Reviewer's report

Title: CT based three dimensional dose-volume evaluations for high-dose rate intracavitary brachytherapy for cervical cancer

Version: 1  Date: 15 April 2014

Reviewer: Kari Tanderup

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Major compulsory revisions

The study presents an analysis of dose and effect in locally advanced cervical cancer which is currently very relevant.

Since the study evaluates specifically the relation between dose and effect, it is important to address in detail how the dose was calculated.

- The authors do not specify how the heterogeneous dose from midline blocked fields was added to the brachytherapy dose?
- The authors do not specify dose and fractionation for midline blocked fields
- The authors do not specify width of midline blocked fields
- The authors describes a range of brachytherapy schedules (2-5 fractions), but they do not specify in which patients which fractionation was used.
- The point A doses and the HR CTV doses look extraordinary low.

Altogether, the clinical outcome looks far better than any data published from European, American and Indian bench mark studies. I do not understand why the course of disease looks so different in Japanese studies as compared to Western European / Indian studies? Also the dose response reported is very different from that reported from other groups (e.g. Dimopoulos et al)

The authors report a lymph node positive status in 20% of patients at diagnosis, whereas this number is normally around 50% in other reports with similar stage distribution. Is there any explanation of this?

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Needs some language corrections before being published

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