

**Prostate Cancer: Localized VII**

**Moderated Poster**

Monday, May 19, 2014

3:30 PM-5:30 PM

**MP62-01**

**BOTH RADICAL PROSTATECTOMY WITH NEOADJUVANT LHRH AGONIST AND ESTRAMUSTINE AND RADIOTHERAPY WITH NEOADJUVANT HORMONAL THERAPY ACHIEVED FAVORABLE ONCOLOGICAL OUTCOME IN HIGH RISK PROSTATE CANCER: A PROPENSITY-SCORE MATCHING ANALYSIS**

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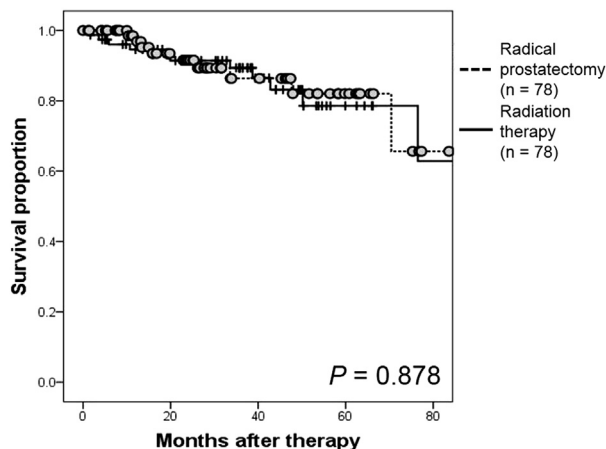
**INTRODUCTION AND OBJECTIVES:** To date, the different treatment modalities for high-risk prostate cancer (Pca) have not been compared in any sufficiently large-scale, prospective, randomized clinical trial. We used propensity-score matching analysis to compare the oncological outcomes of high-risk prostate cancer between patients treated with radical prostatectomy (RP) and those treated with radiation therapy (RT). We studied 216 patients who received neoadjuvant therapy followed by RP (RP cohort) and 81 patients who received neoadjuvant androgen-deprivation therapy (ADT) followed by RT (RT cohort).

**METHODS:** The RP cohort received a luteinizing hormone-releasing hormone agonist and estramustine phosphate (280 mg/day) for 6 months prior to RP. The RT cohort received ADT for at least 6 months prior to RT using a 3-dimensional conformal radiotherapy technique. The total radiation dose was 70–76 Gy administered at 2 Gy/fraction. Propensity-score matching identified 78 matched pairs of patients.

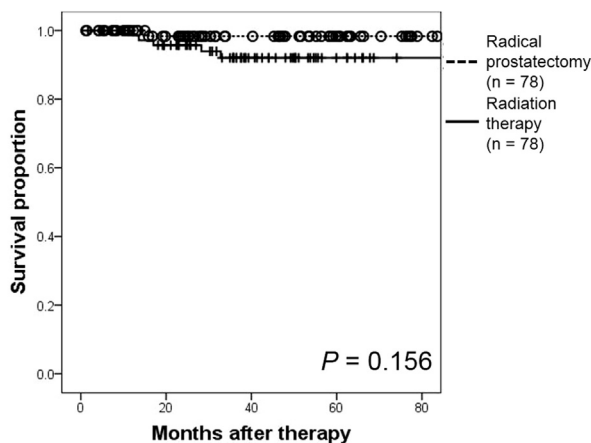
**RESULTS:** The 3-year overall survival rates were 98.3% and 92.1% in the RP and RT groups, respectively ( $P = 0.156$ ). The 3-year biochemical recurrence-free survival rates were 86.4% and 89.4% in the RP and RT groups, respectively ( $P = 0.878$ ).

**CONCLUSIONS:** Our study findings may suggest almost identical cancer control of RP and RT with appropriate neoadjuvant therapy in high-risk Pca. Therefore, issues of health-related quality of life may have important impact on decision making of treatment in high-risk Pca.

**PSA-free survival**



**Overall survival**



Source of Funding: none

**MP62-02**

**EXTERNAL BEAM RADIATION THERAPY VERSUS HIGH INTENSITY FOCUSED ULTRASOUND FOR LOCALIZED PROSTATE CANCER: A MATCHED PAIR COMPARISON**

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**INTRODUCTION AND OBJECTIVES:** High Intensity Focused Ultrasound (HIFU) is a treatment option for localized prostate cancer with excellent overall and cancer specific survival rates. With the lack of randomized comparative study, direct comparison between HIFU and other treatment are difficult.

The goal of the study was to evaluate the oncologic outcome of patients treated with HIFU versus conformal external beam radiation therapy (EBRT). This study is designed to overcome limitations of case series studies by using a matched pair design in patients treated contemporaneously with HIFU and EBRT during the same time period and in the same centres.

**METHODS:** A total of 256 eligible patients with intermediate risk prostate cancer (d'Amico classification) treated between 2000 and 2005 were prospectively followed and matched to a 1:1 basis following known prognostic variables: prostate-specific antigen (PSA) level and Gleason score. After the matching process, 190 patients (95 in each group) were further analysed. Progression free survival rate were the primary endpoint. Other endpoints were secondary used of salvage therapy (EBRT or HIFU), and survival rate without definitive salvage palliative androgen deprivation therapy (S-ADT).

The survival rates were calculated with Kaplan-Meier estimate. For progression free calculation, failure was defined using the Phoenix definition (nadir + 2ng/ml) or at the time of a salvage treatment for local relapse evidenced by control biopsy.

**RESULTS:** The five years progression free survival rate was not significantly different between HIFU and EBRT (47% versus 52%,  $p=0.311$ ). The palliative androgen deprivation free rate at five years was significantly different between the 2 groups (85% for HIFU versus 58% for EBRT,  $p=0.002$ ). At seven years the overall, cancer specific and metastasis free survival rates were 87%, 100%, 100% and 99%, 100% and 98% for HIFU and EBRT respectively ( $p=0.043$ , 0.932, 0.941).

**CONCLUSIONS:** The five years progression free survival rate was not significantly different between HIFU and EBRT but the rate of patients who need palliative S-ADT was significantly higher for EBRT compare to HIFU.

Source of Funding: none