Reviewer’s report

Title: Efficacy and safety of sodium zirconium cyclosilicate in patients with baseline serum potassium level ≥5.5 mmol/L: pooled analysis from two phase 3 trials

Version: 1 Date: 30 Jul 2019

Reviewer: Zubaid Rafique

Reviewer's report:

Please overwrite this text when adding your comments to tReviewer Comments:

This is a nice review of the efficacy of SZC in the first 48 hrs.

My comments are as follows:

1. This is a post hoc pooled analysis without a control arm for comparison. Therefore, the conclusion needs to be a little more restrained. Ln 248 (conclusion) states "rapid reduction in serum K" is not based on data; there was no rate-of-change calculation comparing to control arm, so it would be prudent to delete "rapid" from the Conclusion section and everywhere else in the manuscript.

2. Results section reports decrease in K within 1 and 2 hrs. It would be helpful to have a figure showing K change over the first 4 hrs from baseline for mild, moderate and severe hyperkalemia cohorts (5.5-6, 6-6.5 and >6.5mEq/L)

3. Table 2 is misleading and needs more context. Which hyperkalemia cohort (mild, moderate, severe) got corrected (K<5.5) at 2 hrs? I understand only 80% reached that point at 4hrs.

4. Ln 233 "Patiromer has demonstrated efficacy for the treatment of serum K+ levels of 5.5-<6.5 mmol/L in randomized controlled trials; however, those effects were achieved at a dosing regimen beyond what is currently indicated in its label". Please clarify. Does this mean that the FDA approved dose is not effective in treating hyperkalemia?

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