Reviewer's report

Title: Resveratrol suppresses epithelial-to-mesenchymal transition in colorectal cancer through TGF-beta1/Smads signaling pathway mediated Snail/E-cadherin expression

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Reviewer: Paul Gao

Reviewer's report:

In this report, the authors demonstrated that resveratrol, an effective component often found in grape skin and some traditional Chinese medicinal herbs, can inhibit the cell growth and the migratory/invasive capability of CRC LoVo cells. More interestingly, Resveretrol repressed the lung and liver metastasis of these cells in a tail vein metastasis model as well as an orthotopic CRC tumor model. They further explored the mechanism underlying these effects of resveratrol, and revealed that, it attenuated the TGF-beta1-Smad2/3-Snail-E-cadherin signaling and blocked the EMT process in the CRC cells. This paper presented some novel evidence delineating the anti-tumor activity and associated mechanism of resveratrol, that indeed warrants its publication. However, some issues need to be addressed before being accepted for publication.

Major compulsory revisions:

1. This paper needs a professional language editing. There are a lot of grammar errors and misworded sentences, especially in the Result section.

2. For Figure 3A, the difference for the morphology between control and TGF-beta1 treated cells is rather minimal. So to better present the data, the authors need to show a higher-powered pictures of these cells to substantiate their conclusion about more EMT appearance in the TGF-beta1 treated cells. They may use the arrows to indicate the significantly different cells.

3. It is not clear how the authors prepped the lung metastasis samples. They need to detail the protocol in the Method and Material section, e.g. how thick the lung sections were, how many areas/lung section are observed and counted for metastasis spots, etc.

4. The content of Figure legends needs to be corrected and many description of how the experiments were done should belong to the Method section, e.g. Figure 2 A. legend. The authors should consult a professional biomedical writer to revise these places of the paper.

5. Some figures that showed pictures of the tissue sections ought to be added indicating arrow markers, to better direct readers attention, e.g. Figures 1C and 2A.
Level of interest: An article of importance in its field

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 no competing interests.