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

Nurettin İlter Sever[1]

1 Pamukkale University

Potential competing interests: No potential competing interests to declare.

The manuscript addresses the anti-metastatic effect of bee venom and melittin by upregulating anti-metastatic BRMS1 and DRG1 genes and by downregulating pro-metastatic WNT7B gene. In my opinion, the experimental approach and the statistical analyses were quite thorough and direct. On the other hand, there are some issues which need to be revised or corrected, specified as follows:

1. The title should be rewritten; it needs to be fluent in English.
2. Figure 1 was falsely denoted as Figure 3; it should be corrected.
3. In the first paragraph of the “Results and Discussion” part, IC50 values for cisplatin were denoted as the same for both cell lines, but in Figure 1, they were denoted as different (25 ug/ml for MCF-10A, 12 ug/ml for MDA-MB-231).
4. In the second sentence of the fifth paragraph of the “Results and Discussion” part, “as” should be added after “such”.
5. In the fifth paragraph of the “Results and Discussion” part, in the last sentence, “induced” should be corrected to “inhibited.”
6. I could not get access to Figure 7 or Supplementary Figures 1 and 2.
7. The only experimental suggestion I propose is the Western blot of the proteins of the investigated metastasis genes after bee venom and melittin treatments. There may not be any correlation between mRNA and protein expression profiles after bee venom and melittin treatments. In my opinion, it is worthwhile investigating this concept.
8. In my point of view, in the “Discussion” or “Conclusion” part, the unexpected downregulation of BRMS1 after bee venom treatment should be discussed in detail. The contrast in expression profiles of anti- and pro-metastatic genes after bee venom and melittin treatments in normal MCF10A and cancerous MDA-MB-231 cells should be emphasized as well.