**Reviewer’s report**

**Title:** Statin using periodontitis patients have markedly fewer periodontal lesions - a cross-sectional study

**Version:** 2  **Date:** 10 February 2008

**Reviewer:** Francisco Gude

**Reviewer’s report:**

This study was carried out to evaluate a possible association between clinical markers of chronic periodontitis and statin users. A cross-sectional design was used and a sample of 100 consecutive adult patients referred to a university dental clinic for treatment of advanced chronic periodontitis. A novel index, Periodontal Inflammatory Burden Index (PIBI), was derived from the PPD values to estimate systemic effects of periodontitis. Periodontitis patients taking statins had a lower number of pathological periodontal pockets than those without statin medication. The authors concluded that patients on statin medication exhibit fewer signs of periodontal inflammatory injury than subjects without the statin regimen.

. **Major Compulsory Revisions**

1) The authors state that the aim of this study was to examine the effect of statins on clinical markers of chronic periodontitis. The cross sectional design does not indicate a causal relationship. The main focus of the study is association/relationship and it should be clearly stated in the objective.

2) I understand that authors performed a linear regression analysis in the two subgroups: statin and no statin use (stratification). If they wanted to examine the relationship between PIBI (dependent variable) and statin use (independent variable) adjusting by potential confounding variables (gender, age, RA), then they should enter statin use into the analysis.

Recall that a series of assumptions must be fulfilled to perform the linear regression analysis.

. **Minor Essential Revisions**

In Table 3, the footnote is lacking regarding RA. What does it mean RA?.

. **Discretionary Revisions**

Since the study design is cross-sectional, authors should be aware of appropriated explanations about the effects of statins on periodontal disease.

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests