Reviewer's report

Title: A case-control study on the combined effects of p53 and p73 polymorphisms on head and neck cancer risk in an Italian population

Version: 2 Date: 19 January 2009

Reviewer: Nancy Hamel

Reviewer's report:

As stated in my first review of the manuscript, the study design and execution are good, and the results are of interest to others in this field provided the associations observed are genuine and not false positive results.

Minor Essential Revisions

1. There is one instance where FDR correction for multiple testing rendered a formerly significant association non-significant, as clearly pointed out by the authors in the text (association between the p73 polymorphism and risk of oral cavity cancer, Table 2). It would be useful for the authors to also indicate this in the table itself, as an additional footnote, so it can be immediately clear when browsing the Tables that this positive result is not statistically significant in spite of the suggestive odds ratio.

2. I would like to see a specific comment/statement for every significant association reported in the manuscript regarding the fact that the association remains significant even after correction for multiple testing (which I assume it does given that they are still presented as significant, as in the first version of the manuscript), and the appropriate corrected P-values presented so the strength of the corrected association is evident.

I do not feel personally qualified to properly assess the statistics of this manuscript. Provided the manner in which the authors addressed the statistical issues meets with the approval of the other reviewers who feel competent to assess this aspect of the study, I am satisfied that the authors have addressed my other comments to warrant publication in BMC Cancer.

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

Quality of written English: Acceptable

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.