Rates, Determinants, and Outcomes of Radical Prostatectomy in Prostate Cancer Patients with Clinical Node-Positive Disease (MP74-20)

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Background and Methods

- For clinical node positive (cN1) “regional risk” prostate cancer, NCCN guidelines recommend external beam radiation therapy (EBRT) and androgen deprivation therapy (ADT).
- However, in clinical practice many cN1 patients undergo radical prostatectomy (RP)
- Role of clinical node status in predicting benefit from prostatectomy remains debated

**Objectives:**
1. Characterize rates and determinants of undergoing RP in patients with cN1 disease within the National Cancer Database, 2004-2016
2. Assess prognostic significance of clinical nodal status for patients who undergo RP and have pathologic node involvement (pN1)

**Methods:**
1. cN1 cohort: multivariable risk difference regression to identify factors associated with receipt of initial RP
2. pN1 cohort: Kaplan-Meier analysis, multivariable Cox regression to compare overall survival by preoperative clinical stage (cN1 vs cN0)
Results and Conclusions

- **cN1 patients**: 27% underwent RP (2004-2016)
- **pN1 patients**: cN1 patients had worse OS than cN0 patients on log rank test and adjusted multivariable Cox regression (HR 1.15, p=0.049)

- Factors associated with higher risk of RP: white race, age≤65, treatment at academic center, private insurance, Charlson score>0, T stage≥2c, PSA≤20, Gleason score<8
- Most (84%) were confirmed pN1 and underwent post-operative EBRT and/or ADT

- Conclusions: Over 1 in 4 patients with cN1 disease underwent prostatectomy. Clinical nodal staging retains prognostic significance in patients found to have positive nodes on pathology.