Reviewer’s report

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

Version: 1 Date: 9 April 2014

Reviewer: Umesh Mahanshetty

Reviewer’s report:

General Comments: Authors report on the clinical outcome of a limited number of cervical cancer patients treated with CT Image Based Brachytherapy. The current MS lacks lot of information in terms of material and methods, presentation of results and above all the follow-up is relatively short to draw any sound conclusions. Also, the discussion section only deals with why low doses only. Need more elaboration on other aspects also.

Specific Comments:
In Material and methods section following information is lacking:
- CT Imaging protocol during brachytherapy
- Few lines on CT based contouring – target and OAR’s
- Planning details including planning aim, prescription details including ICRU rectum and bladder point doses etc..
- Was CT, contouring and treatment planning repeated at every fraction and added to get the total doses?

In Results section:
- Basis for HR-CTV doses < 60 and > 60 Gy Analysis has been explained in discussion. Maybe a paragraph of the same explaining the low doses and clinical outcome is required in Introduction.
- Correlation between HR-CTV volume, doses and local recurrence
- Similarly, correlation of radiation toxicities with OAR doses (2 RT proctitis)

In Discussion:
- Authors discuss only the issue of low doses to HR-CTV and outcome.
- Need to include more on comparison with other outcome (control rates and toxicities) data published, correlation with the doses delivered.

Level of interest: An article of limited interest

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 I have no competing interests whatsoever.