Reviewer's report

**Title:** Replication of the Association of Chromosomal Region 9p21.3 with Generalized Aggressive Periodontitis (gAgP) Using an Independent Case-Control Cohort

**Version:** 2 **Date:** 30 April 2010

**Reviewer:** Alexandre Rezende Vieira

**Reviewer's report:**

Here some comments to improve the presentation of the work:

- **Major Points:**

  1. Introduction and Discussion sections are too long. This work is not about the correlation between cardiovascular diseases and periodontitis and most of the text elaborating on this is superfluous and must be deleted.

  2. In the Introduction section (page 5) the authors mention the limited sample size of the initial study, and a few lines after, that the current work exhibits similar sample size. Since there is at least one individual co-authoring both works, and there is a short time span between the two pieces, it is not clear why these data was not presented in the original manuscript.

  3. Methods section, cases and controls have a significant difference regarding gender distribution. This may indicate a good chance of undetected population substructure bias. More consideration to this should have been given in the Methods section and some minimal description on how the authors addressed this should be provided. Genomic control approaches, conditional logistic methods?

  4. Discussion section. The first two paragraphs, as I mentioned above are about cardiovascular diseases, something not tested in this study. However, the authors mention the four genes in this critical region, CDKN2A, ARF, ANRIL, and CDKN2B. There is mention to some previous expression work of these genes, as well as the possibility of linkage disequilibrium to causal genetic variants. Why these four genes were not sequenced in the studied population?

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Not suitable for publication unless extensively edited

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

**Declaration of competing interests:**

I have no competing interests.