Reviewer’s report

Title: Serum concentrations of Krebs von den Lungen-6, surfactant protein D, and matrix metalloproteinase-2 as diagnostic biomarkers in patients with asbestosis and silicosis: a case-control study

Version: 0 Date: 03 Oct 2017

Reviewer: Mary Gulumian

Reviewer’s report:

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The authors have evaluated the potential diagnostic biomarkers of asbestosis and silicosis and have proposed that KL-6, SP-D and MMP-2 may be used as such diagnostic biomarkers. They have conducted case-control study with appropriate statistical analysis but albeit on very small number of patients. They have then concluded that KL-6, SP-D and MMP-2 may be used as such diagnostic biomarkers for asbestosis and silicosis.

This reviewer questions as to the benefits of measuring the levels of KL-6, SP-D and MMP-2 as diagnostic biomarkers for the following reasons:

1. Increased serum concentrations of KL-6, SP-D and MMP-2 are already reported for other fibrotic lung diseases and therefore by measuring their concentration may not be specific diagnostic biomarkers for asbestosis or silicosis.

2. The levels of KL-6, SP-D and MMP-2 may increase upon the presence of fibrosis and therefore they will be considered as late biomarkers rather than early biomarkers for the onset of disease. What will then be the benefit of measuring late biomarkers of lung fibrosis if the possibility of intervention or prevention of disease will be minimal?

3. The authors should be cognisant of the fact that prior to proposing any biomarker there should be a validation process of the said biomarker.

The authors should therefore give further justification for their proposal prior to consideration of measuring the levels KL-6, SP-D and MMP-2 as confirmation of fibrosis rather than diagnostic biomarkers for asbestosis and silicosis.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
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I am able to assess the statistics

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