Reviewer’s report

Title: MicroRNA-182 Downregulates Metastasis Suppressor 1 and contributes to Metastasis of Hepatocellular Carcinoma

Version: 2 Date: 13 April 2012

Reviewer: Paolo Gandellini

Reviewer’s report:

In the present version of the manuscript the authors addressed part of the referee’s requests, thus ameliorating their paper. However, some points still need to be addressed:

Major compulsory revisions

1) Page 9: the title “miR-182 promotes invasion through the inhibition of MTSS1” should be rephrased into “miR-182 promotes invasion and inhibits MTSS1”, as the specific involvement of MTSS1 suppression in miR-182 phenotype was not assessed (rescue experiment).

2) Fig. 1A: miR-182 expression levels in individual normal specimens have not been reported (all values were normalized to 1). Please choose a reference sample (for example, the normal sample of patient #1) and provide all expression values as relative expression compared to that sample. By doing this it will be possible to appreciate not only the up-regulation of the miRNA in cancer specimens but also the inter-patient variations of miR-182 expression. Similarly, average expression levels in normal samples should be reported in fig. 1B (not normalized to 1).

3) The criticism raised in point 2 holds true also for fig. 4A. Quantify miR-182 and MTSS expression levels in individual normal and tumor tissues (do not show normal samples normalized to 1 or tumor/normal ratios, as in the western blotting). Similarly, if in fig. 4B correlation coefficients were calculated using tumor/normal ratios, this is not valid. Calculate them using expression of miR-182 and MTSS1 in individual samples.

4) Report p-values for differences in luciferase activity of fig 5B.

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: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I declare that I have no competing interests