Reviewer’s report

Title: Actions of sesquiterpene lactones isolated from Moquiniastrum polymorphum subsp. floccosum in MCF7 cell line and their potentiating action on doxorubicin

Version: 0 Date: 04 Mar 2017

Reviewer: Guzmán Alvarez

Reviewer’s report:

This work presents an in vitro analysis of combination of antineoplastic drug and two compounds isolated from Moquiniastrum polymorphum subsp in MCF7 cell line. The work is new and it is innovative because in these last year more works are focused in drug combination, that is a successful strategy used for example in HIV chemotherapy.

General consideration for the authors.

If ic50 data are not published they should be presented. If the data are published they should be referenced.

The % of DMSO must be displayed in all experiments, and also what was the negative control?

Very important thing, the concentration must be in micromolar values, because it is not possible compare data between compounds with different molecular weight. If the compound are structural defined the concentration must be in µM.

For the analysis of combinations are better uses the isobolograms for a good show of the results. Also is good using the fractional inhibitory concentration to analyze the synergic effects.


The tables are not easy to read, or is not useful to sown the results. The tables are not good for the readers, the authors need to modify the way to display the results in the tables.

In figure 2 and 3 the x axis are wrong (the name of the axis), What is shown on that axis?

The authors must be shown the compounds doses in all the graphics.

Figures 4 and 5 could be isobolograms and FIC.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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