleveland Clinic Score. Also, this is the first predictive model for all stages of AKI.

6) Please draft separate paragraph on strength of study, also how these study findings can be used in the future for risk stratification.

7) How much I love Dr. Thakkar, I would refrain from using study author name again and again in the manuscript. This is a personal suggestion. Please spell check again.

8) Please follow standard guidelines for p-values. For example, P-values showing two significant decimal places (e.g. 0.25) or one non-zero if smaller than 0.01 (e.g. 0.005 or < 0.001). Apply this for all tables.

9) Table 1: Please remove superscripts on CHF, DM,…so on. Please report data as n (%). Age years, mean ± SD; similarly for creatinine, blood pressure etc.

10) Table 4: Report data as two significant decimal places.

11) Number of Tables for the manuscript are high. Keep Table numbers to 4. May consider moving some tables as supplemental data.

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.

Yes

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:
Needs some language corrections before being published

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