Reviewer's report

Title: Gene-expression of metastasized versus non-metastasized primary head and neck squamous cell carcinomas: a pathway-based analysis

Version: 1 Date: 29 November 2007

Reviewer: Ruud Brakenhoff

Reviewer's report:

General
Hensen et al present array data dealing on lymph node metastases in head and neck cancer.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1) The weakness of the study is the small sample size and the use of a different platform. There are methods to calculate for platform differences, but the authors do not exploit these.
2) I like the idea of selecting existing profiles for analysis, which is exploited increasingly more frequently nowadays and circumvents the use of training-validation analyses. However the existing head and neck cancer prognosis profiles should have been included, such as the Chung profile. Moreover, for these analyses there is no reason to use the own Affymetrix data that only cause confusion. I would suggest to focus on the biological and prognostic profiles using the Roepman data only.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

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.