

We would like to thank all the reviewers for their valuable comments and their help in the improvement of the paper. We tried to answer to all of the comments, point by point.

Reviewer 00505686: that is a valuable study

Thank you for your support.

- Reviewer 00503286: The paper "Evaluation of Blood Bicarbonate Levels and Blood Gas Analysis in Hemodialysis Patients who switch from Lanthanum Carbonate to Sucroferric Oxyhydroxide" should be published, only after minor corrections with the editor.

Thank you for your support.

- Reviewer 02874644: I have several major concerns about this manuscript Comments

"1) Very small samples size; From the study it's concluded that switching from LanC to another phosphate binder SFOH did not have any significant effect on blood bicarbonate levels and gas analysis, however the sample size of the study is very small to draw any conclusion and to find out the significance of this study. Moreover, the data is not sufficient to meaningfully draw any conclusion, additional data is required to understand the demographic of the subjects in two groups. Parameters that could confound the acid-base findings such as dietary protein intake should have been included ."

We agree with the reviewer and we comment on these in the discussion and limitations sections of the paper. The small sample size is a major limitation; however our study can serve as a pilot for future studies with larger sample size and less limitations.

"2) I am unable to understand what the rationale for switching phosphate binders in these subjects when they do not have acidosis to begin with. Having said that, it seems irrational to me to study how SFOH affects acidosis. 2) In the study protocols authors stated that "The patients were taking LanC in the form of 750 mg chewable pills (Fosrenol, Shire Pharmaceuticals Cont. Ltd, UK) for at least 6 months, but they had to change phosphate binder due to logistic reasons". The logistic problem should be specifically defined as that may have a bearing on the findings/interpretation."

The rationale for switching phosphate binders was only logistic (specifically limited access that has to do also with the logistics for reimbursement and disposal limitations) and not the acid-base status of the patients. As the participants would change phosphate binder, we found this as an opportunity to examine if this switching will have any effect on acid-base status of these patients (especially if we consider that SFOH is a new phosphate binder with limited literature). We added the logistic reasons.

"3) As per table 2, in SFOH group, the reductions in phosphate levels were not significantly different between pre- and post- switching samples?? Moreover, the baseline phosphate levels between SFOH and Control groups are substantially different. In order to get determine the real effect of switching versus non-switching to a new phosphate binder the baseline phosphate values should be similar between the two groups. 4) Similar Concerns

are for baseline values of partial oxygen pressure and BE? 5) What was the reason for increase in phosphate values in Control group?"

Baseline levels of phosphate, pO<sub>2</sub> and BE were not statistically different between the groups. This may be due to the small sample size. Also post-switching phosphate level in the SFOH was not statistically different. This may be due to the fact that the reason for switching phosphate binder was logistic and not the effectiveness of the previous binder. The participants had a good phosphate control with the previous binder and the SFOH was titrated to achieve phosphate levels target. As SFOH is effective with less pill burden the patients in this group had lower phosphate levels post switching, but the difference was not statistically significant (again the small sample size may play a role). Analogous explanations may account for the non-statistically significant increase of phosphate levels in the control group.

- Reviewer 03521962: This is an interesting paper with the potential to contribute to the existing knowledge in the field. It is well articulated and the presentation is good. I therefore, wish to accept the manuscript for publication in its current form.

Thank you for your support

- Reviewer 02885976: I have some few comments to the authors:

"Table 1 must be re-structured and include both groups to compare the baseline characteristics (also include a separate column with the statistical difference value corresponding to each parameter)"

Restructured as requested

"Although the authors mentioned "data not shown" for the analysis of data for the 3-day and the 2-day interdialytic intervals between the two groups, this is a relevant issue that it must be included in the manuscript."

We decided to include the relevant analyses as supplementary tables.

"The authors mentioned in result section (third paragraph): "the only significant differences that we found were between the 3-day and 2-day measurements. HCO<sub>3</sub><sup>-</sup>, BE and pH were significantly lower and K higher at the 3-day vs. 2-day interdialytic interval, as expected". For which group of patients are referring these results?

In both groups and in the whole study population. We added this at the end of the paragraph: "When we performed the same analyses in the post switching measurements, or in the different groups, the findings were similar (data not shown)."