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: 19 Sep 2017

Reviewer: Takemi Otsuki

Reviewer’s report:

Authors analyzed the possibility of KL-6, SP-D and MMP2 as a early detection biomarker for asbestosis or silicosis among the dust-exposed workers.

All these three markers seem to be express the development of fibrotic change in pulmonary area. Particularly, KL-6 is used in respiratory medicine filed for diagnosis, evaluation of therapeutic effects for pulmonary fibrosis.

Thus, I feel these are not so new for biomarker of lung fibrosis.

In addition, although I understand the importance of biomarkers for diagnosis of asbestosis or silicosis among exposed workers using peripheral blood instead of radiological diagnosis, if to make it, all the patients who are diagnosed as fibrosis (asbestosis or silicosis) should be positive when compared with radiologically negative workers.

However, from Fig. 1, even there are significant difference, there are many overlapping negative cases. In addition, from Fig. 3, I think, from ROC curve, at least newer markers should be over 90% in sensitivity and less than 10% in [1-specificity]. But, the results did not reach them.

If authors can present that positive cases for KL-6 or SP-D or MMP2, indicated different clinical courses or behaviors when compared with negative patients even all of them are diagnosed as pneumoconiosis (asbestosis or silicosis) by radiological method. These study would have really important meaning in monitoring the dust-exposed workers.

So, I feel this study is still superficial, immature and not newer in their findings.

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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