Reviewer’s report

Title: MicroRNA profile of paclitaxel-resistant serous ovarian carcinoma based on formalin-fixed paraffin-embedded tumor samples

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Reviewer: Zhen Zhang

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In the manuscript, the authors reported the miRNA profile of a paclitaxel-resistant ovarian carcinoma cell line by microarray. From the array result they picked up six miRNAs to confirm their expression changes on FFPE human tumor samples, and show a correlation between their expression levels and OS&PFS of OC patients. The findings may help predict prognosis of OC patients. However, the results are compromised by errors in the data, which must be addressed before further consideration.

Major Compulsory Revisions

1) Errors in patient information. In table 1, patients in paclitaxel-sensitive group have shorter PFS and OS than those in resistant group, which doesn’t make sense. Also in the table, OS is shorter than PFS, which doesn’t make sense either.

2) The OS/PFS Data in Figure 2 and table1 doesn’t fit. If assuming that OS and PFS in table1 were mislabeled, namely, OS should be PFS and PFS should be OS, then the maximal value of PFS is 65. However, the maximal PFS in Figure 2 is 78.

3) The role of mir9 is over-interpreted. The authors claimed that mir9 regulates paclitaxel sensitivity on P3 and P15. However, there is no evidence to support that. The data only suggest a correlation between mir9 expression level and paclitaxel sensitivity.

4) There is no description of microarray experiment in Methods section. Which microarray was used? What’s the number of biological and technical replicates? How the data were processed?

5) There is no error bar in Figure1B. What are the error bars in Figure3B?

Minor Essential Revisions

1) In table 1, column “Resistant”, row “Recurrence”-“Yes (N)”, the number should be 21.

2) P10 “than those with low miR-9 level (12.51 months and 430.40 months, respectively), as”, 430.40 should be 30.40

Level of interest: An article whose findings are important to those with closely related research interests
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.