Reviewer’s report

Title: miR-183 inhibits TGF-beta1-induced apoptosis by downregulation of PDCD4 expression in human hepatocellular carcinoma cells

Version: 1 Date: 2 December 2009

Reviewer: Weizhong Wu

Reviewer’s report:

In this study, the authors give some evidences that microRNA-183 was upregulated in cancerous liver tissues than in adjacent normal tissues, PDCD4 could be downregulated in Huh7 cells transfected either with miR-183 or with siPDCD4, and a decreased apoptotic cell induced by TGF-β was found both in miR-183 and si-PDCD4 transfectants. In general, the research is interesting, however several issues still needed to be clarified.

Major Compulsory Revisions:

1. The authors have not provided any evidences of PDCD4 expression profiles in HCC biopsy and its relationship with miR-183 status.
2. The relationship between miR-183 levels and cell apoptosis in HCC biopsy tissues is not established.
3. Is it suitable to conclude that miR-183 functions as an oncogene in HCC, only based on its anti-apoptotic effects?
4. It should be included a negative control when siPDCD4 vector is transfected into Huh7 cells.
5. The authors claim that miR-183 regulates PDCD4 gene expression at posttranscriptional level. How to explain its effects on the mRNA levels of PDCD4 in Huh7 cells with transfection of miR-183 (Fig. 1A).
6. What about HBV or/and HCV infections as well as liver cirrhosis on miR-183 expression in HCC.

Minor Essential Revisions:

1. What is the full name of DAP in Figure 1.
2. Discussion should focus on what is found in the research.

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.