Reviewer’s report

Title: Analysis of Apoptosis Related Genes in Nurses Exposed to Anti-Neoplastic Drugs

Version: 1 Date: 06 Sep 2019

Reviewer: Natália Brucker

Reviewer's report:

The aim of this study was to evaluate apoptosis related genes in nurses who work in chemotherapy wards and compare it to nurses who work in other wards.

Some topics to be improved:

- There is no description of the objectives in the abstract.

- Methods: A brief procedure section could be added to the methods section to describe the sequence of events in the study and for the subjects. Due to the small sample size, it is necessary to clarify and describe: How was the sample size determined? - How were the subjects recruited?

- The total amount of blood sample (ml) must be reported. It is necessary details about anticoagulant.

- Were the patients fasting? How long occupational exposure per week? It is necessary inform how many years of occupational exposure to these drugs in years or moths.

- Statistical analysis: The authors provided generic languages of the statistical methods used as if they were extracted directly from a statistical textbook.

- Results section, Please give more the demographic information of groups in a table 2.

- Table 3 could be improved.

- The discussion of the apoptosis-related genes overexpression could be more developed. It could be the novelty of this paper.

- The quality of the figures should be improved.

- The authors could cite the limitations of this study

- Editing of English language is required

- Moreover, the references could be updated.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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

Yes

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

Unable to assess

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 recommend additional statistical review

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

Needs some language corrections before being published

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