Reviewer's report

Title: MicroRNA-144 suppresses cholangiocarcinoma cell proliferation and invasion by targeting LIS1

Version: 2
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Reviewer: Kinya Okamoto

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In this manuscript “MicroRNA-144 suppresses cholangiocarcinoma cell proliferation and invasion through targeting LIS1”, Yang R. and colleagues examined the relationship between miR-144 expression level and cholangiocarcinoma (CCA) cell line proliferation, migration and invasion in vitro and tumor growth in vivo. They showed clear effect of miR-144’s CCA suppression and found a represent target gene LIS1. It is very interesting report and it will contribute to establish the new CCA treatment. Therefore, I recommend the authors considering the following points seriously.

Major Compulsory Revisions

1. Authors should explain their deliberate CCA cell line selection in some experiments. Why have HCCC-9810 and CCLP1 been enrolled into the almost all experiment, but not HuCCT1 and RBE? I presume that the cell line selection depended on the expression levels of LIS1. If at all, the authors should declare the selecting criterion. The deliberate cell line selection is also found in miR-144 ectopic over expression and selective inhibition and in vivo tumor model.

2. The estimation of miR-144 putative target genes is one of the important parts of this manuscript. The authors should explain the software predicting method in detail and indicate other candidate target genes and their calculated parameters.

3. The authors should show more information about LIS1 in detail. For example, unabbreviated name, other referring name; platelet activating factor acetylhydrolase isoform 1b (PAFAH1B1) and the known functions from the latest studies.

Minor Essential Revisions

1. The manuscript sentences are written clearly and easy to understand. However, please check the manuscript carefully. There are many lacks of space and word duplications. In addition, I recommend the authors taking proofread by a native English speaker to refine the manuscript more.

2. In Materials and Methods, the authors should show the abbreviation of human embryonic kidney 293T at the first referred sentence.

3. Please unite the company reference style as the submission instruction of the journal.

4. The authors use the word “infection” as the plasmid transfection by the viral
vector. I think the word “transfection” may be better than infection.

5. In figure 1: Please indicate which expression profiles are CCA tissue samples or adjacent normal bile ducts clearly.

6. In figure 3A: please correct has-miR-144 to hsa-miR-144. I think these misspellings are due to the auto word correcting function of the word processing application.

7. In figure legends, some special characters are seen between “p” and “<”. Have the authors used some Chinese fonts for space? Please replace them with English fonts.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.