Reviewer's report

Title: Effect of nonsurgical periodontal therapy verses oral hygiene instructions on Type 2 diabetes subjects with chronic periodontitis: a randomised clinical trial

Version: 2
Date: 4 May 2014

Reviewer: Nikolaos Gkranias

Reviewer's report:

#Major Compulsory Revisions:

In order to best understand this study and its merit could the authors please comment on the following?

1. Line 134: the power calculation is based on a rather low (80%) certainty that weakens overall the results. Could the authors comment on why they did not seek a 90% or 95% certainty level?

2. Line 137: For such a small group, randomisation based on other major periodontal risk factors should ideally have been sought namely diabetic control levels, age, gender, smoking status. Please can you provide these figures within your groups?

3. Lines: 141-147: plaque and bleeding index reproducibility should have been difficult to achieve considering that probing pocket depths were measured 3 hours following the first measurements. Furthermore, its not clear in the material and methods what margins of error where accepted between first and second round of measurement. can you please provide these?

4. Line 161-162: Unknown duration of NSPT visit or OH visits? Please specify

5. Lines 163-164: The use of CHX in one only group could have affected the results; a further control with NSPT without CHX or OH with CHX could have been added. Can you comment in discussion?

6. Line 483: Hs-CRP was markedly lower on OHI group and was reduced only in the NSPT group. NO changes in the OHI group. As there was no statistical significance this may be attributed to the low sample size rather than the true differences. Please comment

7. Table 1: some of the SD indicate significant variability a)3 months on NSPT PI and b) 3 months in the OH group BI, can the authors comment on this?

8. FIG1: This flow chart indicates that the subject in the NSPT group could have entered a loop of OH reinforcement until they reduce the plaque score to less than 20%. Was there a time limitation for this? If not how long was the average patient in that part of the study?

9. Patients with more than 50% reduction in different clinical findings are very small 7, 2 and 16 in PI, BI and PPD, also grouping together subjects from different treatment modalities and analysing them together is debatable. These
results are even weaker and should be treated as such in the discussion.

# Minor Essential Revisions

1. Lines 69-71: needs to be corrected as gingivitis can not lead to tooth loss

# Discretionary Revisions

1. Line 502: are 3 months enough time to show differences in the HbA1C (borderline)? Please comment in the discussion.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests