Reviewer's report

Title: PARP inhibitors in the management of breast cancer: current data and future prospects

Version: 1 Date: 5 June 2015

Reviewer: Priyanka Sharma

Reviewer's report:

The review article “PARP inhibitors in the management of breast cancer: current data and future prospects” is well written and summarizes very well the existing data on activity of PARPi in BRCA mutation associated and sporadic cancers. There is great deal of enthusiasm for evaluation of PARPi in treatment of both BRCA mutated cancers and sporadic ovarian and breast cancer (especially TNBC). This review provides a timely synopsis of the current state of PARPi development and the future prospects.

No Major compulsory or minor essential revisions

Discretionary Revisions:

1. It is suggested that a figure explaining the DNA damage repair pathways and the role of PARP inhibition in synthetic lethality be included in this review article
2. In the section of single agent PARPi therapy (page 5): Suggest adding data and reference for the activity of single agent Veliparib (Coleman et al Gynocologic Oncology 2015)
4. Other suggestions:
   5. Table 1: Consistent use of abbreviation to describe germline BRCA mutation for all rows
   6. Revise line 12-13 on page 12 for more clarity
   7. Line 17 on page 13 should read “are using” triple negative or basal-like phenotype as surrogate biomarker.

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

No competing interests