Reviewer's report

Title: Platinum sensitivity and CD133 expression as risk and prognostic predictors of central nervous system metastases in patients with epithelial ovarian cancer

Version: 5 Date: 26 June 2014

Reviewer: Amer Karam

Reviewer’s report:

1. The question posed by the authors is relatively well designed but it remains unclear as to why CD133 was chosen as a risk factor for CNS metastases and its relevance to such a presentation.

2. The methods are clear but the glaring question remains as to how the expression of CD133 could differentiate between patients with recurrent ovarian cancer with or without CNS metastases. To that end the analysis would have been stronger if each patient would have had a number of similar controls without CNS metastases to be able to compare the risk associated with CD133 expression.

3. The data is relatively sound but would have been more compelling had the design been a case control study since this is a small cohort of patients with variable CD133 expression when multivariable analysis is at best weak since most subgroups contain 10 or less patients. Table 2 is confusing with tiny numbers in each cluster which is weakens the strength of the associations, I would have preferred separated columns for the p value but also doubt the utility of such table in light of it’s weak statistical importance. A table outlining the correlation between primary and metastatic sites with regards to CD133 expression would have been preferable.
Also I would have liked to see more details about the neurologic symptoms the authors allude to.

4. The manuscript adheres to accepted standards for data reporting and presentation.

5. The discussion and conclusion are clear but suffer from the lack of comparison to patients without CNS metastases which could have strengthened the conclusion and this should have been included among the limitations of the study which are otherwise clear.

6. The authors did acknowledge published work upon which they are building.

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.