**Reviewer's report**

**Title:** A randomized, double-blind, placebo-controlled multicenter study for evaluating the effects of fixed-dose combinations of vitamin C, vitamin E, lysozyme, and carbazochrome on gingival inflammation in chronic periodontitis patients

**Version:** 0  **Date:** 01 Nov 2018

**Reviewer:** Jan Kühnisch

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The present RCT is investigating the effects of a pharmaceutical composed of vitamin C, vitamin E, lysozyme, and carbazochrome on gingival inflammation of chronic periodontitis patients. It was shown a mild, short-term (8 weeks) effect according to the gingival index. Other periodontal indices showed non-significant differences. There are some suggestions which need to be addressed during revision of the manuscript:

- The phrase "vitamin C, vitamin E, lysozyme, and carbazochrome …" is repeatedly used in the manuscript. Please modify.

- The statistical analyses excluded logistic regression analyses so far. It is suggested to analyse the data in such a way due to the fact that simple comparisons might be misleading and confounding factors (age, gender) are not considered. Please include an appropriate logistic regression analyses or refer - at minimum - in the discussion that this statistics was not performed.

- Beside highlighting small statistical significances there is an urgent need to interpret these data from a clinical point of view: With respect the small differences, the data should be interpreted with caution. The effects seems to be true for an 8 week interval and are small. Please revise your conclusion.
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.

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

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