Reviewer’s report

Title: Lean Body Mass: The Development and Validation of Prediction Equations In Healthy Adults

Version: 3 Date: 27 August 2013

Reviewer: Heliodoro Aleman-Mateo

Reviewer’s report:

Major Compulsory Revisions

Dear authors I am so glad to know that all points raised by me were answered. However, the validation procedures is still confusing for me. In Table 1, the authors present the Concordance R (95% CI), I guess that it came from the results of the analysis of the concordance correlation coefficient proposed by Lin L. LBM PE1 and PE2 had a values below 0.90 indicating a weak strenght. Is not clear if the authors tested accuracy of the new equation by obtaining the concordance correlation bias. From my point of view this is the most important issue that is not clear how exactly the authors tested accuracy of new equations. If you look the table 2, 3 and 4 this information is missing. Additionally, a graph of the concordance correlation between estimated LBM by DXA and LBM estimate by the new equation must be included. Finally, I would like to see the average difference between methods by bland and altman analysis.

Level of interest: An article of importance in its field

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

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.