Reviewer's report

Title: The expression level of miR-18b in hepatocellular carcinoma is associated with the grade of malignancy and prognosis

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Reviewer: Zhen Zhang

Reviewer's report:

- Major Compulsory Revisions

1) There are no asterisks in Figure1 and 2. If that means no statistically significant difference across the samples, then the conclusions of the paper become very shaky.

2) Ago-2 CoIP is the only experiment for testing if TNRC6B is the target of mir18b. However, the authors didn’t indicate how many independent replicates had been done, and there are no error bars in Figure 1C. The presented data is too weak to support the conclusion that TNRC6B is a target without statistical analysis and at least one alternative method for confirmation.

3) In both Figure1B and Figure 2A, Western Blot is better than qRT-PCR to examine the repression of mir18b on TNRC6B, as miRNA regulation is on both transcript and protein level.

4) The quality of the images in Figure 3 is very poor. They should be replaced by high quality images. In addition, the staining results should be quantified, for example, as the percentage of positively stained cells per slide.

5) In cell proliferation and adhesion experiments, TNRC6B overexpression and siRNA knockdown share one control. Because the authors used completely different transfection reagents for overexpression and knockdown, each method should have its own negative control (empty plasmid by Fugene 6 for overexpression, and negative control siRNA by RNAiMAX for knockdown). This is critical, especially when the differences between control and treated groups are very small.

- Minor Essential Revisions

1) The authors referred to Figure1B for mir-18a, mir-122 and mir-423-5p overexpression and mir-221 suppression. However, only mir18b data is presented there. The data of mir-22 overexpression and inhibition should also be presented in Figure 1B.

2) in Figure 1C the y-axis is not the relative expression level of TNRC6B as labeled.

3) The cell lysis step is missing in the method of Ago2 CoIP.
Level of interest: An article of limited interest

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.