Reviewer’s report

Title:A novel naproxen derivative capable of displaying anti-cancer and anti-metastatic properties against human breast cancer cells

Version:3 Date:24 April 2014

Reviewer:Anthony Lucci

Reviewer’s report:

Minor Essential Revisions:
1. Grammatical issues
   In the abstract: Increasingly needs a comma after it. Introduction: change the wording “a lot”, human needs to be plural, (last sentence) in murine should be in a murine, excessive use of commas throughout manuscript.

Major Compulsory Revisions:
1. It is impossible to calculate significance for some of the experiments because the experiments (MTT, Apo-TRACE, flow cytometry, and migration) were only performed two times. These experiments should be repeated one more time so that p values and therefore, statistical significance, can be calculated. Even though statistical analyses could not be performed, within the results section the authors report IC50 values and “better killing property” for derivatives 1,2, and 4 compared to the parent compound.

Similarly, the figure legends the authors use terms such as “enhanced killing effect”, “no significant cell cycle arrest”. These statements cannot be adequately supported without calculating p values.

Level of interest:An article of importance in its field

Quality of written English:Needs some language corrections before being published

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.