Reviewer’s report

Title: Intraoral photobiomodulation-induced orthodontic tooth alignment: a preliminary study

Version: 2 Date: 23 Nov 2015

Reviewer: Nikolaos Gkantidis

Reviewer's report:

1. This an interesting study, referring to the attempt for reduction of orthodontic treatment duration by enhancing the rate of orthodontic tooth movement through Photobiomodulation. The study presents encouraging results. However, there are certain limitations that should be taken into consideration when interpreting these encouraging results.

- Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

2. Since the study has important limitations that are reported in the manuscript, the conclusions in the abstract should put more emphasis on this issue. For example, the results could start with the following phrase: "Under the limitations of the present study…"

3. In Table 1 there is an obvious difference in upper/lower arch distribution between the groups. Please check the statistics that you used to show that this difference is not significant and rephrase the way you report this in the text. Please also consider that
statistical significance depends also on sample size and the sample size in the present study is small.

4. The limitations of the study should be reported just before "Conclusions" section under the subheading "Limitations"

- Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

5. Please rephrase line 88 as follows: "A way to reduce orthodontic treatment time is by increasing the rate of tooth movement.", because there are also other factors that influence treatment time and can be controlled.

6. Line 271. Please delete the word "control" the first time it appears in this sentence.

7. Please rephrase Line 396 as follows: "Under the limitations of the study, it could be suggested that:"

- Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

Minor issues not for publication

The reference list is quite extended and could be reduced.

The whole manuscript can also be reduced if repetition of several points will be eliminated.
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.

No

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

No

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:

Acceptable

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