Reviewer's report

Title: Perseverant, non-indicated treatment of obese patients for obstructive lung disease

Version: 2 Date: 18 June 2012

Reviewer: Simone Scarlata

Reviewer's report:

Major compulsory revisions
1) This is a small retrospective cohort study investigating the hypothesis of a overuse of inhaled therapy amongst obese patients referring dyspnea. I found it quite original and focusing a very hot topic. Unfortunately, although the paper is well written, the sample size is quite small and this may affect the generalisability of the results. On the other side, data on the relationship between obesity and overtreatment partially replicate those already available in literature and therefore may be considered significant.

Methods
1) It is not clear whether the authors used the LLN or the 0.7 fixed value of FEV1/FVC as a cut-off for lung obstruction. This must be cleared because, if fixed value was eventually used, this could have been underestimate the diagnosis of obstruction, considering the young mean age of patients (52 yo). Authors should motivate and discuss their choice.

2) Authors should also clarify whether all tests were conducted with patients observing wash out from medications. 3) 5 studies (3.2%) were defined as inconclusive. It is unclear what is meant and which criteria have been used to define an un conclusive spirometry. Please add.

4) Was dyspnoea measured? did you apply any score? As known, Obesity correlates positively with dyspnea but not with lung obstruction. For this reason a correlation should be attempted in order to motivate your findings.

Minor comments
Please add pneumonia to the potential side effects of inhaled corticosteroids (page 7, line 3).

Discretionary revisions
1) This paper has some strength because it underlines how a large number of patients receiving inhalers still continue the therapy despite the normal results at pulmonary function tests. I am not aware of similar results in literature. For this reason, I would suggest the authors to address the discussion into this direction.

Results and discussion:
In figure 3 is shown that the rate of treatment for obstruction reduces after
spirometry in the normal and restrictive group. Authors stress this concept in both results and discussion. However, they also should underline that, surprisingly, the rate of treatment reduces amongst asthmatics and does not increases in the 22% of patients with COPD not receaving inhalers. This finding shoud be discussed and the underuse, but also the lack of interpretation of spirometric results in orienting the management of patients with obstruction focused.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

'I declare that I have no competing interests'