Reviewer's report

Title: RNA-binding protein RNPC1: acting as a tumor suppressor in breast cancer

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Reviewer: Jin Zhang

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In the manuscript titled “RNA-binding protein RNPC1: acting as a tumor suppressor in breast cancer, Xue et al have investigated the role of RNA-binding protein RNPC1 in breast cancer. Specifically, they found that RNPC1 is down-regulated in several invasive breast cancer cell lines including MDA-MB-231 and SUM1315. Moreover, the authors showed that RNPC1 was able to inhibit cancer cell proliferation and migration in vitro and tumorigenicity in vivo. Furthermore, they also showed that the level of RNPC1 mRNA was decreased in 82 out of 121 breast cancer tissues, which was associated with advanced clinical stages, p53 status and lymph node metastasis. Overall, the study is hypothesis driven with experiments well designed and executed. There are a few minor concerns needed to be addressed before it is suitable for publication on BMC cancer.

1. On the technical side, off-target effects must be addressed with additional independent RNPC1 shRNA sequences.
2. The Western blot results need to be quantified to show the relative fold change of protein.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

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.