Reviewer's report

Title: Spermine oxidase (SMO) activity in breast tumor tissues and biochemical analysis of the anticancer spermine analogues BENSpm and CPENSpm

Version: 3 Date: 9 July 2010

Reviewer: Masao Kawakita

Reviewer's report:

The revised manuscript is a substantial improvement over the original one, and I recommend its publication in BioMed Central after minor correction and revision as follows:

1. “A total of 15 patients ……” on page 9, line 7 from the bottom should be “A total of 20 patients ……” In the revised version of the manuscript.

2. The passage “This approximate estimate is indeed in agreement with the experimental data ……” on page 11, line 7 from the bottom is too strong. I do not feel an observed difference of 4- to 5-fold in affinity is not in agreement with theoretical estimate of three orders of magnitude difference. This part of discussion based on molecular modeling can be deleted, if the authors’ major concern is to impress the readers the fact that BENSPM and CPENSPM are SMO inhibitors with affinity roughly comparable with MDL72527. Just the experimentally obtained Ki values are enough for this purpose. We should rather say that introduction of cyclopropyl moiety did not result in as much increase in affinity of CPENSPM for SMO as was predicted based on molecular modeling.

Level of interest: An article whose findings are important to those with closely related research interests

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