Reviewer's report

Title: Neck Control after Definitive Radiochemotherapy without Planned Neck Dissection in Node-Positive Head and Neck Cancers

Version: 1 Date: 20 November 2011

Reviewer: Thomas Kuhnt

Reviewer's report:

Dear editor, dear colleagues
Thank you for the submission of the manuscript. The present manuscript is an original work.

General remarks:
The purpose of this study was to examine how often regional recurrences occur in the neck without a planned neck dissection after chemo radiation in patients with initial positive lymph nodes of SCC/ nasopharyngeal carcinoma.

The work evaluates medical records of 50 patients with lymph node positive head and neck cancer/ nasopharyngeal cancer. The patients were treated in the time period between June 2003 and August 2011 at the National University in Seoul Bundang Hospital Korea. All patients were treated with radiotherapy (2D, 3D-conformal or IMRT) as the option in primary therapy with curative intent. Chemotherapy was given either neoadjuvant or concurrent to the irradiation treatment. These were essentially given a cisplatin-based chemotherapy. Some patients received adjuvant chemotherapy, too. After the end of therapy a neck dissection only was performed in those patients who have residual neck disease or who have a regional recurrence. The response evaluation of neck was performed with CT / MRI or PET-CT on average 5 weeks after the end of treatment. The overall survival, progression-free survival, local control, regional control and the distant metastasis-free survival were calculated. Prognostic factors were determined with univariate and multivariate analysis.

1. Is the question posed by the authors well defined?
The topic is interesting and has a contemporary significance.

2. Are the methods appropriate and well described?
A. Unfortunately, the description of the patient selection and the methods is weak.
The methods have been described inadequate. E.g. it lacks the information concerning the classification of tumors (UICC, AJCC). Furthermore, the descriptions are missing when a lymph node on CT / MRI or PET-CT was regarded as involved. According to which criteria the response was assessed? Used RECIST-criteria? E.g. it lacks the description of the selected prognostic
factors (necrosis, SUV-value).

B. Furthermore, the chemotherapy dosages of the drugs must be described.

C. The statistical tests are appropriate. Unfortunately, it lacks in detail which statistics program was used. There are missing data of the selection of factors which used in the multivariate analysis.

3. Are the data sound?
Unfortunately, the presentation of the data is incoherent. E.g. a flowchart would be helpful.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
The present manuscript complies with the requirements and standards of an international publication and with Radiation Oncology.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
Unfortunately, the discussion is a little too insubstantial. The authors have to discuss the data much more profound. E.g. what is the role of PET-CT in the response assessment? The summary is acceptable.

6. Are limitations of the work clearly stated?
The weaknesses of the work have been discussed not sufficient. This paragraph is missing in the discussion and must be inserted.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
The publications were well chosen. Important papers were cited and discussed.

8. Do the title and abstract accurately convey what has been found?
The title and the abstract agree well.

9. Is the writing acceptable?
The writing is acceptable and sufficient.

Please make your review as constructive and detailed as possible in your comments so that authors have the opportunity to overcome any serious deficiencies that you find and please also divide your comments into the following categories:

- Discretionary Revisions
1. E.g. had the administration of chemotherapy (neoadjuvant, simultaneously, adjuvant) a prognostic influence? Please describe.

- Minor Essential Revisions
1. Unfortunately, it lacks the details of which statistics program was used. There are missing data for the selection of factors in the multivariate analysis.

- Major Compulsory Revisions

1. The patient population is not homogeneous. The entity nasopharyngeal carcinoma has a different etiology and prognosis than other head and neck carcinomas. In addition, the nasopharyngeal carcinoma is a very sensitivity carcinoma to radiation and chemotherapy. Therefore, the entities can not be analyzed together. For the SCC in the head and neck region, the question of planned neck dissection is still relevant. Therefore, I recommend the work to focus entirely on the SCC H&N. Here, however, the number of patients must be significantly increased.

2. It lacks information concerning the classification of tumors (UICC, AJCC). Which staging system was used? (UICC or AJCC). Please specify this.

If all of patients prior to therapy a positive cervical lymph nodes status should have, why seven patients with stage II in classification? Please specify. Please see table 1.

3. Furthermore, the descriptions when a lymph node on CT / MRI or PET-CT was regarded as involved are missing. According to which criteria the response was assessed? RECIST- criteria? Which version was used? It lacks the description of the selected prognostic factors (necrosis, SUV-value).

4. Furthermore, the chemotherapy dosages of the drugs must be described in detail.

5. Unfortunately, the discussion is a little too insubstantial. The authors have to discuss the data much more profound. E.g. what is the role of PET-CT in the response assessment? Please describe.

**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