Reviewer’s report

Title: Chemotherapy induces Notch1-dependent MRP1 up-regulation, inhibition of which sensitizes breast cancer cells to chemotherapy

Version: 2
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Reviewer: liu chao

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The author talk about the relationship between Notch signal pathway and Multi-drug Resistance associated Protein-1 (MRP1), in this research, Immunohistochemistry showed that MRP1 and Notch1 are up-regulated in breast cancers by chemotherapy. After down-regulated of Notch1-4 by siRNA, they found that Notch-dependent activation of MRP1 in T47Ds but not HB2s.

1. There was only one breast cancer lines used in this research, they must use two breast cancer lines to show the role of doxorubicin on those cells at least.

2. After down-regulated of Notch1-4 by siRNA, the author only detect mRNA of Notch1-4, the Notch1-4 expression must be detected in breast cancer lines by western blot.

3. In Figure 3A western blot, the expression of MRP1 is confused they must provide another picture.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.