Reviewer's report

Title: Chk1 Inhibition as a Novel Therapeutic Strategy for Treating Triple-Negative Breast and Ovarian Cancers

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Reviewer: Brian Gabrielli

Reviewer's report:

This manuscript investigates the sensitivity of panel of cancer cells lines to the Chk1 inhibitor V158411. The authors focus primarily of the triple negative breast cancers and ovarian cancer which are the most sensitive to killing by this drug. They demonstrate that the sensitivity observed is likely to be on target as it was well correlated with two other Chk1 inhibitors. The authors go on to examine the mechanism of action of these drugs, the major surprise was the loss of Chk1 protein with higher doses of the drug, although this was not commented on the authors. They also examine the cell lines for potential markers of sensitivity and have identified the level of Chk1 pSer296 as a very good marker in most cell lines. Finally, they demonstrate that the drug sensitizes cells to chemotherapeutics. Although much of this has been demonstrated with other Chk1 inhibitors, this type of data is essential for any novel drugs. The sensitivity of the triple negative breast cancers is also relatively novel.

Minor Essential revisions: The authors need to more closely proof their manuscript. A number of the references are incomplete and in the Table provided, MDA-MB-453 is mislabeled as a luminal cell line.

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