Reviewer's report

Title: Relationship between peripheral airway function and patient reported outcomes in COPD: a cross-sectional study

Version: 1 Date: 24 August 2009

Reviewer: Bill Diong

Reviewer's report:

This paper describes a study to determine the correlation between 3 objective pulmonary function tests/measurements (spirometry, IOS and CT) to 3 patient reported outcomes (SGRQ, MRC, HADS) in COPD.

The question posed by the authors is well defined, the methods appropriate and well described, and the data appear to be sound. Moreover, the manuscript adheres to the relevant standards for reporting and data deposition, the writing is better than acceptable and the discussion and conclusions well balanced and adequately supported by the data. The authors also clearly acknowledge the works upon which they are building, and the paper's title and abstract accurately convey what has been found.

However, the limitations of the work are not properly stated: this study's population consists only of men. The same study may (or may not) find gender differences if women are also part of the study. This significant limitation should be added to the last paragraph of the Discussion section.

[ This is a Major Compulsory Revision ]

The following are Minor Essential Revisions (with suggested changes underlined; these markings appear in the Word format version of this report e-mailed to the editorial staff):

1. In Table 1, the height characteristics of the study population should be included; this is because several studies (see Oostveen et al, Eur Respir J 2003; 22:1026-1041) have documented the strong correlation between height and IOS values (in normal subjects)

2. Last line of MS page 2: "... investigated the .."

3. 2nd para of MS page 4 "... IOS measures lung resistance and reactance, ..."

4. 2nd para of MS page 5 "... assessments consisting of conventional ..."

5. 2nd para of MS page 9 "... expressed as mean+-SD"

The following are Discretionary Revisions (with suggested changes underlined; these markings appear in the Word format version of this report e-mailed to the editorial staff):
1. 2nd para of MS page 9, consider deleting the sentence "Additionally, for the ordinal variable ... " since it serves little purpose.

2. 2nd para of MS page 12 "... and the total SGRQ and ..."

3. 1st para of MS page 14 "... the HADS, and neither did the pulmonary function test parameters or CT."

4. 2nd para of MS page 14 "... features of COPD"

5. 2nd para of MS page 14 "... by IOS consistently correlated with ..."

6. 2nd para of MS page 17 "... in male patients with COPD."

7. 2nd para of MS page 17 "... assess the male COPD patient’s ...

8. Reference 4 “... Eng P ...”

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.