Reviewer's report

Title: MiR-378 inhibits tumor cell growth and invasion and is an independent prognostic factor in colorectal cancer

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Reviewer: zheng hua-chuan

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Zhang et al. for the first time investigated the role of miR-378 in colorectal carcinoma and found that that miR-378 significantly down-regulated in CRC cancer tissues and cell lines. Moreover, patients with low miR-378 expression had significantly poorer overall survival as an independent prognostic factor in CRC. Over-expression of miR-378 promoted SW620 cell growth and invasion, and resulted in down-regulation of vimentin expression. However, miR-378 knock-down inhibited these processes and enhanced the expression of vimentin. In addition, we further identified vimentin as the functional downstream target of miR-378 by directly targeting the 3′-UTR of vimentin. It was concluded that miR-378 may function as a tumor suppressor and plays an important role in inhibiting tumor growth and invasion. The paper is well organized and written, which determines it available to publish in BMC Cancer. However, the minor revision should be performed:

Major Essential Revision
No
Minor Essential Revisions

1) In the article, tissue experiment is firstly described, followed by cell and animal experiment. In contrast, the sequence for the paper title is opposite to the context.

2) Why not choose the CCD-18co cell to knockdown miR-378. Is the normal cell immortalized using SV40 T antigen or something?

3) Please give the reason using SW620 cell for invasive or migrating study. Why not select SW480?

4) Regarding xenograft experiment, please provide an explanation why not to perform the anti-miR-378 suppression.

5) In Table 1, “Histology grade” should be “histological grading”?

6) As for clinical stage, I think that it should be “clinicopathological staging”. Please confirm it!

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:**

No