Reviewer's report

Title: Impact Of Occupational Exposure On COPD

Version: 2 Date: 4 November 2011

Reviewer: Kjell Torén

Reviewer's report:

Major comments

I think it is valuable to establish cohorts of patients (subjects) with COPD, and future follow-ups of such cohorts giving longitudinal data will be valuable. The main problem when establishing hospital-based cohorts of COPD is the selection bias, which may hamper the external validity of the results.

This study comprises 615 patients collected during 3½ year from 17 university departments. That means a recruitment rate of 10.3 patients/year/hospital. That seems to be quite few. How were the criterias for inclusion? This low inclusion is of interest as probably both age, severity and occupational exposures may be factors associated with both referral and inclusion? Were the patients part of a drug trial, which also may have affected the inclusion? Please, comment this in greater detail.

The statistical analysis is not sufficient. The authors present only univariate analyses, but to be proper analyzed multivariate analysis should have been performed. One multiple logistic regression model could be “COPD severity=age smoking VGDF atopy”. This was just a suggestion.

The description of smoking habits is confusing. In the part “Risk factors” are stated in the last paragraph that patients were categorized as current smokers, past smokers or never smokers. However, in the results all patients seem to be current or former smokers. Please, explain.

If only smokers were included, where are the never smokers? Five to ten percent of the COPD occurs among never-smokers. This has to be discussed. It is also tricky to analyze interaction with smoking, if there are no never smokers in the material. Please, comment on this.

I suggest the title would be “Occupational exposure and severity of COPD”.

Minor comments

Background, second para. I suggest that the term “occupational COPD” is not used. It is impossible at the individual level to know if the COPD is occupational.

I do find any results regarding the HAD scale mentioned in the last para under data collection.

Forth para – discussion. I do not agree that it is an important strength that the
study only included smokers, see comments above.

Are the p-values in the Tables for the difference between VGDF+ and VGDF-? Explain that, please.

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'