Reviewer’s report

Title: Synergistic effects of oncolytic reovirus and docetaxel chemotherapy in prostate cancer

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Reviewer: Randal Johnston

Reviewer’s report:

No compulsory revisions are requested. The paper is one of several that have emerged recently from various labs that show synergy between reovirus and chemotherapy in achieving enhanced cytolysis of tumor cells. Its broad conclusions are well supported by the data, even though the detailed mechanisms by which the synergism is achieved remain unclear.

Several minor revisions are noted as typographical or grammatical errors, none of which is serious (eg the word 'data' is plural). Overall the manuscript is well written and the figures and legends are clear. References adequately document prior work.

Two discretionary revisions are suggested, in which first the authors may wish to comment further on the strange result that PC3 and Du 145 cell lines appear to show opposite patterns of synergetic response to the combination of reovirus and docetaxel - why might this arise, and could it complicate clinical therapeutic strategies? In addition, why should reovirus, docetaxel and vincristine all lead to an increase in acetylated tubulin when they operate through very different (or opposing) mechanisms?

The data shown are interesting and relevant, and the conclusions drawn are suitably qualified - thus acceptance of the manuscript is encouraged. However, this reviewer believes that a comprehensive understanding of viral oncolysis and its potential synergy with chemotherapeutic drugs is not yet at hand.

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