Reviewer's report

**Title:** Comparative analysis of oral treponeme bacteria associated with periodontal health and disease

**Version:** 2 **Date:** 13 February 2013

**Reviewer:** Jacques Izard

Reviewer's report:

The authors are revisiting in detail the importance of treponemes in periodontal disease and in health. Despite evidence of association between disease severity and the abundance of treponemes, there is no clear information about the diversity in situ. The authors use a strong approach to analyze the data providing new horizons to understand treponemal involvement in health and disease.

Major issues

None

Minor issues

Title. Should read “oral treponemes associated”.

Abstract, line 4. Too many “and”

Abstract, line 5. “Oral treponemes (genus Treponema)” is the correct terminology

Page 4, line 3. Too many “and”

Reference 15. Please include the chapter of interest.

References. Please be sure that the italics are present where they should be.

Page 5, 2nd paragraph. Treponema medium is missing from that list.

Page 5, 2nd paragraph, 2nd line. Please remove “(Borrelia)”. This is past antiquated.

Page 5, 2nd paragraph. Treponema pallidum can be an infectious agent in the oral cavity. This should be mentioned.

Page 7, line 13. It should be mentioned for “each subject” as it leaves the reader unclear is all plaque of all subjects were pooled or not.


Page 19, 1st paragraph last line. The authors should mention that this reinforce previous observation both microscopy (Rosebury, Microorganisms indigenous to man, 1962) and by next generation sequencing (Genome Biol. 2012 Jun 14;13(6):R42. doi: 10.1186/gb-2012-13-6-r42.) and reference 51.

Page 19, last line. Reference 14 indicates 49 phylotypes (98.5% cut off)

Page 20, last line. As-yet-to-be-cultivated
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

No competing interest