Reviewer's report

Title: Control of the growth of human breast cancer cells in culture by manipulation of arachidonate metabolism

Version: Date: 17 November 2006

Reviewer: Alfred O Mueck

Reviewer's report:

General:
The present manuscript describes the effect of controlling the arachidonate pathway in human breast cancer cells. Material and Methods are presented sufficiently, the results have been evaluated properly and the discussion is appropriate. However there are some points which should be further raised by the authors.

Major compulsory revisions:
1) Material and methods: How were the test substances dissolved. How was the final concentration of the dissolving agent?
2) Material and methods: How many replicates have been used for each concentration? How many independent cell experiments have been conducted?
3) Statistics: The statistical calculation is completely missing.
4) Discussion: It has been shown that COX-2 inhibitors have an proapoptotic effect in MCF-7 cells (Teh et al. J Cell Biochem 2004; 91: 796) and antiproliferative effect in various tumor cell lines. How do the authors explain the discrepancy of these results to the results found in the present manuscript?

Minor compulsory revisions:
1) Figures: What values are depicted, means ±SD?
2) Figures: In the Figures 1,3 and 4 the standard deviation is not shown for all testing points.

What next?: Accept after minor essential revisions

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No