Reviewer’s report

Title: Quantification and Physiological Significance of the Rightward Shift of the V-slope during Incremental Cardiopulmonary Exercise Testing

Version: 0 Date: 17 Feb 2017

Reviewer: Jon Oliver

Reviewer's report:

The authors present an interesting paper examining the VAT and associated right shift in a clinical population. The paper is very well written, there is a clear research question, the methods provide a comprehensive approach to data handling, the discussion interprets the those results and the findings may have some applied, clinical applications. Importantly the research meets the criteria of the Journal; the study is scientifically valid, with a sound research question and suitable methods.

The only area that requires attention is some of the statistical analyses. You disclose that your right shift data are not normally distributed, and this variable is involved in most of your analyses. However, even though the data is non-normal you apply parametric testing throughout (Pearson's correlation, students t-test, one-way ANOVA) with the right shift data. Those analyses should be rerun with a non-parametric equivalent to reflect the properties of the data. I doubt this will make any material difference to the findings or interpretation, but it is needed to be statistically correct.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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