Reviewer's report

Title: Characterization of human gastric carcinoma-related methylation of 9 miR CpG islands and repression of their expressions in vitro and in vivo

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Reviewer: Yong Sung Kim

Reviewer's report:

The authors describe CpG island methylation and their correlation with inverse silencing of nine microRNAs in gastric cancer cell lines and primary gastric tumors. From the miRbase DB, they selected nine CpG islands related to five extragenic and to four intragenic miR genes and estimated the methylation status by DHPLC and the expression of mature miRNAs by qRT-PCR assays. Based on the results, authors suggested the clinical relevance of miR CpG methylation associated with gastric carcinogenesis. This paper is a nice report for the epigenetic regulation of miRNA expression and its potential implication in gastric cancer. Although potentially interesting, the minor essential comments should be taken into account before publication to strengthen this work.

1. Authors should suggest the significances of this study in Conclusions of Abstract in accord with the goal of this study or the title of this paper.

2. Also, authors should consistently describe their assertion in Conclusion of Abstract session and in conclusion of Discussion session.

3. In Discussion session, authors described the function or target only one miR gene, such as miR-200b. The prediction or description on target mRNAs of miR genes examined in this study may strengthen the paper.

4. How about the expressional change of these miRNAs in gastric cancer cell lines after AZA treatment?

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.

Declaration of competing interests:

I declare that I have no competing interests.