Reviewer's report

Title: Therapeutic effects of lentivirus-mediated shRNA targeting of cyclin D1 in human gastric cancer

Version: 1 Date: 22 October 2013

Reviewer: John Nemunaitis

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Results demonstrated by Jin-Hee Seo et al are straightforward and support justification of further testing with lentivirus mediated shRNA cyclin D1. However, a great deal of preclinical work is needed for conclusions stating that this may have potential in clinical development. Such limitations need to be mentioned in discussion (i.e. long term effect of lentivirus exposure, risk of lentivirus DNA integration, off target integration, along with validation of shRNA knockdown activity starting with target RNA and protein as well as downstream signal response). Moreover, future steps involving further animal efficacy related to long term survival and toxicology/biodistribution should be mentioned as necessary steps prior to IND need to be brought up as necessary prior to possible clinical discussions. Other minor comments are included:

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Line # 4 “…the tumors were injected…” would be helpful to better describe injection routine (i.e. central single injection, radial injection…). Was the entire tumor injected? Did follow up biopsy acquire tissue from the injection points?

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Is there any information on the molecular results of CCND1 knockdown (i.e. protein, RNA knockdown of CCND1, effect of related signal patterns to CCND1)?

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.