Author’s response to reviews

Title: Non-significant association between -330 T/G polymorphism in interleukin-2 gene and chronic periodontitis: findings from a meta-analysis

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Version: 2 Date: 27 Nov 2019

Author’s response to reviews:


Dear Editor Liam Messin,

Thank you for the e-mail.

We made the most changes suggested by the reviewers.

Reviewer reports:

Ana Maria Sell, Ph.D (Reviewer 2): First, I would like to thank you for your willingness to attend the previous considerations. The modifications made allowed a better understanding of your study. In this way, I made some additional considerations.
Reply (#2): We are very grateful for the increased scientific impact given to our work by means of the Reviewer’s consideration. Again, we have made the most suggested changes in the test and we hope that the changes we made in our manuscript may be positively considered by Reviewer.

Minor comments

* Consider the inclusion of more information about the polymorphism (IL2 -330 T/G) that justifies its study, just like in which region of the gene it is located, and what kind of modification causes to IL-2 expression, among other relevant information.

Reply. As suggested, we have included information on IL2 gene localization, that was informed by the first study that has been identified the -330 T/G polymorphism in this gene (Background, line 23). In the text, as the original text as the last revisioned version, the authors included contradictory information on IL-2 function on diverse diseases and inflammatory conditions as well as the role of variant allele and wild type allele in IL-2 protein levels in a CD3/CD28-stimulated peripheral blood lymphocytes from participants positive or negative for the mentioned polymorphism (Discussion, line 16). We believe these informations, and the difficult in perform wide genetic studies, may justify the scientific rationale for the study.

* As mentioned earlier, authors should be careful about the nomenclature of genes, and the correct mention in the text of a gene (IL2) or protein (IL-2) names (e.g. Background, line 48).

Reply. We have made this change through the text.

* In the "C" and "D" comparison, available on forest plot in supplementary material, the heterogeneity test shows $I^2 = 81\%$, compatible with the choice of a Random model. However, the OR values described for the forest plot showed values compatible with the Fixed model. Are the corresponding values described in Table 2 for Fixed or Random model?.

Reply. We have used the Random effects and therefore the correct statistical values have been included in the text and table 2.

* The desired criteria for HWE for the chosen studies need to be further described in table 1. Which p-value has been selected? Is only the study of Majumder et al. in according to the HWE? Which group was checked for HWE, cases and controls combined or just the control group?

Reply. We have included this information. Only a few number of studies have brought details on HWE which just the study of Majumder et al. in fact was in according to the HWE. In these studies, the authors analysed the HWE for cases and controls combined.