Reviewer's report

Title: Association of biomarkers of inflammation and cell adhesion with lung function in the elderly: a population-based study.

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Reviewer: Ana-Maria Buga

Reviewer's report:

1. This manuscript addresses a very important topic which is chronic obstructive pulmonary disease (COPD) in the elderly. We know that progressive decline in lung function mainly affect elderly people independent of their history of exposure to tobacco. The reasons for this are still unclear. The argument is of interest for the readers of the journal, and it raises several points stimulating their attention.

Discretionary revisions:

2. The authors describe well the methods used in this study. However, according with some studies, the statins were found to reduce IL-6 levels and in consequence CRP levels. My suggestion is to specify also the comorbidities in the clinical characteristics of population data.

3. In the results part, the Authors compared the FEV1 and FVC with inflammation marker. Did the authors correlate this inflammation marker with FEV1/FVC ratio (that reflect better pulmonary obstruction comparing with FEV1)?

4. The discussion and conclusion are well balanced and the limitation of the study is clearly defined. In this part Authors highlight the recent findings that elevated level of CRP are associated with comorbidities like miocardial infarction or lung cancer. I suggest that the authors should also cite some of the most recent findings that associate CRP level with other aged related diseases in elderly like stroke (e.g. Di Napoli et al., Neurology, 79, 2012 etc).

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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