Reviewer's report

Title: MEK1 is associated with carboplatin resistance and is a prognostic biomarker in epithelial ovarian cancer

Version: 1 Date: 1 September 2014

Reviewer: Alister Ward

Reviewer's report:

The manuscript by Penzvalto et al. is potentially interesting and valuable to the field. It could provide new insights into the role of MEK1 in ovarian cancer, including platinum resistance, with implications for application as a biomarker. It also provides an exemplary example of how consolidated public-domain data can be mined in a clinically meaningful way. However, there remain a couple of outstanding issues.

- Major Compulsory Revisions

The authors should investigate the mechanism by which MEK might contribute to platinum resistance. Indeed, they suggest a number of potential mediators – AKT, ERCC1 and EMT – which could be easily assayed in their various cell lines using appropriate antibodies, as well as inhibitors in the case of AKT.

The authors should re-check the statistical analyses. The indicated statistical significance for some of the samples in Figure 2 panel B appears questionable, given the small change and relatively large error bars.

- Minor Essential Revisions

The authors should correct the minor typographical errors in the manuscript.

- Discretionary Revisions

None

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.

Declaration of competing interests:

I declare that I have no competing interests