However, some studies showed that adjuvant HT may be associated with worse radio-induced toxicity although this topic remains controversial. Therefore, the purpose of this study was to evaluate the impact of the HT (in terms of drug type and duration) on acute and late toxicity in patients undergoing RT for PCa.

Materials and Methods: We collected data from 8 clinical trials on RT of PCa. Acute toxicity was assessed according to the RTOG scale and late toxicity according to RTOG-EORTC scale. The results in terms of acute toxicity were compared with the chi-square test. Late toxicity actuarial cumulative incidence was calculated by Kaplan-Meier method and the comparison between survival curves was performed using log-rank test (univariate analysis) and Cox's Proportional Hazard Method (multivariate analysis using as covariates: RT dose, fractionation and prophylactic lymph node irradiation).

Results: Overall 346 patients were included in this analysis (median age: 72 years, range: 50-82; median RT dose: 70 Gy, range: 65-80; LH-RH analogue: 51.4%, high-dose antiandrogen [bicalutamide 150 mg/die]: 48.6%; HT for 6 months: 50.3%, HT for 24 months: 49.7%). The results of the statistical analysis are shown in the table.

adjuvant hormone therapy	acute toxicity GI G ≥ 2	p =	acute toxicity GU G ≥ 2	p =	late toxicity GI (5 years) G ≥ 1	p =	late toxicity GU (5 years) G ≥ 1	p =
drug								
LH-RH analogue	33.5%	.055	27.4	.495	57.1%	.037	36.9%	.073
antiandrogen	26.2%		21.2		40.7%		42.0%	
duration								
6 months	/		/		44.1%		49.7%	
24 months	/		/		53.7%	.936	29.7%	.126

GI:gastrointestinal; GU:genitourinary

The higher incidence of GI late toxicity in patients receiving adjuvant hormone therapy with LH-RH analogue was confirmed by multivariate analysis (p: 0.038).

Conclusions: In an evaluation of radiation-induced toxicity in patients undergoing RT plus adjuvant HT, a higher incidence of late GI toxicity was recorded in patients treated with LH-RH analogues compared with patients treated with antiandrogen. This result warrants further studies to optimize adjuvant therapies in patients with PCa.

PO-0723

Early toxicity outcomes: A single 15Gy fraction HDR brachytherapy as pre-treatment EBRT boost in prostate cancer.

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Purpose/Objective: To assess the toxicity of combined therapy between external beam radiation therapy (EBRT) plus high dose rate brachytherapy (HDRB) as a boost in patients with intermediate or high risk prostate cancer.

Materials and Methods: From 2010 to August 2014, a total of 221 patients diagnosed as intermediate or high-risk prostate cancer were treated with EBRT plus HDRB. Median age was 72 years (range 52-85). Most patients (68%) were classified as high-risk (stage T2c-T3b or PSA >20ng/dl or GS>7), and 70 patients (32%) were considered intermediate risk. The stage of tumor was determined in every case by magnetic resonance imaging (MRI). Every patient received first HDRB as boost and 4 gold fiducials were implanted. Finally, all patients received EBRT by intensity modulated radiotherapy technique with imaging guided by CBCT. The patients received HDRB as a single 15 Gy implant, followed by EBRT to 46 Gy in 23 fractions. Thirty seven percent of the high-risk patients presented seminal vesicles invasion receiving a single 9.5 Gy implant, followed by ERBT to 60 Gy in 30 fractions. A total of 117 patients (52%) received a dose of 46 Gy to the true pelvis. In all brachytherapy plans, the constraints indicated in the GEC/ESTRO recommendations have been respected (Rectum D2cc £75Gy EQD2; Urethra D10£ 120Gy EQD2). Most patients (120; 54%) were prescribed complete androgen deprivation therapy (ADT), 66 (29%) received incomplete ADT and 28 (13%) did not receive ADT. GI and GU toxicity was evaluated utilizing the RTOG criteria. Median follow-up was 26 months.

Results: No treatment failure has been observed to the last follow-up. The incidences of any acute ≥ Grade 2 GI or GU toxicities were 0% and 9% respectively. Dysuria and urgency was prevalent symptoms in acute GU toxicity. Late genitourinary toxicity included 2 patients (0.9%) with urine obstruction requiring intermittent/permanent catheter. One case of grade 2 gastrointestinal late toxicity presented actinic rectitis event.

Conclusions: The use of a single 15Gy fraction HDRB as pre-treatment EBRT boost provides early-term and good outcomes in treatment-related toxicity. These data can help physicians to assess this scheme of radiotherapy as an acceptable option in the prostate carcinoma treatment.

PO-0724

Hypofractionated RT, radiosurgical boost, hormone therapy for prostate cancer: a dose escalation study (ISIDE-P3)

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Purpose/Objective: The use of hypofractionation allows to reduce the duration of radiotherapy (RT) and is theorically associated with an improved probability of cure in patients with prostate cancer (CAP). However, hypofractionated RT could be associated to an higher incidence of late side effects. Several studies are in progress to valuate efficacy of this irradiation modality but there are no definitive indications about tolerability and efficacy of this