Reviewer’s report

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

Version: 1 Date: 04 Sep 2019

Reviewer: Marcelo Arbo

Reviewer's report:

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The aim of this study was to monitor cellular toxicity parameters and gene expression in nurses who work in chemotherapy wards and compare it to nurses who work in other wards. The results are interesting however the manuscript needs a review in some aspects.

Tables need edition to become more clear to the reader.

The english language is difficult to understand in some parts, such as:

"According to the Figure 2 A cell viability in isolated lymphocytes of oncology nurses significantly was reduced as well as control nurses (p<0.001)."

"When florescence of rhodamine 123 is much means loss of mitochondrial membrane potential also is much."

This reviewer was not able to understand these sentences.

Results of Annexin V-PI assay present only cells in apoptosis, how was the percentage of cells marked with PI or annexin V only, or both annexin V and PI?

Results presented in table in table 3 should be statistically analyzed, using qui-square test for example.

The lack of exposure biomarker, such as the values of antineoplastic drugs in the blood of the nurses is a weak point of this manuscript.

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.

Yes

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 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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