Reviewer’s report

Title: Increased MiR-221 Expression in Hepatocellular Carcinoma Tissues and Its Role in Enhancing Cell Growth and Inhibiting Apoptosis in vitro

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Reviewer: Peter Jansen

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BMC Cancer MS Rong, Chen and Dang apoptosis

In this ms Rong et al report a study on the correlation between miR-221 expression and some clinical relevant parameters in relation to proliferation, metastasis and invasion of HCC. The study was done on paraffin-embedded formalin-fixed archival liver tissue from resected specimens.

The authors show that miR-221 expression correlates with tumor stage, metastasis and capsule infiltration. In vitro studies, using HCC-derived cell lines, show that miR-221 inhibitors stimulate apoptosis and reduce proliferation.

The study is well done and these results are interesting as they lead the way to future use of miR-221 inhibitors in HCC therapy. However, the results are not novel and confirm previous studies (Park et al. Cancer Res 2011;71:7608-16; Pineau et al PNAS 2010;107:26).

Comments

1. Since this concerns a study on archival material the authors may have information on patient survival. If possible please provide this data.

2. Microscopic vaso-invasion has predictive value towards survival. These data is not provided, if available please provide.

3. The text is at some points is too long. I suggest to delete: in Background section the paragraph related to Doxorubicin and Cisplatin/IFN therapy. These therapies are obsolete and do not need to be discussed. Also delete on page 6 the paragraph starting with ‘After transfection with…………(data not shown)’. This is shown in the figures and there is no need to describe this in detail. Finally delete in Discussion (page 7 and 8) the entire paragraph starting with ‘Formalin-fixed and……..RT-qPCR procedure’. It is well known that miRNA survives formalin-fixation and this does not have to be repeated here.

4. Throughout the text there are several grammatical errors. Please correct.

Level of interest: An article of importance in its field

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:

No conflicting interests.