Reviewer’s report

Title: MicroRNA-21 inhibitor sensitizes human glioblastoma cells U251 (PTEN-mutant) and LN229 (PTEN-wild type) to taxol

Version: 2 Date: 19 October 2009

Reviewer: Yong Li

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In this work, Ren et al reported MicroRNA-21 inhibitor enhances the sensitivity of human glioblastoma cells U251 (PTEN-mutant) and LN229 (PTEN-wild type) to taxol. The authors found that miR-21 inhibitor significantly enhanced apoptosis and reduced cell invasion in both U251 cells and LN229 cells. They also found that miR-21 inhibitor and taxol synergistically reduced GBM cell growth.

There are a few concerns that must be addressed:

First, Zheng-Jun Jin method was used quite frequently. However, it is unclear what kind of method it is?

Second, interaction of miR-21 and taxol was mentioned multiple times, yet there is no data to support it? “Interaction” normally means “physical interaction”.

Third, there is no discussion on why miR-21 has similar apoptosis effect on U251 (Pten-mutant) cells compared to LN229 cells (Pten-wild type) given that Pten is the target gene of miR-21 in this study.