Reviewer’s report

Title: MiR-663 is down-regulated with promoter hypermethylation in pediatric acute myeloid leukemia (AML)

Version: 1 Date: 7 November 2012

Reviewer: Bo Wen

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Major Compulsory Revisions.

1. The paper entitled “MiR-663 is down-regulated with promoter hypermethylation in pediatric acute myeloid leukemia (AML)” reported that DNA hypermethylation on the promoter of Mir-633 was observed in 41% of Chinese pediatric AML patients. However, their data showed that status of DNA methylation was not associated with expression level of Mir-633. Their data suggested that DNA methylation is not the epigenetic mechanism regulating mir-633 in AML. Thus, the title of this paper is very misleading, and the conclusion “epigenetic inactivation of miR-663 by promoter hypermethylation is frequent and tumor specific event in pediatric AML” was not well supported by the presented data. The authors should change the title and rewrite the paper based on data they have.

2. The function of DNA methylation relies on its location relative to genes. For example, promoter hypermethylation can be related to gene silencing but gene body methylation is usually associated with gene activation. The authors should provide a map to show the region they analyzed and its distance to mir-633 gene.

3. Since DNA methylation and expression were not correlated, the authors should discuss other possible epigenetic mechanisms underling mir-633 downregulation in AML.

Level of interest: An article of limited interest

Quality of written English: Not suitable for publication unless extensively edited

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