PERIOPERATIVE AND ONCOLOGICAL OUTCOMES IN HIGH RISK ELDERLY PATIENTS

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Aim of the study
ontroversy continues to exist concerning the treatment of choice for D'Amico high risk elderly patients.
The purpose of this study is to compare the perioperative and oncologic outcomes of robotic assisted radical prostatectomy (RARP) in D'Amico high risk, propensity score-matched elderly and younger cohorts.

Materials and methods
From January 2008 through August 2012, 3818 patients underwent RARP at our institution by a single surgeon (VP). Retrospective analysis of prospectively collected data from our Institutional Review Board approved registry identified 80 D'Amico high risk patients, 70 years of age and over. A propensity score-match analysis was conducted using multivariable analysis to compare elderly patients (age 70 and over) to those under 70. The final two study cohorts – D'Amico high risk elderly patients (n=80) and D'Amico high risk younger patients (n=80) constituted the clinical material for this comparative study of perioperative and oncologic outcomes.

Results
Preoperative clinical characteristics were similar for the two matched groups. The operative time, transfusion rate and intra-operative complications were similar for the two groups.The mean estimated blood loss was significantly greater in younger patients (156.1 ± 84.2 mL vs 113.6 ± 67.7; p=0.002). No significant differences were observed in laterality, ease of nerve sparing or surgeon subjectively assessed anastomosis and pathological outcomes between the groups. No significant differences were found in postoperative complication rates, overall pain scores, length of stay or duration of indwelling catheterization. At follow-up, freedom from biochemical recurrence (BCR) in elderly patients was 85.0% vs. 83.8% in younger patients. The mean time to BCR in elderly patients was 15.0 months (range, 2.3 to 38.8) and 14.5 months (range, 5.2 to 35.1) in younger patients.

Discussion
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Conclusions
This study clearly demonstrates that RARP can be performed in D'Amico high risk elderly patients without increasing perioperative morbidity and with oncologic outcomes comparable to high risk younger patients. RARP in elderly patients presenting with localized prostate cancer should be considered a viable treatment alternative based on the individual's life expectancy.

PROPOSAL OF NOVEL RISK GROUPS FOR OUTCOME PREDICTION FOLLOWING RADICAL PROSTATECTOMY IN CONTEMPORARY PROSTATE CANCER PATIENTS

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Aim of the study
NCCN and D'Amico risk classification are widely used in clinical practice, but were developed on historical patients cohort. We aimed at developing and internally validating a novel clinically useful algorithm to predict biochemical recurrence (BCR) among contemporary patients treated with RP for prostate cancer (PCa).

Materials and methods
The study population included 4,372 consecutive patients treated with RP for PCa between 1993 and 2012 at single a tertiary referral center. Clinical features (namely pre-operative PSA, biopsy Gleason score and clinical stage) were employed to develop the novel model. Kaplan-Meier curves assessing BCR were used to address statistically significant difference categories (defined as a p between each category 50%). Predictive ability of the model was evaluated using the c (for concordance) index proposed by Harrell et al.

Results
In the overall population, the 5-, 8-, and 10 years BCR free survival rates were 88, 82 and 74%, respectively. At multivariable Cox regression analyses, all variables included were significantly associated with BCR (all p 20 ng/ml or GS 8-10 + PSA >10 + positive DRE or GS 4+3 + PSA >20 + DRE positive) vs. 8-10 (very high risk; GS 8-10, PSA >20 ng/mL and positive DRE, or those with GS 8-10 and PSA >50 ng/mL) The accuracy of the model proposed was of 72.5%. When the D'Amico model was validated in the current patient population, its accuracy was 59.7%.

Discussion
We developed a novel risk group classification for BCR prediction after RP for PCa. This includes 5 different categories from very low to very high risk of recurrence.

Conclusions
The model showed good predictive ability and might be useful to better sub-stratify the outcome of PCa patients.