Author's response to reviews

Title: The combination of ANT2 shRNA and hNIS radioiodine gene therapy increases CTL cytotoxic activity through the phenotypic modulation of cancer cells

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Author's response to reviews: see over
Dear Editor in BMC cancer

We are pleased to resubmit our manuscript titled “The combination of ANT2 shRNA and hNIS radioiodine gene therapy increases CTL cytotoxic activity through the phenotypic modulation of cancer cells”. To answer the reviewer's criticism for apoptosis analysis, we have executed additional experiments to examine the caspase-3 activation in treated cells using a caspase-3/7 Glosensor from promega company because caspase-3 is key effector in apoptosis event. In addition, we have revised the manuscript per each reviewer's comments. We sincerely hope that this revised manuscript is acceptable for publication in BMC Cancer.

Best and kindest regards,

Yong Hyun Jeon, Ph.D.
(Responses to comments)

The authors have revised their manuscript. So, the article improved a lot. But I want to point out the clonogenic assay (additional experiment) is not used to determine cell apoptosis, as the authors said in the text of the article, the method is used to evaluate the survival and proliferation of cells.

(Answer)

We appreciate reviewer's comments. To faithfully answer the reviewer's comment, we tried to examine the level of caspase-3 activation in treated cells because caspase-3 is well-known key factors in apoptosis using Caspase-Glo 3/7 assay Kit (Promega, Madison, WI). Briefly, this assay kit include the pro luminescent substrate containing the DEVD (the sequence is in a single-letter amino acid code), which is cleaved by caspase-3/7. After caspase cleavage, a substrate for luciferase (aminoluciferin) is released. This results in the luciferase reaction and the production of luminescent signal. This results is added as supplementary figure and clonogenic assay was deleted.

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

(Answer)

We further performed statistical analysis for data of all experiment.