Reviewer’s report

Title: First characterization of methanogens in oral cavity in Malian patients with oral cavity pathologies.

Version: 0 Date: 22 Jul 2019

Reviewer: Oleh Andrukhov

Reviewer's report:

In these preliminary study the prevalence of methanogens within the patients of the stomatology department of Bamako. The presence of methanogens in the oral cavity was never studied in African populations. However, the study is preliminary and limited, because it includes only the patients of the dental clinic and not a representative population. Furthermore, the number of study participants is rather low and therefore the manuscript could be considered only as a preliminary report or a pilot study.

Here are the major criticism points:

Data of the present study shows methanogens analysis in the population of Mali, but not in the whole of Africa. Therefore, the title and the text of the manuscript should be adjusted accordingly.

Furthermore, the study includes only patients of the stomatology department of Bamako. Therefore, this population is not representative of the whole population of Mali, because it does not include the persons without dental problems (healthy group). This circumstance should be reflected in the title and the text.

Demographic characteristics of the study group (age, gender, smoking status, etc) should be presented in table form as mean+/−SD for metric variables and absolute number/proportion for nominal variables.

Clinical parameters such as probing pocket depth, bleeding index, attachment loss should be provided for gingivitis and periodontitis patients.

Methanogens were detected only in eight samples, to which group belonged these patients?

P. 8, line 190. Authors mention that clinical data are unavailable for patient no 5. How it complies with the statement of data availability?
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.

Yes

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.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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