Reviewer's report

Title: Ageing and smoking contribute to plasma surfactant proteins and protease imbalance with significant correlations to airway obstruction

Version: 2 Date: 15 December 2010

Reviewer: Meng-Chih Lin

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1. This is an interesting manuscript that explores the relationship between plasma biomarkers, aging, and smoking. Authors concluded that age has a significant contribution to potential markers related to smoking and COPD. Levels of surfactant protein-A seems to be the best factor in differentiating COPD from the control. However, several points need to be clarified before further decision of acceptance.

2. Major compulsory revisions:
   a. The major problem for this study is the lack of a stated clear rationale. Why do authors want to conduct this study? Why were these biomarkers chosen to study? What are the relationships among those biomarkers?
   b. The second major critique is the subject’s inclusion criteria. How were subjects selected to the study? Randomly or active recruitment? How many subjects were included and upon selection, how many were excluded? It may be helpful to have a diagram to present the study design.
   c. Study needs to state methods of informed consents. Even though authors stated that this project has obtained an approval from the ethics committee of the hospital, further details in regards to acquiring informed consents was not mentioned. Please clarify this problem.
   d. Authors mentioned that patients received “no other environmental exposures,” was this based on patient self-report or anthropometric measurement?
   e. Statistical methods need to be clarified. The number of subjects in each group was different and does not seem to have enough power for statistical comparisons. Authors may need a statistics expert to clarify the method.

3. Minor essential revisions:
   a. First appearance of an abbreviation should be replaced be spelled out (ie. Abstract: COPD, TIMP-1, EIA/ELISA, FEV1/FVC. Page 5 line 1: COPD; line 7: SP-D. page 6 line 11: TIMP-1).
   b. Please check the manuscript carefully by a native English speaker.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published
Statistical review: Yes, and I have assessed the statistics in my report.