

Pre-operative characteristics of pT3b prostate cancer

results from the Be-RALP project



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OBJECTIVES

To evaluate the **pre-operative characteristics** of prostate cancer (PCa) with confirmed **seminal vesicle invasion on pathology** (pT3b) after robot-assisted laparoscopic prostatectomy (RALP).

METHODS

As part of the **prospective Be-RALP project**, from October 2009 till March 2016, **848 patients** with clinical or pathological seminal vesicle invasion were evaluated.

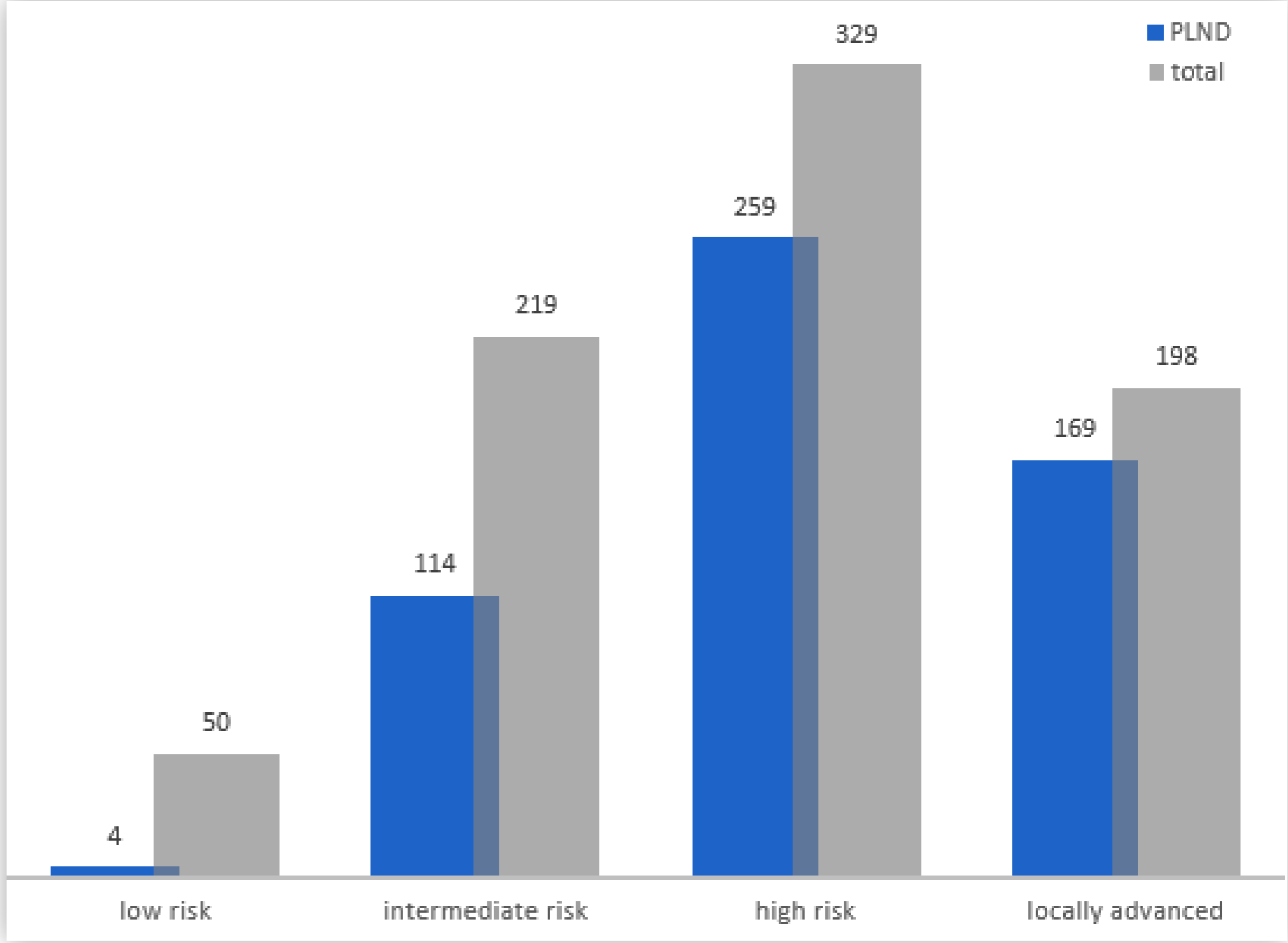
RESULTS

Of the 79 patients with **clinical T3b disease**, 56 (**71%**) had seminal vesicle invasion on **pathologic** evaluation of the RP specimen. Seven hundred ninety-six patients with **pT3b PCa** were operated with RALP, of which 546 (**69%**) received **pelvic lymph node dissection (PLND)**.
Median PSA was 10 (IQR 7-17) and 187 patients (**24%**) had **clinical T3-4 disease** (*Table 1*). Of the patients with grade group >3 on biopsy, 15% did not receive PLND, compared to 22% on pathology (p=0.019).

Table 1

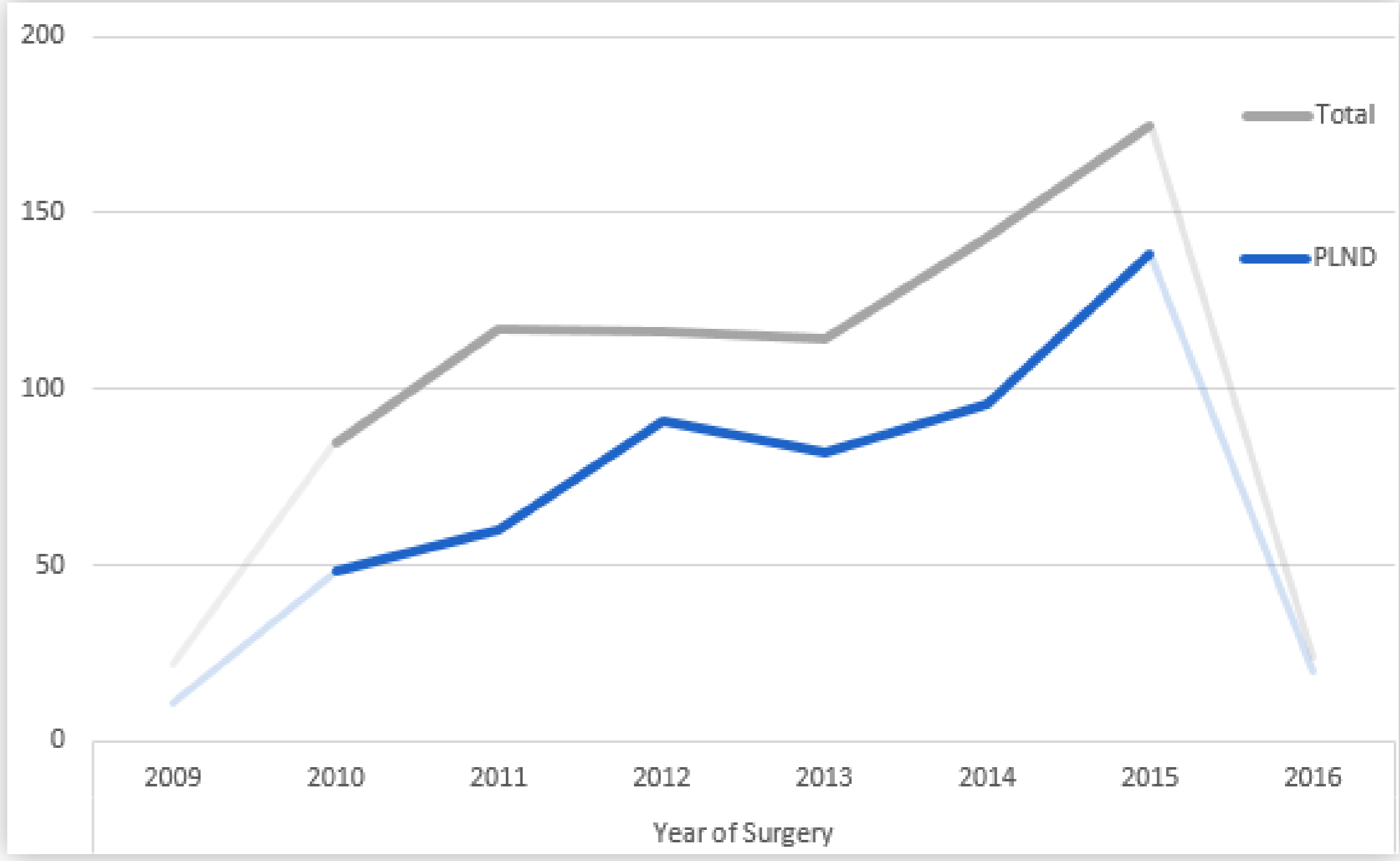
	total (n=796)	RALP+PLND (n=546)	RALP (n=250)	p value
Patient / tumor				
age, yr	65 (60-70)	65 (60-69)	65 (61-69)	0.545
PSA, µg/l	10 (7-17)	12 (8-20)	8 (6-11)	<0.001
cT stage, n (%)				<0.001
T1-2	598 (76)	380 (71)	218 (88)	
T3-4	187 (24)	158 (29)	29 (12)	
cN positive, n (%)	29 (4.6)	28 (6.4)	1 (0.5)	<0.001
biopsy grade group, n (%)				<0.001
1	129 (17)	41 (7.7)	88 (36)	<0.001
2 – 3	361 (47)	247 (47)	114 (47)	0.976
4	152 (20)	125 (24)	27 (11)	<0.001
5	132 (17)	117 (22)	15 (6.1)	<0.001
biopsy details				
cores, n	11 (8-12)	11 (8-12)	10 (8-12)	0.089
positive cores, n	6 (4-8)	6 (4-9)	4 (3-6)	<0.001
positive / total cores, %	57 (38-83)	63 (42-92)	50 (30-67)	<0.001
highest involvement, %	80 (50-100)	90 (57-100)	66 (22-90)	<0.001

Figure 1



PLND was performed in **8%** (4/50) **low-risk**, **52%** (114/219) **intermediate-risk** and **79%** (259/329) **high-risk localized PCa** patients. **Eighty-five%** (169/198) of patients with **high-risk locally advanced** disease received PLND (*Figure 1*).
After multivariate analysis (including risk group) **year of surgery** (*Figure 2*, p<0.001) and **percentage positive / total biopsy cores** (OR 1.01 [1.005-1.018], p=0.001) were significant predictors for **receiving PLND**.

Figure 2



CONCLUSIONS

- > **clinical T3-4 disease** was reported before RALP in **only 24%** of all pT3b PCa tumors
- > the **use** of PLND **increased over time**
- > next to **risk group**, Belgian urologists also include **percentage of positive biopsy cores** in their decision making to **perform PLND** or not