Reviewer’s report

Title: FEV1 and FVC and Systemic Inflammation in a Spinal Cord Injury Cohort

Version: 0 Date: 21 Feb 2017

Reviewer: Lewis Smith

Reviewer's report:

The authors describe the cross-sectional association between two biomarkers of systemic inflammation (IL-6, CRP) and lung function (FVC, FEV1, FEV1/FVC) in a large number of patients with chronic spinal cord injury. Using unadjusted and various adjusted models they found that higher levels of these two biomarkers were associated with reduced FVC and FEV1.

I have no issues with the study design or the analysis described. However, the study adds little to what the authors have previously published other than they now present data on about twice as many individuals and made some additional adjustments to their analytical model. The study does not add any particular insight into cause and effect. For example, could lower lung function with greater predisposition to recurrent microaspiration without clinical pneumonia lead to higher systemic levels of inflammatory biomarkers? Further, the authors included 61 individuals from their earlier publications. Although they were retested and only the new data included, they represent about 20% of the population reported now, which could increase the likelihood that the current results would parallel their previous results. They should re-analyze the data excluding those 61 individuals. More importantly, they could use these 61 individuals for a smaller longitudinal study that could provide insight into reproducibility as well as cause and effect. What is now needed is a longitudinal study not another cross-sectional study examining the same biomarkers.

Minor Comments:

The data in tables 2 and 3 are too busy. A limited amount of information from these tables would be better presented as a figure or graph. The full data could be provided as a supplemental table.

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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