Reviewer's report

Title: Translocation pathways for inhaled asbestos fibers

Version: 1 Date: 3 September 2007

Reviewer: Yasunosuke.suzuki@mssm.edu Suzuki

Reviewer's report:

General

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. The authors should emphasize in the paper (for instances, in the introduction part of the paper) why the translocation of asbestos fibers from the lung into other organs is biologically important. Without this mechanism, it is not possible to explain why two major biological effects of asbestos fiber, a carcinogenic effect (an induction of pleural and peritoneal mesothelioma) and a fibrogenic effect (a production of pleural and peritoneal fibrosis) can be seen in these tissues (the pleural and peritoneal tissues) that are locating in far distant places from the lung.

2. References # 52 and 53 were missing from the list of the references.

-----------------------------------------------

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

In addition to the paracellular pathway shown in Fig.1, a death of alveolar epithelial cells after they phagocytose asbestos fibers, followed by a desquamation of alveolar lining cells may be another mechanism for the pathway of asbestos fibers.

It is well documented that like alveolar macrophages, alveolar epithelial cells can phagocytose asbestos fibers.
Discretionary Revisions (which the author can choose to ignore)
Interstitial edema followed by interstitial fibrosis and the appearance of the
fenestrated alveolar capillary endothelium may another contributory factor for the
mechanism of the translocation of the asbestos fibers.

What next?: Accept after discretionary revisions

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a
statistician.