Reviewer's report

Title: Dysnatremia, its correction, and mortality in patients undergoing continuous renal replacement therapy: a prospective observational study

Version: 1 Date: 18 September 2015

Reviewer: Kianoush Kashani

Reviewer's report:

- Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

  o The article needs significant language improvement. It needs to be reviewed by someone whose speak English as the mother tongue.

  # Example: Authors say: “The distributions of AKI causes were different among sodium groups. Hyponatremia 13 groups had higher scores on the Charlson Comorbidity Index than the normonatremia group.” CCI is only an indicator of risk for AKI, not the cause.

- Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

  o Authors corrected sodium for glucose. This formula may not be correct when glucose is more than 400. They need to present median and IQR of glucose level.

  o Authors mentioned they used hypo or hypertonic solutions to correct sodium during CRRT. They need to report how much of each solution was employed in each subgroup and total.

- Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

  o What is sodium score? How they come up with this score? This is wrong assumption that this formula corrects sodium for the severity of illness. Have they validated it? In addition this assumes there is a linear relationship between the severity of acute disease and sodium level, which is not proven by their data.

Level of interest: An article of limited interest

Quality of written English: Not suitable for publication unless extensively edited

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