Review for “A novel aspirin prodrug inhibits NFkB activity and breast cancer stem cells properties”

The article by Kastrati et al report on a new prodrug for aspirin, called GTCpFE, and assessed the properties on breast cancer cells in regard to cell proliferation, Cancer stem cells and NFkB activity in vitro and in vivo. The manuscript is nicely and coherently written and the scope of it is well defined. They were analysing a prodrug library to identify compounds with a direct impact on NFkB activity which was assessed by a luciferase assay. In addition they defined the properties of the compound GTCpFE by RT, p65 binding and western blot. CSC activity, quantified by mammosphere growth properties, was significantly altered. Figures are well described and outline the results properly.

In summery, they identified the reported compound to be effective to reduce NFkB activity and possess the ability to inhibit CSC in an in vitro and in vivo model of breast cancer.

The manuscript is suitable for publication but there are some minor comments which should be addressed by the authors:

1) Why have the authors choosen the cell lines MCF7 and BT474?
2) The authors should address the limitations of their study more in detail as the limitation of nude mice models versus transgenic mouse models; the controversies on the antitumorigenic properties of aspirin.

The reviewer suggest rapid publication as mansucript is of high interest.