Reviewer’s report

Title: Simultaneous expression of flotillin-1, flotillin-2, stomatin and caveolin-1 in non-small cell lung cancer and soft tissue sarcomas.

Version: 3 Date: 5 August 2013

Reviewer: B C Sun

Reviewer’s report:

Dear Editor,

Thank you for your invitation.

The manuscript of Ksenia A. Arkhipova investigated the expression of members of different families of the microdomain-forming proteins in 50 non-small cell lung cancer cases and 40 soft tissue sarcomas cases by western blot and real-time PCR. There are several questions need to be addressed.

Major Compulsory Revisions

1. Non-small cell lung cancer origins from epithelial tissue, while soft tissue sarcomas come from mesenchymal tissue. The molecular mechanism of carcinogenesis is different in epithelial tissue and mesenchymal tissue. It is rare that they were involved in the same study.

2. There is comparation in expression of microdomain-forming proteins mRNA in STS between soft tissue sarcomas and relative normal tissue in Table 3. However, there is no the similar data for NSCLC sample. The parameters in different type of tumors should be equal.

According to point 1 and 2, I suggest authors to split the manuscript into two parts, NSCLC and soft tissue tumor, respectively.

3. This study used western blot to investigate the protein expression in tumor tissue. Western blot just test the total target molecule expression in whole sample including tumor cells and mesenchymal cells in tumor tissue. Western blot is difficult to locate the target molecule as well. If is available, it is better to use immunohistochemistry to make the microdomain-forming proteins location clear.

Level of interest: An article of limited interest

Quality of written English: Acceptable

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.