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://brieflands.com/briefland/knowledgebase/category/tree.html#opr.html

International Journal of Cancer Management
Article DOI: 10.5812/ijcm.109039
Published in: International Journal of Cancer Management: 14(2); e109039

Peer Review Report for "Effects of Eight-Week Combined Resistance and Endurance Training on Salivary Interleukin-12, Tumor Necrosis Factor, Cortisol, and Testosterone Levels in Patients with Breast Cancer"

Author(s): Amirabbas Monazzami, Roya Momenpur, Elham Alipour, Kheirollah Yari, Mehrdad Payandeh

Review Timeline:

Submit Date: 2 Sep 2020
Revised Date: 3 Jan 2021
Accepted Date: 25 Jan 2021

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)

6 Nov 2020

Dear AE,
Thanks for submitting this manuscript regarding the anti-inflammatory effect of endurance/resistance training. Inflammation has been proposed as an important player in tumor initiation, promotion, angiogenesis, and metastasis. The authors tried to provide evidence for the anti-inflammatory effect of moderate-interval exercise in patients with breast cancer. There are several suggestions that may improve the quality of this research work:
- Please provide the full-term of acronyms for the first appearance in the abstract and main text.
- Please change the title to not include the "forward slash" sign.
- The authors need to include more practical and basic information regarding the importance of the evaluated biomarkers in breast cancer, in either the abstract or main text.

For the basic section, you can follow this:
Following physical stress (in this case endurance/resistance training), cortisol rises (Singh et al. Differential hypothalamic-pituitary-adrenal axis reactivity to psychological and physical stress, DOI: 10.1210/jcem.84.6.5746), and enhances the respiratory chain efficiency of mitochondria (Picard et al. Psychological Stress and Mitochondria: A Systematic Review, DOI:10.1097/PSY.0000000000000545.), that in turn, improve the prognosis of patients with cancer (Akbari et al. Cell Energy: A New Hypothesis in Decoding Cancer Evolution, PMID: 31823627).
- Please provide information on the reliability and validity of saliva-based to blood-based inflammatory biomarkers in response to exercise. This information is required for each evaluated biomarker.
- It seems that the following phrase needs to be changed in the Abstract section: "confidence interval of P<0.05".
- Please note the clinical applications of all evaluated biomarkers -also for TNF/IL-12 ratio and testosterone/cortisol ratio- in breast cancer.
- Please provide the details of the staging of breast cancer in terms of tumor size (median, range) and pathology diagnosis. Also, considering the importance of age and BMI on the basic inflammatory status, please provide related information. Moreover, the authors need to mention to equally distribution of patients based on these parameters to take out the bias effect.
- Line 92: This is not an acceptable criterion for defining post-menopausal status. Please follow the standard definitions. e.g. based on the NCCN guideline.
- Line 143-147: These sentences have been repeated before.
- Please add a p-value column for Tables 1 and 3.
- Line 209-210: "The production of IL-12 during infection may 209
activate macrophages and enhance the host's cell-mediated immunity(16)."
This sentence is not regarding the main topic.
- Please provide information on Cortisol and testosterone in the Discussion section.
- Please revise the conclusion section to include the main findings of the study.
Thanks

REFEREE: Associate Editor | **Revision** (0) 13 Nov 2020

Dear EIC,
The manuscript is studied, and there are some comments which should be addressed by the author. According to the comments, the document needs major revision.
Kind regards,

REFEREE: EIC | **Revision** (0) 14 Nov 2020

Dear authors,
Please revise your manuscript according to the reviewer's comments.
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.

Dear Editor

I would like to thank you and your reviewers for his/her good comments regarding our study, which allow us to improve this manuscript. We insert some parts of these explanations and advice into the manuscript. Answers to the reviewer's comments are presented below.

Major points

1.Please change the title to not including the "forward slash" sign.

Response: Many thanks for your suggestion. The forward slash was removed and Title was revised.

2. Please provide the full-term of acronyms for the first appearance in the abstract and main text

Response: Many thanks for your suggestion. We provide the full- term of acronyms for the first appearance in the abstract and main text.

3. It seems that the following phrase needs to be changed in the Abstract section: "confidence interval of P<0.05".

Response: Many thanks for your suggestion. The phrase was edited.

4.The authors need to include more practical and basic information regarding the importance of the evaluated biomarkers in breast cancer, in either abstract and main text

Response: Many thanks for your suggestion. The importance of the evaluated biomarkers was mentioned in the main text. But the limited number of words in the article did not allow us to explain in more details.

5.Please provide information on the reliability and validity of saliva-based to blood-based inflammatory biomarkers in response to exercise. This information is required for each evaluated biomarker.

Response: Many thanks for your suggestion.information on the reliability and validity of saliva-based to blood-based inflammatory biomarkers in response to exercise in each variable were noted in the introduction section.

6. Please note the clinical applications of all evaluated biomarkers -also for TNF/IL-12 ratio and testosterone/cortisol ratio- in breast cancer.

Response: Many thanks for your suggestion; clinical applications of all evaluated biomarkers were mentioned in the introduction and discussion sections.

7. please provide the details of the staging of breast cancer in terms of tumor size (median, range) and pathology diagnosis. Also, considering the importance of age and BMI on the basic inflammatory status, please provide related information. Moreover, authors need to mention to equally-distribution of patients based on these parameters to take out the bias effect.

Response: Many thanks for your suggestion. Staging of breast cancer and equally distribution of patients were described in the methods section but the importance of age and BMI on the basic inflammatory status were noted in the main text.

8. Line 92: This is not an acceptable criterion for defining post-menopausal status. Please follow the standard definitions. e.g. based on the NCCN guideline.

Response: Many thanks for your suggestion. post-menopausal status edited based on the NCCN guideline in the methods section

9. Line 143-147: These sentences have been repeated before.

Response: Many thanks for your suggestion.The repetition phrase was removed.

10. please add a p-value column for Tables 1 and 3.

Response: Many thanks for your suggestion. We deleted Table1 because of repetition data and added p-value to Table 3.

11. Line 209-210: "The production of IL-12 during infection may 209 activate macrophages and enhance the host's cell-mediated immunity(16)." This sentence is not regarding the main topic.

Response: Many thanks for your suggestion. The phrase was removed.

12. Please provide information on the Cortisol and testosterone in the Discussion section.

Response: Many thanks for your suggestion.Information on the Cortisol and testosterone were noted in the discussion section.

13. Please revise the conclusion section to include the main findings of the study

Response: Many thanks for your suggestion. The conclusion was revised.

Best Regards

Kh Yari

A. Monazzami

OPEN PEER REVIEW

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) 14 Dec 2020

Dear AE,
Thanks for response to the reviewer's comments and concerns. However, there are 4 comments that the answers are not convincing.
Comment 4: The authors need to include more practical and basic information regarding the importance of the evaluated biomarkers in breast cancer, in either the abstract or the main text.
For the basic section, you can follow this:
Following physical stress (in this case endurance/resistance training), cortisol rises (Singh et al. Differential hypothalamic-pituitary-adrenal axis reactivity to psychological and physical stress, DOI: 10.1210/jcem.84.6.5746), and enhances the respiratory chain efficiency of mitochondria (Picard et al. Psychological Stress and Mitochondria: A Systematic Review, DOI:10.1097/PSY.0000000000000545.), that in turn, improve the prognosis of patients with cancer (Akbari et al. Cell Energy: A New Hypothesis in Decoding Cancer Evolution, PMID: 31823627).
*** It seems that this comment of esteemed reviewer #1 provides a novel hypothesis that is valuable for further studies.
Comment 6: Please note the clinical applications of all evaluated biomarkers -also for TNF/IL-12 ratio and testosterone/cortisol ratio- in breast cancer.
Comment 7: Please provide the details of the staging of breast cancer in terms of tumor size
(median, range) and pathology diagnosis. Also, considering the importance of age and BMI on the basic inflammatory status, please provide related information.
Moreover, authors need to mention to equally-distribution of patients based on these parameters to take out the bias effect.
*** Please re-add Table 1 and follow the reviewer's comment.
Comment 10: please add a p-value column for Tables 1 and 3.
*** Please re-add Table 1 and follow the reviewer's comment.
Thanks

REFEREE: Associate Editor | **Revision** (1) 14 Dec 2020

Dear EIC
The reviewer(s) have recommended publication, but also suggest some minor revisions to the manuscript. Therefore, I invite the author to respond to the reviewer(s)' comments and

revise his manuscript.

Kind regards,

REFEREE: EIC | **Revision (1)** 15 Dec 2020

Dear authors,

Please revise your manuscript according to the reviewer's comments.

Thanks

OPEN PEER REVIEW

Revision (2)

Reply to Reviewers

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Dear Editor

I would like to thank you and your reviewers for his/her good comments regarding our study, which allow us to improve this manuscript. We insert some parts of these explanations and advice into the manuscript. Answers to the reviewer's comments are presented below.

Reviewers' Comments:

Reviewer 1:

Comment 4: The authors need to include more practical and basic information regarding the importance of the evaluated biomarkers in breast cancer, in either the abstract and the main text.

For the basic section, you can follow this:
Following physical stress (in this case endurance/resistance training), cortisol rises (Singh et al. Differential hypothalamic-pituitary-adrenal axis reactivity to psychological and physical stress, DOI: 10.1210/jcem.84.6.5746), and enhance the respiratory chain efficiency of mitochondria (Picard et al. Psychological Stress and Mitochondria: A Systematic Review, DOI:10.1097/PSY.0000000000000545.), that in turn, improve the prognosis of patients with cancer (Akbari et al. Cell Energy: A New Hypothesis in Decoding Cancer Evolution, PMID: 31823627).

**** It seems that this comment of the esteemed reviewer #1 provides a novel hypothesis that is valuable for further studies.*

Response: Many thanks for your suggestion. *Practical and basic information regarding the importance of the evaluated biomarkers in breast cancer was added in either the abstract and the main text*

Comment 6: Please note the clinical applications of all evaluated biomarkers -also for TNF/IL-12 ratio and testosterone/cortisol ratio- in breast cancer.

Response: Many thanks for your suggestion. The introduction section was revised.

Comment 7: Please provide the details of the staging of breast cancer in terms of tumor size (median, range) and. Also, considering the importance of age and BMI on the basic inflammatory status, please provide related information. Moreover, authors need to mention to equally-distribution of patients based on

these parameters to take out the bias effect.

**** Please re-add Table 1 and follow the reviewer's comment.*

Response: Many thanks for your suggestion. Material and Method were revised.

Comment 10: please add a p-value column for Tables 1 and 3.

**** Please re-add Table 1 and follow the reviewer's comment.*

Response: Many thanks for your suggestion. Table 1 was re-added.

Best Regards

Kh Yari

OPEN PEER REVIEW

Revision (2)

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

REFEREE: Reviewer | **Revision** (2) 31 Dec 2020

Dear AE,
Thanks for the precise responses to the comments.
The manuscript still needs a minor correction.
Please translocate Table 1 to the "Results" section.
Thanks

REFEREE: Associate Editor | **Revision** (2) 31 Dec 2020

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

REFEREE: EIC | **Revision** (2) 2 Jan 2021

Dear authors,
1. Please define all abbreviations when they are used for the first time in the title, abstract, and manuscript body, each one separately; including "IL-12", and "TNF-alpha" in the title, "ELISA" in the abstract, and "IL-12", "TNF-alpha", ... in the manuscript body.
2. In the methods section, please state which ethics committee approved the study.
3. Please remove "Resistance and endurance training" from the keywords list, as it is not considered a MeSH term.
Thanks

OPEN PEER REVIEW

Revision (3)

Reply to Reviewers

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

Dear Editor

I would like to thank you and your reviewers for his/her good comments regarding our study, which allow us to improve this manuscript. We insert some parts of these explanations and advice into the manuscript. Answers to the reviewer's comments are presented below.

Reviewers' Comments:

Reviewer 1:

Thank you for the precise responses to the comments.
The manuscript still needs a minor correction.
Please translocate Table 1 to the "Results" section.

Response: Many thanks for your suggestion. *The data in Table 1 was previously translocated to the Results section, but data in Table 1 and 3 were replaced in the previous revision, which was edited.*

EIC Decision:

1. Please define all abbreviations when they are used for the first time in the title, abstract, and manuscript body, each one separately; including "IL-12", and "TNF-alpha" in the title, "ELISA" in the abstract, and "IL-12", "TNF-alpha", ... in the manuscript body.

Response: Many thanks for your suggestion. The all abbreviation in the mentioned sections were revised.

2. In the methods section, please state which ethics committee approved the study.

Response: Many thanks for your suggestion. Ethic committee was added and revised

3. Please remove "Resistance and endurance training" from the keywords list, as it is not considered a MeSH term.

Response: Many thanks for your suggestion. *Resistance and endurance training* were removed from keywords list.

Best Regards

Kh Yari

OPEN PEER REVIEW

Revision (3)

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

REFEREE: EIC | **Revision** (3) 25 Jan 2021

Dear authors,

Thank you for revising your manuscript according to the reviewers' comments.

Regards