Reviewer's report

Title: A novel aspirin prodrug inhibits NFkB activity and breast cancer stem cell properties.

Version: 2 Date: 24 July 2015

Reviewer: Michael Chan

Reviewer's report:

The authors investigate the role of aspirin prodrug (esp. GTCpFE) in the inhibition of NF-kB activity and CSC properties in breast cancer cell lines. The manuscript is interesting and well-written.

Minor Essential Revisions

1. The authors examined several prodrugs and eventually focused on GTCpFE. As a novel therapeutics against breast cancer, do prodrugs, such as GTpBr exhibited both NF-KB inhibiting activity and cytotoxicity better than GTCpFE? The authors should elaborate further on choosing GTCpFE.

2. In fig 6, the authors should also examine the effect of IKKVII on the expression of CD44 and CD24. Is it possible the effect of GTCpFE in the inhibiton of CSC is due to its effect on anti-COX2 activity but not anti-NFkB?

Discretionary Revisions

Page 12, line 254, Figure 4B should be Figure 6B
Page 12, line 261, figure 4C should be figure 6C

In figure 1,5,7, the small letter in each bars for the comparison between different groups should be clearly explained in figure legends.

Level of interest: An article of importance in its field

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