OPEN PEER REVIEW

Open Peer Review (OPR)

As a new feature for progressing towards transparency, we decided to open a new window for all of our editors as well as authors titled "**Open Peer Review**". We hope by this new facility, our reviewers will be more motivated and authors will be more satisfied with the review process. We believe that publishing our peer review reports could make a transparent and clear environment for all our efforts within a journal, but not all reviewers tend to publish their comments.

What is "Open Peer Review" process?

An "Open Peer Review" process is making the details of all review process (including reviewers, associate editors, and EICs comments) as "Public" as it is agreed by EIC, Authors, and reviewers.

Advantages of "Open Peer Review" process

- More transparency, constructiveness and tactful comments of the peer review process: leads to an increase in the quality of reviews
- More motivations for all involved roles in the review process
- Authors' satisfactions from the review process: Increases honesty between authors and reviewers
- Education of both authors and new students
- Prevents reviewers from following their individual agendas and leading to the detection of reviewers' conflicts of interests

You can find out more at:
https://sites.kowsarpub.com/kowsar/knowledgebase/category/tree.html#opr.html

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Peer Review Report for "The Radio-Sensitivity Effects of Human Umbilical Cord Wharton's Jelly Mesenchymal Stem Cell's Conditional Medium on MDA-MB-231 Cells"

Author(s): Hamed Shoghi, Niloofar Neisi, Ghasem Saki, Mohamad Javad Tahmasebi Birgani, Amir Danyaei

Review Timeline:

Submit Date: 14 Oct 2020
Revised Date: 21 Oct 2020
Accepted Date: 22 Oct 2020

Revision (0)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | **Revision** (0) 18 Oct 2020

Dear AE,
Thanks for submitting this manuscript entitled "Enhancing the radiosensitivity of MDA-MB-231 cells with Conditioned Medium of Human Umbilical Cord Wharton's jelly of Mesenchymal Stem Cells" to Jentashapir J Cell Mol Biol. We need the authors to address the following issues:
1. Please follow the journal's instruction in manuscript writing: The body (sections) of your manuscript is not in line with journals' instruction: 1- Introduction, 2- Material and methods, 3- Results, and 4- Discussion sequentially.
2. Abstract: Please delete the group's area in line 3 of the abstract; you noted groups in detail in the methods section. Therefore, it is not necessary to mention it in the abstract section.
3. Material and methods:
a) Please delete the Reagent topic and instead of it, add the section with this name: Experimental design and irradiation procedure and then explain about groups and irradiation details on this part.

b) Please note the procedures which you used to assess IL6 and TNF. There were not even the names of those procedures?!
4) Results: Please put the P-value in figure 2 B.
5) Discussion: Please more discuss your findings and compare them with other studies. You discussed more the other studies' findings instead of yours.
6) Please revise the English writing of the manuscript and try to improve it.
Thank you for submitting this work.

REFEREE: Reviewer | **Revision** (0) 18 Oct 2020

Dear AE,
There are some comments which should be addressed by the author:
1- English writing is poor and needs editing.
2- The structure of the article is not according to the format of the journal.
3- The quality of microscopic images of cells is not good.
4- The abstract does not cover the various sections of an article.
5- New references must be added.
6- Methods is not enough.
Thanks.

REFEREE: Reviewer | **Revision** (0) 18 Oct 2020

Dear AE,
The manuscript needs major revision.
- The article contains too many mistakes in English writing. The exact meaning of sentences is unclear.
- The title is not appropriate. It is suggested that the title be modified as follows:
The radio-sensitivity effect of human umbilical cord wharton's Jelly Mesenchymal Stem Cell's conditional medium on MDA-MB-231 cells.
- The Abstract is not organized. The Methods are not available in the abstract. The study groups and the variables must be defined clearly.
- The results are unclear. For example, what is the meaning of the following sentence?????
"The MTT test showed that proliferative activity of the MDA-MB-231 cells was significantly decreased in 4Gy+CM, 6Gy+CM, and 8Gy+CM groups relative to the cells grown in conventional culture medium (C), rather than Gy groups in all doses of condition medium. "
- The results must be re-written in plain English carefully.
The results are insufficient to conclude that: human umbilical cord wharton's Jelly Mesenchymal Stem Cell's conditional medium radio-sensitized the MDA-MB-231 cells. In this regard, the viability of MDA-MB-231 cells plus the expression of apoptotic genes and ROS production must be considered.
Thanks.

Seyyed Ali Mard: Associate Editor | **Revision** (0) 18 Oct 2020

Dear EIC,
A major revision is recommended.
Thanks.

Seyyed Ali Mard: EIC | **Revision** (0) 18 Oct 2020

Dear Author,

A major revision is recommended.

Thanks.

OPEN PEER REVIEW

Revision (1)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

1. Please fallow the journal's instruction in manuscript writing: The body (sections) of your manuscript is not in line with journals' instruction: 1- Introduction, 2- Material and methods, 3- Results, and 4- Discussion sequentially.
We have made the change.
2. Abstract: Please delete the group's area in line 3 of abstract; you noted groups in details in the methods section. Therefore, it is not necessary to mention it in the abstract section.
We have removed this section.
3. Material and methods:
a) Please delete the Reagent topic and instead of it, add the section with this name: Experimental design and irradiation procedure and then explain about groups and irradiation details on this part.
We agree and have updated.

b) Please note the procedures which you used to assess IL6 and TNF. There were not even the names of those procedures?!
We thank the reviewer for pointing this out. We have revised.

4) Results: Please put the P value in figure 2 B.
You are right. Figure 2B did not show P value, because the differences in these results were not significant.
5) Discussion: Please more discuses about your findings and compare them with other studies. You discussed more about the other studies' findings instead of yours.
This observation is correct. We have updated..

6) Please revise the English writing of the manuscript and try to improve it.
True, we revise the English writing of the manuscript by kowsar institute and certificate of editing is attached.

Thank you for submitting your work.

Reviewer 2:
1-English writing is poor and needs editing.
True, we revise the English writing of the manuscript by kowsar institute and certificate of editing is attached.
2-The structure of the article is not according to the format of the journal.
We have made the change.
3-The quality of microscopic images of cells is not good.
We agree and have updated.
4- The abstract does not cover the various sections of an article.
We have made the change.
5-New references must be added.
We have made the change.
6-methods are not enough.

Thanks to the esteemed judges. Due to the fact that this study is the result of a doctoral thesis and another article should be extracted from it, so it is not possible to add data in this study.

Reviewer 3:

Dear Authors

The manuscript needs major revision.

- The article contains too many mistakes in English writing. The exact meaning of sentences is un-clear.

We agree and have updated.

- The Title is in not appropriate. It is suggested that the title be modified as follows: The radio-sensitivity effect of human umbilical cord Wharton's Jelly Mesenchymal Stem Cell's conditional medium on MDA-MB-231 cells.

We thank the reviewer for pointing this out. We have revised.

- The Abstract is not organized. The Methods are not available in the abstract. The study groups and the variables must be defined clearly.

We have made the change.

- The Results are unclear. For example what is the meaning of the following sentence?????

"The MTT test showed that proliferative activity of the MDA-MB-231 cells was significantly decreased in 4Gy+CM, 6Gy+CM, and 8Gy+CM groups relative to the cells grown in conventional culture medium (C), rather than Gy groups in all doses of condition medium."

This observation is correct. We have changed.

- The results must be re-written in plain English carefully.

True, we revise the English writing of the manuscript by kowsar institute and certificate of editing is attached.

The results are insufficient to conclude that: human umbilical cord Wharton's Jelly Mesenchymal Stem Cell's conditional medium radio-sensitized the MDA-MB-231 cells. In this regard the viability of MDA-MB-231 cells plus the expression of apoptotic genes and ROS production must be considered.

Thanks to the esteemed judges. Due to the fact that this study is the result of a doctoral thesis and another article should be extracted from it, so it is not possible to add data in this study.

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Revision (1)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | **Revision** (1) 22 Oct 2020

Dear AE,
Thanks to the authors for making all the corrections point by point, despite the low quality of the microscopic image, but my opinion is to accept the article.
Thanks.

Seyyed Ali Mard: Associate Editor | **Revision** (1) 22 Oct 2020

Dear EIC
Based on the authors' answers to the reviewers' comments, the reviewer(s) have recommended publication.
Kind regards.

Seyyed Ali Mard: EIC | **Revision** (1) 22 Oct 2020

Dear Author,
The document is reviewed carefully by the reviewers. According to their comments and your revisions as requested, this manuscript is accepted.
Thanks.