

Improved erectile function recovery after nerve-sparing radical prostatectomy by ink-marked intraoperative frozen section monitoring of the prostate: results of a prospective single-surgeon series

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Introduction

- Radical prostatectomy represents therapy of choice for organ-confined prostate cancer
- Intraoperative frozen sections (IFS) effective in reducing positive surgical margins and biochemical recurrence
- Effect of IFS on functional results (continence/erectile function) not assessed so far
- Aim: Assessment of efficacy of IFS on erectile function recovery in patients undergoing nerve-sparing radical prostatectomy

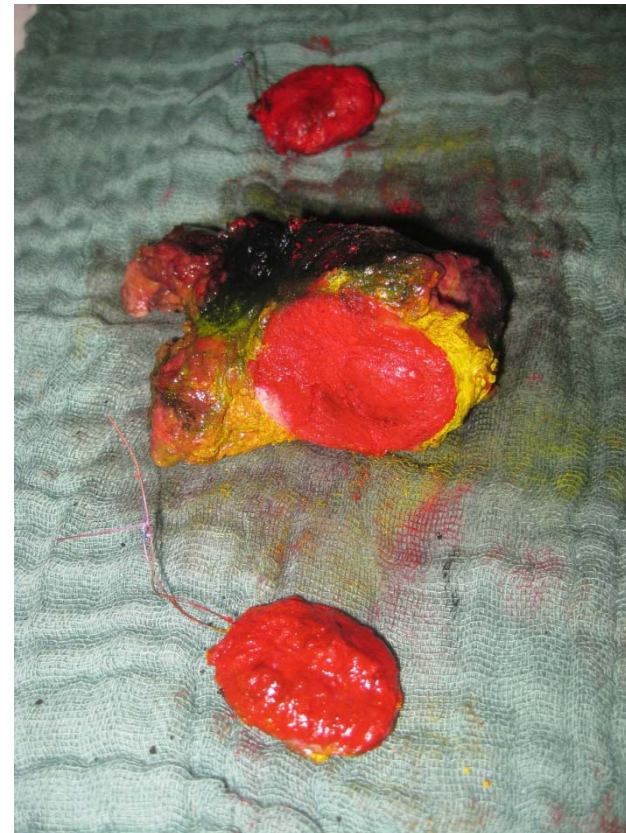
Materials and Methods

- Prospective study
- April 2008 – Mai 2012
- N= 500 consecutive patients with presumably organ-confined prostate cancer
- Retropubic nerve-sparing radical prostatectomy (JEG, >2500 RP)
- Intraoperative ink-marking of prostate and en-bloc preparation of postero-lateral aspects
- In case of PSM → secondary resection along NVB corresponding to PSM
- End points:
 - BCR-free survival
 - functional results (continence/erectile function)

Materials and Methods



Ink-marking of prostata



En-bloc preparation und marking of postero-lateral aspects

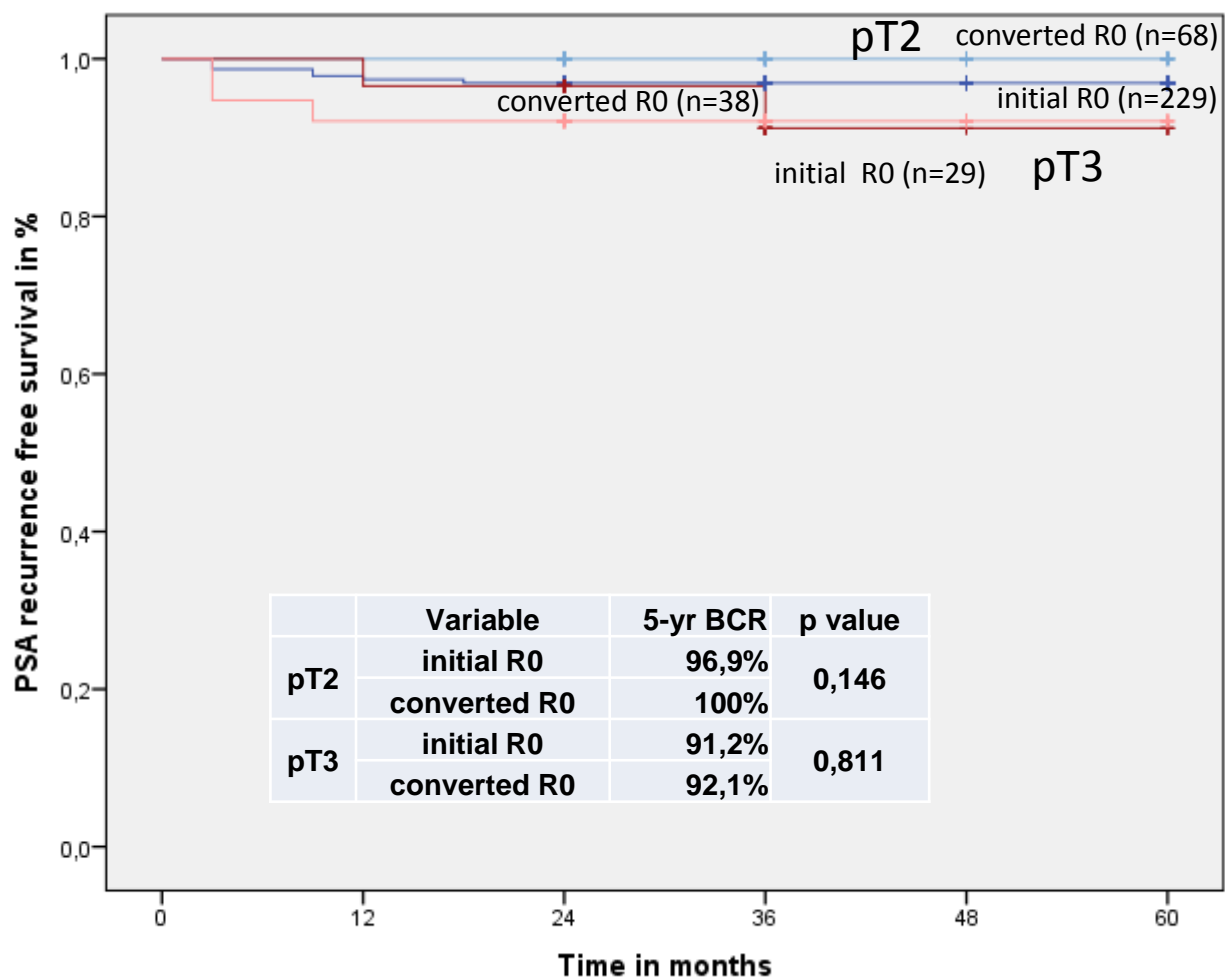
Results I – PSM

*n= 29 excluded, neoadjuvant therapy/ pN+

Number of patients	n= 500*
PSM in IFS	137/471 (29.1%)
PSM after secondary resection	10/137 (7.3%)
Free margins after secondary resection	127/137 (92.7%)
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PSM postero-lateral desp. sec. resection	10/471 (2.1%)
PSM postero-lateral despite negative IFS (failure rate)	11/471 (2.4%)
PSM outside of IFS-area (1x seminal vesicle, 1x ventral)	2/471 (0.4%)
PSM overall	23/471 (4.9%)

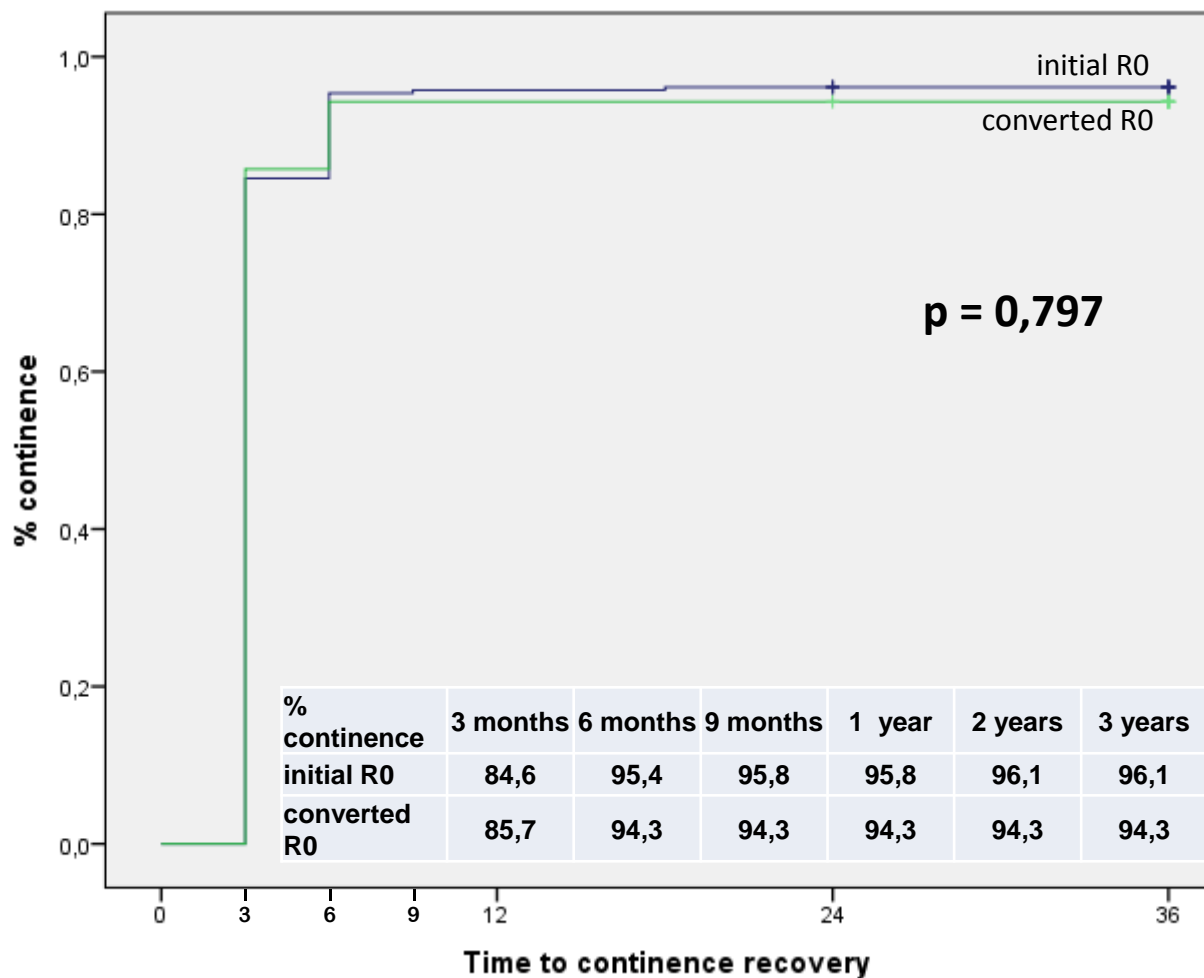
Results II – BCR-free survival

BCR: PSA $\geq 0,2$ ng/ml



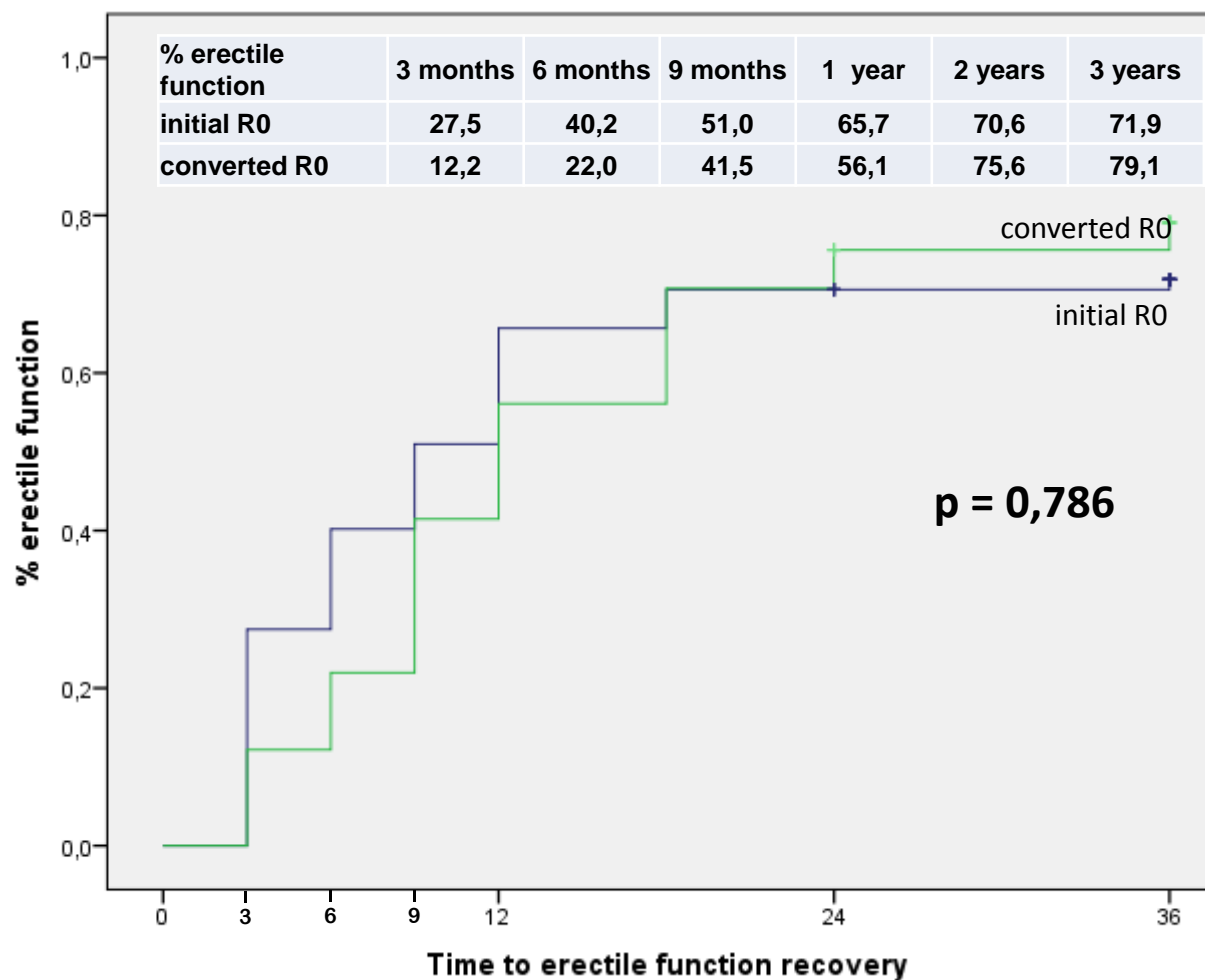
Results III – continence recovery

Continent: 0-1 safety pad



Results IV – erectile function recovery

Potent: IIEF-5 ≥ 17



Conclusions

- IFS of prostate highly effective in reducing PSM and BCR-rate in patients undergoing nsRPx
- Nerve-sparing technique with high level on safety (extended indication, even for advanced disease - pT3 and high-risk PCa)
- Optimizing functional results, especially potency
- Availability of pathologist
- Long-term data and multi-center studies necessary

Thank you!

