Reviewer’s report

Title: A cluster analysis of chronic obstructive pulmonary disease in dusty areas cohort identified three subgroups

Version: 1 Date: 06 Oct 2017

Reviewer: Seyed Nouraie

Reviewer’s report:

After reviewing the original statistical comment from second reviewer and provided responses, I conclude that comments were adequately addressed. These responses provided to show the adequacy of PCA assumption, sensitivity analysis, more clarification of how PCA score were used in cluster analysis as well as limitation of using change of variables that were were used in clustering.

I suggest to:

1) Be more specific about which score from PCA was used for clustering, was it regression score or score from factor analysis.

2) Specify the potential direction that results could be affected by using change of FEV1, mMRC and CAT in final analysis.

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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