Reviewer's report

Title: Helical Intensity-Modulated Radiotherapy of the Pelvic Lymph Nodes with Integrated Boost to the Prostate Bed - Initial Results of the PLATIN 3 Trial

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Reviewer: Tobias Hölscher

Reviewer's report:

2013-09-19
The authors report first safety and efficacy data of a phase II trial in radiotherapy treatment of prostate bed and pelvic lymph nodes in patients with prostate cancer after radical prostatectomy.

40 patients met inclusion criteria and were treated with neoadjuvant androgen deprivation and helical IMRT applying a simultaneous integrated boost technique (1.5 Gy pelvic nodes / 2.0 Gy prostate bed).

The authors applied a new technique (Tomotherapy (R)) and were able to show an acceptable acute toxicity profile.

The primary aim of the study was to show that the treatment adherence without severe toxicity was >87 %. As toxicity of postoperative radiotherapy in prostate cancer is low, (shown in table 5+6), this endpoint is of minor relevance.

Especially late GU toxicity cannot be assessed properly during a follow-up period of 2 years, GU morbidity might occur after >5-10 years.

The length of follow up could be considered in table 6.

The report of erectile dysfunction can be omitted in patients receiving androgen deprivation.

1. Is the question posed by the authors well defined?
   The primary end point of this phase II study was described as, the proportion (denoted SDR) of patients receiving treatment as planned and without grade 3-4 toxicity. No comparison to a standard treatment was planned.

   Secondary endpoints were prostate–specific symptoms, treatment toxicity parameters and quality of life parameters

2. Are the methods appropriate and well described?
   yes

3. Are the data sound?
   Yes, however, numbers are too small e.g. for toxicity and quality of life analyses.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
5. Are the discussion and conclusions well balanced and adequately supported by the data?

No: Conclusion. As there was no direct comparison to prostate bed irradiation alone, and the follow-up is not mature, following conclusion cannot be accepted. “Prophylactic radiotherapy of the pelvic lymph nodes with an integrated boost to the prostate bed can be performed without excessive toxicity compared to prostate bed irradiation alone”.

6. Are limitations of the work clearly stated?

No, authors should discuss limitations: 1. small number of cases and short follow-up, not allowing valid analyses of outcome, toxicity or QOL; 2. Fractionation schedule is not state of the art (dose per fraction of 1.5 Gy!);

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

Yes.

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

No: Conclusions of abstract:” Postoperative whole-pelvis IMRT with an integrated boost to the prostate bed can be performed safely and without excessive toxicity compared to prostate bed irradiation alone.” This has not been compared in this trial.

9. Is the writing acceptable?

Yes.

Major Compulsory Revisions
- none

Minor Essential Revisions
- Modify conclusions, i.e. stating that such integrated boost helical IMRT may be applied without excessive toxicity and could be evaluated further in prospective trials to assess clinical efficacy for patients with high risk of (residual) tumor in pelvic lymph node area
- discuss limitations of study
- The report of erectile dysfunction can be omitted in patient receiving androgen deprivation.

Discretionary Revisions
- Table 6: report median follow up time
- Report of QOL data in such a heterogeneous group of 39 patients may be omitted.

Minor issues not for publication
- Conclusions: correct spelling “conclusions”
- Results: para 4 and elsewhere: “fi” to be replaced by “>=”
- Results para 2: “small cell lung cancer “
- Some spelling mistakes

In conclusion, I believe that presented work is of relevance for readers of BMC cancer after minor revision.

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

**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