Reviewer's report

**Title:** Lung function decline in relation to diagnostic criteria for airflow obstruction in COPD in respiratory symptomatic subjects

**Version:** 1  **Date:** 18 September 2011

**Reviewer:** Marco Contoli

**Reviewer's report:**

The aim of the study was to evaluate lung function decline in symptomatic middle-aged and elderly subjects identified as ‘obstructive’ according to either the fixed 0.70 FEV1/FVC cutpoint or an age- and gender-specific LLN cutpoint for this ratio. The study is of interest however I have major concerns to address to the authors.

**Major Compulsory Revisions**

The authors found that the annual postbronchodilator FEV1 decline in obstructed subjects based on FEV1/FVC ratio but with a normal FEV1/FVC in term of age- and gender-specific LLN (discordant subjects) were very similar to subjects who were non-obstructive according to both definitions, but also that it was less than half the rate of the decline observed in subjects with airflow obstruction base on both definition (obstructed patients). However discordant and obstructed patients were not matched for several variables that can influence lung function decline. Indeed, according to table 1, discordant patients were significantly milder (postBD FEV1 71.3%) compared to obstructed patients (postBD FEV1 58.1%) and smoking habit was different between the two groups with more current smokers in the “obstructed” group compared to “discordant” patients (55% vs 36% respectively). Moreover, was the proportion of asthmatic and COPD patients similar in the two groups? Finally, was the follow-up period during which the lung function decline was evaluated similar between study groups? The authors must adequately address these issues.

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

**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