

## Aims

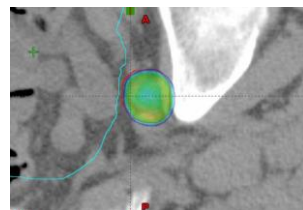
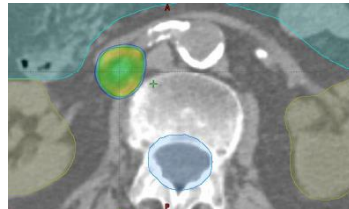
Metastases directed treatment is an emerging strategy for oligometastatic/oligorecurrent/oligoprogressive lymph node metastases from prostate adenocarcinoma. Aim of the present study was to evaluate outcome of patients treated with stereotactic body radiation therapy (SBRT) on lymph node metastases.

## Methods

this is a multi-institutional retrospective analysis, including patients affected by lymph node metastases from prostate adenocarcinoma treated with SBRT. Patients with a maximum of 5 lymph node metastases were included. Concomitant treatment with systemic therapy was allowed. End-points of the analysis were local control (LC), out-of-field progression-free survival (OFPFS), overall progression-free survival (PFS) and overall survival (OS).

## Results

80 patients and 157 lymph node metastases, treated from 2009 to 2018 were evaluated. Median age was 70.2 years and median PSA before SBRT was 1.88 ng/ml. Median diameter of treated lesion was 37 mm (range 7 – 40 mm). Dose delivered ranged from 25 to 48 Gy in 5 to 12 Gy per fractions (median BED3Gy 116.67, range 66.67-240). Androgen deprivation therapy was administered concomitantly in 72 lesions. With a median follow-up of 16 months, LC rates at 1- and 3-years were 93% and 86%. In-field progression of disease was observed in 11 (7%) lesions. One and 3-years OFPFS were 59% and 29% while PFS were 49 % and 20%. Median values of OFPFS and PFS were 15 and 11 months, respectively. Rates of OS at 1- and 3-years were 100% and 95%.



## Conclusions

SBRT in the management of lymph node metastases from prostate cancer seems to be an effective approach with high rates of in-field control. Prospective trials are necessary to better select patients who can benefit the most from this ablative focal treatment.