Reviewer's report

Title: Malignant transformation of oral potentially malignant disorders: a retrospective cohort study

Version: 3 Date: 2 December 2008

Reviewer: Giovanni Lodi

Reviewer's report:

The Authors reports the results of a study investigating the incidence of cancer in a group of Taiwanese patients affected by premalignant lesions of different nature. The subject of the study is of great interest for the readers of BMC Cancer, and the sample size make the study worth of attention, however in my opinion, before being suitable for publication the manuscript needs some major changes.

In particular:

MATERIALS (patients?) AND METHODS

• One very important detail that is missing in this section is whether the study has a retrospective or prospective design, i.e. did the Authors collected data before or after planning the study?

• More details should be provided regarding the selection of the group. Authors clearly indicated inclusion and exclusion criteria, but it is not clear whether all subjects seen at the Kaohsiung clinic in the period considered were included in the study group or if they undergo any selection. This is particularly important in view of the sex distribution that seems to indicate some kind of selection bias.

• Authors should give more information on verrucous hyperplasia, as readers can be unfamiliar with such a recently described lesion

• In Chung et al. 2005 no clear diagnostic criteria for the diagnosis of verrucous hyperplasia are defined, a part from affecting areca chewers. More details on the diagnosis of such lesion are needed.

• A major problem of the present report is the absence of any information about treatment. What happened to this group of patients in the period described? did they undergo any form of treatment? did treatment affect outcome?

RESULTS

• The number of females in the group investigated is really small. Too small in my opinion. It seems that something happened during the selection of the group (see Discussion)

DISCUSSION

• Please discuss the possible selection bias causing the unusual sex ratio (limitation in access to care for women? selection of the Authors?)
• Please discuss the difficulties in comparing past and future data regarding “verrucous hyperplasia” in absence of clear clinical and histological diagnostic criteria.

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

**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