Author's response to reviews

Title: Skin-impedance in Fabry Disease: A prospective, controlled, non-randomized clinical study

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Author's response to reviews: see over
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To the Editor of Biomed Central Neurology

Re: 2003602465179258 Resubmission 2 - Skin-impedance in Fabru disease: A prospective, controlled, non-randomized clinical study

Dear Editor,

We are resubmitting the above manuscript in which we made the following changes requested by the reviewers.

**CCH**

1. We added information and references on the technique in the introduction (page 5) and the methods (page 7).
2. We modified the conclusions in the abstract and the body of the manuscript accordingly. We also explain why we expected to see difference between day 2 and 13 post-infusion. It is based on our previous observations using QSART (Schiffmann et al 2003).
3. We added a paragraph in the Results section, page 11, on the effect of GALA levels on the statistical model and subject group membership. We did not assess the relationship to the degree of renal failure. Previously, however, we have not observed such a relationship using QSART for example.
4. Figure 2: we added the units to the legend.
5. We made the other corrections suggested by the reviewer.

**GEEL**

1. Why use this method: we explain in detail the nature of the method, the fact that, unlike QSART and TST, it measures baseline rather than induced sweating. This may explain the different results. We also note the ease of use and portability.
2. We took out all but one table and left two figures only.

**RDS**

1. We took out of the Abstract the statement about serial measurements. We explain why this technique may be useful: “The instrument portability, ease of its use, a relatively short time required for the assessment, and the fact that DDIM system was able to detect the difference in skin-moisture makes the instrument a useful clinical tool.”
2. We clearly state now in the results that the significant difference occurred only between Fabry patients and controls.
3. Regarding the effect of GALA levels and patient groups, we added a paragraph page 11 with the appropriate data. The latter was inadvertently omitted.
4. Serial testing: is mentioned only as a possible limitation of this study. It is possible that serial testing will demonstrate variable results over the two week period between infusions. See Schiffmann et al. 2003, Muscle and Nerve).

5. Difference between skin impedance method and QSART and TST: In trying to explain why no ERT effect was seen we simply suggest that that may be the absence of stimulation in the skin impedance method compared to the other two. It is possible that ERT affect induced sweat rather than baseline skin humidity.

6. We note that our results here are consistent with QSART and TST data in that they again show clear difference between healthy and Fabry subjects.

7. A discussion regarding the mechanism of effect of ERT on sweat if any is outside the scope of this paper especially since we did not demonstrate an ERT effect. In general however we noted in our previous publication that the deficiency and its correction are due to change in the gland function rather than cellular regeneration.

8. Table 2 was deleted.

9. Figure 2 was deleted as well

10. We made the suggested change in that sentence.

As we have address all the reviewers’ concerns, we hope this manuscript is now acceptable for publication in Biomed Central.

Sincerely,

Raphael Schiffmann, M.D.