

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.

The presented article, author described the effect of melittin and bee venom on the expression of selected genes in MDA-MB-231 and MCF10A cell lines, cytotoxicity, and cell migration. To make the text more transparent for readers, several changes should be made:

- The **abstract** should be a shortened version of the entire article, so a sentence should be added about what methods were used in the study and what they were intended to investigate, as if it were the purpose of the study (in general).
- There are no citations in the sentence in the introduction:

"There are a vast number of studies suggesting the use of bee venom and its major component, melittin, for effective therapy of cancer to deal with uncontrolled cell proliferation and metastable potential."

Results and discussion

- Statistical markings should be included in the charts.
- There is no broader explanation of the differences in gene expression in response to the venom and melittin itself, based on the literature.
- There is no Fig. 1 at the moment, probably a numbering error.
- MTT test results should be added as a figure.
- Please arrange the place of figures appropriately in the text, now they are placed chaotically.

Experimental Section

- *Bee venom, melittin, and cisplatin treatments.*

There should be information here about where the products come from, how the solutions were prepared (in the case of melittin, there is no information about whether it is an aqueous solution or in a medium), whether the solutions were prepared fresh before administration, or the stock solution was frozen.

Concentrations used for specific tests can be transferred to the sections describing that test.

- If the procedures were performed are described "as previously" and the quoted text is not with open access, not everyone has access to it, so it would be polite to describe it in the given text – regarding the preparation of the venom solution.
- Please add detailed information about the equipment (e.g., incubator: model, company) and reagents used.

Other:

- There is an error in the link to Supplementary.
- Please check the values from the figures again and compare them to those in the text.