Biochemical Outcome after Radical Prostatectomy for High-Risk Localized Prostate Cancer

Introduction and Objective: The optimal therapeutic strategy for high-risk localized prostate cancer (PCa) is controversial. Supported by randomized trials, the combination of external beam radiation therapy (EBRT) and endocrine therapy (ET) is advocated by many, while radical prostatectomy (RP) is regarded as primary therapy by others. Depending upon outcome, an important argument for surgery is that successfully operated patients are spared the side effects of ET. We report the outcome for high-risk localized PCa patients treated with RP in our department.
Material and methods: Of 1300 patients that underwent RP, 231 were identified as high-risk according to the D'Amico classification. Patients were followed for biochemical recurrence (BR) (defined as PSA≥0.2 ng/ml), metastatic disease and survival. No patients received adjuvant therapy before BR was confirmed. Uni- and multivariate analysis was performed with Kaplan-Meier and Cox proportional hazard models.
Results: Median follow-up was 4.4 years (range: 0.1-14.9). Survival estimates are presented in Table 1. In multivariate analysis extra capsular tumor growth, seminal vesicle invasion and young age were independently associated with higher risk of BR.
Conclusion: Our results confirm that a significant proportion of patients with high-risk PCa remain biochemically disease-free and without need for ET following RP as primary and only treatment. A large randomized study of RP as primary therapeutic strategy versus the combination of EBRT and endocrine therapy in patients with high-risk localized PCa seems warranted.

Table 1. Estimates of survival after 10 years.

	% survived	**95% CI**
Biochemical recurrence-free survival:	49 %	40-57%
Metastasis-free survival	81%	76-92%
Overall survival	84%	73-91%
Cancer-specific survival	90%	79-95%