



La radioterapia stereotassica in 5 frazioni in pazienti con carcinoma prostatico a rischio basso e intermedio.

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Background

- Recent innovations in EBRT, which combine IGRT and IMRT, allow for delivery of an increased dose to the target while limiting toxicity to normal tissues.
- Several studies of RT in prostate cancer suggest that prostate tumours may have a low alpha/beta.
(Brenner et al., 2002; Dasu et al., 2007)
- The linear/quadratic model suggests that SBRT delivered in few fractions of focused high doses should improve the therapeutic ratio in radiotherapy for prostate cancer.

Linac based SBRT for prostate cancer in 5 fractions with VMAT and flattening filter free beams: preliminary report of a phase II study

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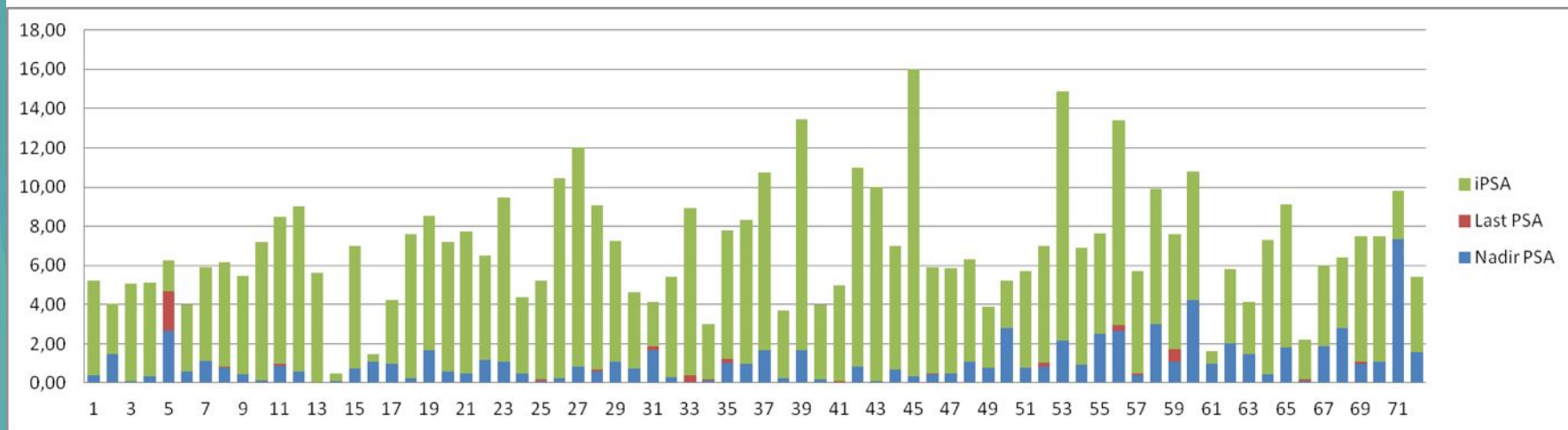
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Methods and Materials

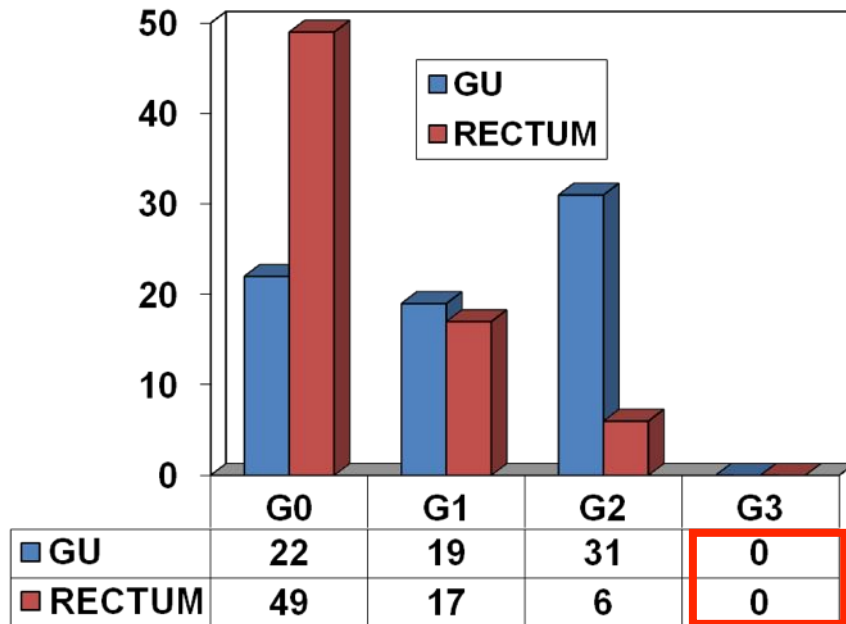
N. of patients	72
Recruitment	Feb 2012-Dic 2013
Median Age [year]	70 [48, 80]
Mean Gleason Score (composite)	6.3±0.5 (range: 6-7)
Initial PSA [ng/mL]	Mean: 6.95 ±3.0 Range: 0.5-16
NCCN Low Risk Class	47 (65%)
NCCN Intermediate Risk Class	25 (35%)
<p>The schedule was 35 Gy in 5 fractions, delivered on alternate days, by means <i>Rapid Arc</i> technique with <i>Flattening Filter Free</i> (FFF) beams.</p>	

Results

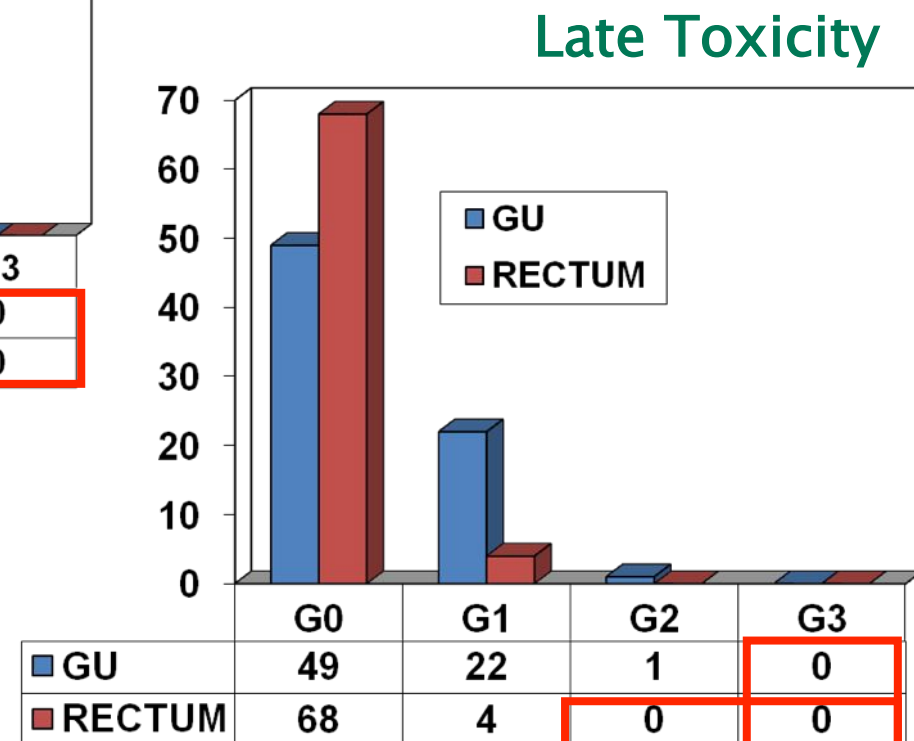
Follow-up [months]	Mean: 14.5±6.9 Range: 6-23 Median: 15
Nadir PSA [ng/mL]	Mean: 1.29±1.23 Range: 0.02-7.33
Last PSA [ng/mL]	Mean: 1.41±1.36 Range: 0.02-7.33



Results



Acute Toxicity



Conclusions

- SBRT with RapidArc and FFF beams for prostate cancer in 5 fractions is a feasible and fast approach.
- The treatment is very well tolerated in acute and early late settings.
- Longer follow-up is needed for assessment of definitive toxicity data and outcome.



Thank you.