Reviewer’s report

Title: The Wnt signalling pathway is upregulated in acquired Tamoxifen resistant breast cancer.

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Reviewer: Xiaojun Yan

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Breast cancer is one of the few cancers which is sensitive to the hormonal therapy and tamoxifen has been still considered as one of the first options for hormonal therapeutic drugs. However, the drug-resistance is always bothering in this treatment. The authors are trying to characterize one of the proposed characterized Wnt pathway by RT-PCR array and report assay. The question in this study is well focused and the methods are well organized.

The data showed that a number of Wnt genes including CCDN1, DKK1, JUN, PORCN, CSNK1A1 and MYC have been increased significantly in the TamR cell line, which was confirmed by further report gene assay. The results also showed epithelial to mesenchymal transition (EMT) was closely related with the Wnt upregulation. The best point of the study is the inhibitor of Wnt pathway suppress both of cell proliferation and EMT, which confirm the previous results.

Therefore, in my view, this study is a well focused confirmation study using TamR cell line. The results confirm that Wnt pathway upregulation is the major part to afford the cell survival for resistance and EMT morphology.

It is worthy of publication.

Considering the title, it maybe more appropriate to be “THE WNT SIGNALLING PATHWAY IS UPREGULATED IN ACQUIRED TAMOXIFEN RESISTANT BREAST CANCER Cell Model”

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.