

Review of: "Anti-metastasis After Bee Venom and Melittin by Upregulation of BRMS1 and DRG1 Genes, With Downregulation of WNT7B in Breast Cancer Cells"

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Potential competing interests: No potential competing interests to declare.

In the current study, the authors evaluated the bee venom and melittin effects on breast cancer cells. This manuscript should be rejected; however, I recommend reconsideration of the manuscript after major revision. Furthermore, fundamental correction of written English is obligatory.

Please consider the following advice to improve your manuscript:

1. The title is not attractive and has too many unnecessary words, such as Upregulation of BRMS1 and DRG1 Genes, With Downregulation of WNT7B..
2. In the abstract, it would be better if you mentioned the methods you used in your current research.
3. In the introduction, please consider the following structures:
 - a. The word "metastable" in your research context is meaningless; please change the word "metastable" to "metastasis."
 - b. In the second paragraph, first sentence, "There are a vast number of studies suggesting," please add a few references.
 - c. It would be better to mention how and why you chose the genes related to this study.
4. Your results part should be rewritten. For example, in the MTT assay, you mentioned "the viability of cells decreased in a dose-dependent manner." However, figure 1 showed that cell viability increased in cisplatin and bee venom at 100 mg/ml in comparison to 25 and 50 mg/ml concentrations.
5. Moreover, in MCF10A cells, your bee venom concentrations are 8, 12, 25, 50, or 100 µg/mL, but your results showed the IC50 value for this cell line is 36 mg/mL. Also, your highest value for melittin is 12 mg/mL, but your IC50 value is 20 mg/mL.
6. Therefore, you must check all your results again and rewrite them in the proper way.
7. In the methods, you should consider the following corrections:

- a. Please add the suppliers for all the media and machines listed, as well as the models if they are not specified, such as FBS, RPMI, etc.
- b. Please specify how you chose the bee venom and melittin concentrations for your experiments, such as the MTT assay and the wound healing assay.
- c. Please rewrite this sentence. "For MTT after melittin (Sigma-Aldrich, U.S., Cat. No. M2272), cells were treated with 0.375, 0.75, 1.5, 3, 6, and 12 µg/ml of the final concentration of melittin for 24 h. Counterpart cells were left untreated."
- d. Please rewrite the MTT assay because you have not mentioned how many cells you seeded in each well, how many replicates you ran, or when you added the MTT dye to your wells.
- e. Please use a scratch assay instead of a wound healing assay.