Reviewer's report

**Title:** Functional activation of endogenous p53 by combined, but not individual, p19Arf gene transfer and nutlin-3 drug treatment reduced viability of B16 cells

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**Reviewer:** Mauro VACCAREZZA

**Reviewer's report:**

The paper by Merkel et al. provides an interesting approach of p53 reactivation as a method to improve cancer therapy. The modulation of p53-related pathways to restore apoptosis on cancer cells is not new but the combined approach suggested by Merkel et al. makes sense and the "formal" proof of concept (activating p19arf by gene insertion through viral vectors and using a pharmacologic inhibitor of the p53-MDM2 complex) is attained convincingly.

The methods are appropriate and the data sufficiently solid; the discussion is complete.

Of course one would translate in a more physiological context (human cells) the message of the paper that is based on mouse melanoma and rat glioma cell lines, but the in vitro e in vivo data are a nice "scaffold" considering also the expression of the above proteins on human melanoma samples (as correctly reported by the authors)

Some minor mispelling is present through the English text.

**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 have no competing interests