Reviewer's report

Title: Expression profiling identifies genes involved in neoplastic transformation of serous ovarian cancer

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Reviewer: Lin Zhang

Reviewer's report:

The authors compared mRNA expression profiles during malignant transformation of ovarian surface epithelium. And several potential targets were identified by microarray, further validated by RT-PCR. WNT7A was able to increase cell migration in vitro. This is well-designed study, and should contribute to both diagnosis and treatment for human ovarian carcinoma.

Minor Essential Revisions:

---- How do the authors over-express WNT7A in OVCAR3? Using full length cDNA? Is it transient or stable over-expression? The authors should provide more detailed information in the method section.

---- The function of WNT7A was examined in only one cell line, OVCAR3, by over-expression. If authors can test it in other ovarian cancer cell lines, it will be more robust conclusion. E.g. using siRNA to knock-down WNT7A expression in high level expressing cell lines. If the authors are not going to perform further experiments, they might discuss it in the discussion section to point out the weakness of the current study and future direction.

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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests