Reviewer's report

Title: Trimodal therapy for stage III-N2 non-small-cell lung carcinoma: a single center retrospective analysis

Version: 1  
Date: 1 December 2013

Reviewer: Thorsten Walles

Reviewer's report:

Major Compulsory Revisions

1. The manuscript is lacking a research hypothesis.

2. In the method section the time of N2-diagnosis is not specified: Was N2-disease confirmed during preoperative staging (thus representing IIIA3 disease)? If so, why did one-third of patients (n=23) receive chemotherapy in a neoadjuvant setting and two-third of patients (n=48) in an adjuvant setting?

3. The calculation of post-radiation loss of lung function with the post-operative lung function as baseline is problematic: Thoracic Surgery results in a permanent (due to resection of lung parenchyma) and a temporary (due to reversible tissue changes in the remaining lung parenchyma) loss of lung function. Depending on the time interval between lung resection and determination of postoperative lung function the effect of radiation on lung function will be underestimated. The median time interval between surgery and adjuvant radiation was 4 weeks or 4 months, respectively, depending on pre- or postopertative chemotherapy. However, the range was 1 to 12 months for the entire cohort.

4. No consensus exists regarding the optimal treatment of patients with locally advanced NSCLC IIIA and IIIB and these patient cohorts are subject of numerous recent and ongoing clinical analyses. Above all, the effect of pre- or postoperative radiation therapy in a multimodal setting has been addressed by various groups. However, in the submitted manuscript 15 of 29 cited references are older than 5 years and it has to be questioned if the authors' argumentation is based on the most recent clinical findings.

5. The pneumonectomy rate in the presented cohort was 28% (n=20) which is rather high and similar to other studies that apply radiation therapy in the neoadjuvant setting. The authors should specify the amount of sleeve-resections in their cohort. Especially, since bilobectomy and pneumonectomy is associated with decreased patient survival.

Minor Essential Revisions

6. Chemotherapy is better tolerated in the neoadjuvant setting. Surprisingly, in the presented cohort more chemotherapy cycles were given in the adjuvant setting. The authors should specify the reasons for this unusual distribution.

7. The R0-resection rate in the presented cohort is 74.6%. The authors should discuss if a neoadjuvant radiation therapy that has been shown to increase the
R0-resection rate could have resulted in an improved outcome.

Discretionary Revisions
None.

Level of interest: An article of limited interest

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.