Reviewer’s report

Title: Involvement of TSC genes and differential expression of other members of the insulin signaling pathway in oral squamous cell carcinoma

Version: 1 Date: 13 February 2008

Reviewer: Eloiza Helena Tajara

Reviewer’s report:

Major Compulsory Revisions
1. The Material and Methods section lacks some relevant information. For example, the authors refer tumor samples from the tongue. However, no information is given regarding the part of the tongue where the tumors were found. This information may be important because tongue base tumors tend to be more aggressive than those on the front of the tongue and, therefore, may have a different expression profile.

2. In addition, the authors should mention that microdissection was not performed. As the authors point out, the presence of contaminating normal cells may affect the results of methylation and expression experiments.

3. It is not clearly described why the cutoff value for determining the upregulation or downregulation of a gene was defined as 1.8

4. To my understanding, Results and Discussion have similar statements and should be presented in a single section.

Minor Essential Revisions
1. Official Gene Symbol should be preceded by the Official Full Name of the gene (see Entrez Gene/NCBI or HUGO Gene Nomenclature Committee Guidelines).

2. I would expect appropriate references for statistical methods (see page 7, first paragraph, reference 7) and original references for the PCR-SSCP methodology (see page 7, second paragraph, reference 13).

3. Although the reference of insulin signaling pathway is not incorrect, I think mTOR signaling pathway is more appropriate for the genes analyzed.

Discretionary Revisions

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: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests