

Suppl. Table 1: Patient characteristics (unmatched patients). Continuous values are presented as median and IQR; categorical values are given as number (n; %). IQR: inter quartile range; PSA: prostate specific antigen; BMI: body mass index; Pvol-TRUS: prostate volume in transrectal ultrasound; Pvol-PATHO: prostate volume according to pathology report; ISUP: International Society of Urological Pathology.

* Comparison between group Biopsy versus group Non-biopsy.

Characteristics	Biopsy n=8995	Non-biopsy n=68	p-Value
Age [y]	67.02 (60.92-72.49)	72.91 (65.76-76.61)	P<0.001
PSA [ng/mL]	8.27 (5.69-13.65)	14.55 (8.80-33.80)	p<0.001
BMI [kg/m²]	26.26 (24.28-28.74)	25.64 (23.66-27.98)	P=0.266
Pvol-TRUS [cm³]	40 (30.00-55.00)	49 (35.00-69.50)	P=0.006
Pvol-PATHO [cm³]	53 (42.00-66.00)	55.5 (43.25-74.50)	P=0.114
Tumor stage			
pT2	5508 (61.8%)	33 (48.5%)	P=0,027
pT3	3310 (37.1%)	35 (51.5%)	
pN0	6358 (72.5%)	23 (33.8%)	
pN1	769 (8.8%)	16 (23.5%)	p<0.001
pN2	1648 (18.8%)	29 (42.6%)	
M0	8510 (97.2%)	63 (92.6%)	
M1	246 (2.8%)	5 (7.4%)	P=0.025
R0	6405 (71.5%)	43 (63.2%)	
R1	2550 (28.5%)	25 (36.8%)	
V0	5316 (97.9%)	64 (94.1%)	P=0.034
V1	115 (2.1%)	4 (5.9%)	
L0	4864 (89.3%)	53(77.9%)	
L1	580 (10.7%)	15(22.1%)	P=0.003
ISUP Grade			
1	2549 (28.8%)	5 (7.5%)	p<0.001
2	2828 (31.9%)	20 (29.9%)	
3	1564 (17.7%)	21 (31.3%)	
4	824 (9.3%)	7 (10,4%)	
5	1088 (12.3%)	14 (20.9%)	
PSA group			
PSA <4	961 (10.8%)	2 (2.9%)	p<0.001
PSA 4-10	4890 (54.9%)	19 (27.9%)	
PSA 10-20	1933 (21.7%)	24 (35.3%)	
PSA >20	1124 (12.6%)	23 (33.8%)	

Suppl. Table 2: Mean EORTC QLQ-C30 scores, ICIQ scores, pads/day and IIEF scores as well as standard deviations (SD) between biopsy and non-biopsy- **unmatched cohort**

Mean (SD) EORTC QLQ-C30 score, ICIQ scores, pads/day and IIEF scores																		
	Preoperative			3-month follow-up			12-month follow-up			24-month follow-up			36-month follow-up			48-month follow-up		
	biopsy	Non biopsy	p	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p
Symptom scale																		
Global health status	72.5(20.5)	70.1(22.9)	0.570	65.7(20.6)	57.9(26.5)	0.068	58.4(24.7)	66.01(27.5)	0.049	70.5(21.3)	67.5(27.4)	0.965	71.0(21.9)	65.7(17.4)	0.161	71.4(20.7)	79.9(12.5)	0.227
Physical functioning	93.6(12.1)	92.7(14.1)	0.867	88.5(15.3)	84.9(19.3)	0.413	90.0(15.5)	82.8(24.2)	0.127	89.2(16.2)	82.5(27.2)	0.721	88.5(17.1)	87.8(20.7)	0.851	88.5(17.3)	78.9(26.9)	0.222
Role functioning	91.6(19.6)	92.3(18.8)	0.831	71.6(27.3)	69.5(29.6)	0.732	80.3(25.0)	69.7(32.4)	0.055	80.9(25.8)	76.6(27.4)	0.337	82.6(24.9)	83.3(22.9)	0.864	82.1(25.2)	70.1(25.7)	0.052
Emotional functioning	75.5(22.5)	75.5(20.1)	0.657	73.4(23.8)	66,9(25.9)	0.084	75.5(23.8)	71.5(27.0)	0.452	76.4(23.1)	73.4(25.6)	0.497	77.5(22.9)	77.8(19.8)	0.845	77.53(23.1)	85.4(19.5)	0.215
Cognitive functioning	89.3(16.9)	91.7(14.7)	0.341	86.2(19.9)	87.0(21.6)	0.426	85.3(20.2)	86.0(19.6)	0.932	84.9(19.9)	80.2(23.7)	0.220	84.3(20.1)	86.1(17.4)	0.793	83.4(20.5)	87.5(12.6)	0.801
Social functioning	86.8(21.0)	87.0(22.8)	0.820	69.3(28.1)	64.2(25,8)	0.135	74.4(27.4)	69.7(31.0)	0.381	75.8(27.3)	76.6(29.3)	0.666	76.4(26.7)	79.6(26.5)	0.613	76.9(26.9)	76.4(23.0)	0.680
Fatigue	14.7(19.4)	18.1(19.2)	0.066	25.8(23.1)	30.1(22.4)	0.174	22.8(23.1)	33.3(25.4)	0.007	22.5(23.3)	31.9(28.5)	0.053	22.3(23.4)	25.3(18.2)	0.251	23.1(23.4)	26.9(25.3)	0.554
Nausea and vomiting	1.1(5.5)	0.0(0.0)	0.109	1.8(7.4)	3.7(11.5)	0.313	1.9(7.4)	7.0(17.6)	<0.001	2.1(7.6)	4.7(18.6)	0.906	2.3(8.6)	0.0(0.0)	0.176	2.5(8.5)	1.4(4.8)	0.818
Pain	9.9(20.1)	13.0(22.8)	0.252	13.9(21.9)	20.9(27.8)	0.053	11.4(20.9)	16.7(27.7)	0.305	11.5(21.0)	12.5(26.1)	0.950	12.3(22.2)	10.2(15.3)	0.773	12.3(22.1)	1.4(4.8)	0.065
Dyspnoea	8.4(18.7)	10.5(21.3)	0.414	13.1(22.7)	12.2(23.3)	0.725	14.1(23.9)	21.9(32.2)	0.147	15.3(24.5)	26.0(33.6)	0.075	15.1(24.6)	11.1(16.2)	0.797	15.6(25.3)	11.1(26.0)	0.332
Insomnia	20.7(28.9)	27.8(34.1)	0.137	24.7(30.1)	35.8(34.5)	0.028	25.0(30.6)	36.9(35.8)	0.030	25.8(30.2)	29.2(31.4)	0.502	25.3(30.6)	24.1(29.8)	0.926	25.5(30.3)	19.4(30.0)	0.450
Appetite loss	3.3(12.2)	1.9(7.7)	0.539	5.9(16.5)	7.3(17.5)	0.519	4.0(13.2)	11.4(22.3)	0.004	4.6(14.2)	15.6(30.5)	0.008	6.0(17.3)	1.9(7.9)	0.339	5.1(15.6)	5.6(19.2)	0.774
Constipation	5.6(16.4)	4.3(13.0)	0.740	12.3(23.9)	16.7(23.9)	0.097	10.5(21.3)	15.8(25.4)	0.116	10.5(21.4)	13.5(27.9)	0.738	10.0(21.5)	18.5(30.7)	0.177	10.8(22.3)	11.1(21.7)	0.878
Diarrhoea	7.4(16.9)	7.4(17.9)	0.988	8.9(19.5)	5.7(14.7)	0.342	9.8(20.0)	13.2(19.8)	0.127	10.7(20.1)	12.5(23.6)	0.751	10.3(19.8)	3.7(10.8)	0.169	11.0(20.3)	16.7(30.2)	0.556
Financial difficulties	4.0(14.6)	2.5(8.9)	0.779	11.5(23.8)	16.3(27.0)	0.170	8.9(21.1)	8.8(24.1)	0.708	8.8(20.4)	9.4(21.1)	0.945	8.5(20.0)	5.6(17.2)	0.454	7.1(18.4)	8.3(20.7)	0.886
ICIQ	1.1(2.7)	2.3(3.7)	0.003	8.7(5.6)	9.3(6.2)	0.423	6.3(5.4)	7.7(6.1)	0.156	6.2(5.4)	8.0(6.1)	0.102	5.3(5.2)	8.2(6.5)	0.033	5.8(5.3)	10.3(5.5)	0.032
Pads/day				2.5(2.6)	3.1(3.3)	0.162	1.5(2.1)	1.9(2.2)	0.199	1.4(1.8)	2.4(2.8)	0.029						
IIEF(only patients with IIEF ≥20 before prostatectomy)	23.6(1.8)	23.3(2.1)	0.744	4.7(5.7)	1.4(2.1)	0.035	9.1(8.6)	7.5(8.4)	0.432	10.5(9.9)	11.6(6.8)	0.679	11.6(9.8)	5.5(6.4)	0.515	11.3(10.9)	0.0(0.0)	0.171

Suppl. Table 3: Mean EORTC QLQ-C30 scores, ICIQ scores, pads/day and IIEF score as well as standard deviations (SD) between biopsy and non-biopsy - **unmatched cohort - subgroup (pT2)**

Mean (SD) EORTC QLQ-C30 score, ICIQ score, pads/day and IIEF score																		
	Preoperative			3-month follow-up			12-month follow-up			24-month follow-up			36-month follow-up			48-month follow-up		
	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p
Symptom scale																		
Global health status	74.3(19.5)	72.7(24.8)	0.882	66.9(20.7))	56.4(29.0))	0.077	60.0(24.2))	70.5(26.9))	0.024	72.9(20.0))	68.9(29.0))	0.930	73.1(21.2))	65.0(20.0))	0.175	73.3(20.7))	78.1(14.7))	0.784
Physical functioning	94.5(11.0)	89.9(18.0)	0.338	89.5(14.8))	82.2(21.3))	0.157	91.9(13.5))	82.2(22.9))	0.031	91.2(14.3))	81.3(31.4))	0.538	90.8(15.0))	84.9(25.1))	0.266	90.6(15.5))	75.0(28.0))	0.024
Role functioning	92.7(17.9)	90.8(21.6)	0.816	72.4(27.3))	65.9(30.9))	0.322	82.6(23.7))	68.1(33.7))	0.035	83.4(24.4))	80.0(25.7))	0.471	85.5(22.9))	80.3(26.7))	0.374	84.5(23.7))	70.8(26.4))	0.051
Emotionalfunctioning	76.1(22.3)	78.7(18.6)	0.750	73.9(23.6))	68.7(26.9))	0.361	76.3(23.7))	70.8(28.1))	0.421	77.5(22.7))	74.6(24.9))	0.593	79.2(22.4))	81.8(18.2))	0.842	78.7(22.8))	81.3(21.7))	0.856
Cognitivefunctioning	89.9(16.1)	92.0(14.5)	0.562	87.1(18.9))	84.9(25.2))	0.864	85.9(19.4))	86.8(22.5))	0.497	85.3(19.4))	79.2(25.9))	0.264	85.4(19.3))	81.8(18.9))	0.441	84.2(20.4))	85.4(13.9))	0.764
Social functioning	88.0(19.7)	92.0(20.7)	0.113	70.1(28.1))	70.0(27.9))	0.973	75.9(26.7))	71.5(32.8))	0.697	78.0(26.2))	78.3(27.6))	0.764	78.6(25.8))	74.2(31.9))	0.733	79.5(26.3))	75.0(26.7))	0.519
Fatigue	13.5(18.2)	16.5(20.1)	0.250	24.4(22.5))	33.9(22.6))	0.042	20.4(21.8))	37.0(24.9))	<0.001	20.3(21.9))	28.3(26.1))	0.129	19.3(21.5))	27.3(20.7))	0.118	20.4(21.8))	27.8(27.2))	0.411
Nausea and vomiting	0.98(5.5)	0.0(0.0)	0.258	1.7(7.1)	6.4(15.3)	0.039	1.7(6.9)	4.9(9.2)	0.002	2.0(7.3)	5.0(22.4)	0.636	2.0(8.0)	0.0(0.0)	0.328	2.1(7.5)	0.0(0.0)	0.373
Pain	8.8(18.5)	16.7(28.2)	0.232	13.0(21.2))	23.3(33.1))	0.100	10.0(19.3))	17.4(28.0))	0.204	10.3(20.0))	15.0(31.5))	0.838	10.3(20.2))	9.1(15.6))	0.730	10.9(20.8))	2.1(5.9))	0.235
Dyspnoea	7.6(17.6)	10.3(25.4)	0.981	12.6(22.4))	14.3(27.0))	0.930	12.8(22.9))	19.4(32.5))	0.428	13.4(23.0))	21.7(31.1))	0.229	12.7(22.7))	9.1(15.6))	0.818	13.4(23.1))	8.3(23.6))	0.357
Insomnia	19.9(28.7)	26.4(37.1)	0.506	24.0(29.4))	27.0(30.9))	0.638	23.8(30.3))	33.3(36.8))	0.191	24.5(29.7))	25.0(30.3))	0.921	23.3(29.8))	18.2(31.1))	0.488	23.3(29.2))	20.8(35.4))	0.639
Appetite loss	2.8(11.5)	0.0(0.0)	0.157	5.2(15.3)	6.4(17.1)	0.777	3.9(13.3)	11.1(23.4))	0.040	4.1(13.5)	13.3(31.3))	0.114	5.3(16.6)	0.0(0.0)	0.235	4.3(14.3)	8.3(23.6)	0.743
Constipation	5.2(15.6)	1.2(6.2)	0.158	11.4(23.1))	13.3(19.9))	0.324	9.4(20.5)	18.1(29.5))	0.096	9.1(19.9)	11.7(27.1))	0.953	8.4(19.7)	9.1(21.6)	0.979	9.7(21.8)	8.3(23.6)	0.658
Diarrhoea	7.4(17.1)	1.2(6.2)	0.039	8.1(18.5)	7.9(18.0)	0.992	8.5(18.7)	11.1(18.8))	0.307	9.7(19.3)	11.7(24.8))	0.860	9.7(19.9)	3.0(10.1)	0.269	10.2(19.8))	20.8(35.4))	0.343
Financial difficulties	3.4(13.6)	0.0(0.0)	0.134	10.6(23.0))	11.1(21.9))	0.782	7.7(19.2)	1.4(6.8)	0.096	7.6(19.4)	0.0(0.0)	0.049	7.1(18.5)	6.1(20.1)	0.615	6.0(16.9)	4.2(11.8)	0.911
ICIQ	1.0(2.4)	2.6(3.8)	<0.001	8.3(5.5)	10.4(5.6)	0.067	5.9(5.2)	7.7(5.6)	0.097	5.7(5.1)	7.8(5.8)	0.093	4.8(4.9)	8.3(6.4)	0.039	5.4(5.1)	9.8(6.4)	0.080
Pads/day				2.3(2.5)	3.5(3.7)	0.057	1.3(1.8)	1.9(2.4)	0.131	1.1(1.6)	1.8(2.4)	0.092						
IIEF(only patients with IIEF ≥20 before prostatectomy)	23.7(1.7)	23.7(2.0)	0.970	5.2(6.0)	1.8(2.2)	0.106	10.3(8.7)	9.0(8.4)	0.599	12.4(10.3))	11.6(6.8)	0.855	13.1(9.7)	5.5(6.4)	0.335	13.4(10.5))	0.0(0.0)	0.131

Suppl. Table 4: Mean EORTC QLQ-C30 scores, ICIQ scores, pads/day and IIEF scores as well as standard deviations (SD) between biopsy and non-biopsy - **matched cohort -subgroup (pT2)**

Mean (SD) EORTC QLQ-C30 score, ICIQ score, pads/day and IIEF score																		
	Preoperative			3-month follow-up			12-month follow-up			24-month follow-up			36-month follow-up			48-month follow-up		
	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p	Biopsy	Non biopsy	p
Symptom scale																		
Global health status	76.6(17.7)	72.7(24.8)	0.843	71.9(22.1)	56.4(29.0)	0.027	62.5(26.6)	70.5(26.9)	0.195	75.0(18.8)	68.9(29.0)	0.945	73.4(24.2)	65.0(20.0)	0.157	77.0(21.2)	78.1(14.7)	0.809
Physical functioning	92.9(12.0)	89.9(18.0)	0.953	93.2(12.4)	82.2(21.3)	0.034	92.5(13.8)	82.2(22.9)	0.056	90.6(12.0)	81.3(31.4)	0.955	90.2(17.3)	84.9(25.1)	0.277	89.1(19.9)	75.0(28.0)	0.067
Role functioning	91.5(18.0)	90.8(21.6)	0.803	78.6(25.5)	65.9(30.9)	0.081	87.7(20.6)	68.1(33.7)	0.011	86.7(22.3)	80.0(25.7)	0.230	85.4(25.3)	80.3(26.7)	0.355	83.8(29.9)	70.8(26.4)	0.104
Emotional functioning	79.3(20.1)	78.7(18.6)	0.669	81.1(16.7)	68.7(26.9)	0.066	85.8(18.9)	70.8(28.1)	0.021	83.3(20.3)	74.6(24.9)	0.137	74.6(24.9)	81.8(18.2)	0.771	80.3(26.1)	81.3(21.7)	0.759
Cognitive functioning	90.3(15.4)	92.0(14.5)	0.696	90.6(15.3)	84.9(25.2)	0.647	90.4(13.8)	86.8(22.5)	0.832	86.1(18.1)	79.2(25.9)	0.307	81.7(22.6)	81.8(18.9)	0.850	80.8(25.4)	85.4(13.9)	1.000
Social functioning	88.0(18.8)	92.0(20.7)	0.091	77.6(23.9)	70.0(27.9)	0.305	84.4(17.9)	71.5(32.8)	0.194	80.3(26.7)	78.3(27.6)	1.000	78.5(26.7)	74.2(31.9)	0.768	84.3(27.6)	75.0(26.7)	0.262
Fatigue	13.0(19.2)	16.5(20.1)	0.180	17.2(20.2)	33.9(22.6)	0.003	16.3(19.1)	37.0(24.9)	<0.001	19.7(18.7)	28.3(26.1)	0.232	17.6(22.6)	27.3(20.7)	0.096	22.9(28.1)	27.8(27.2)	0.496
Nausea and vomiting	1.4(5.3)	0.0(0.0)	0.141	0.0(0.0)	6.4(15.3)	0.002	1.1(4.1)	4.9(9.2)	0.025	0.7(3.3)	5.0(22.4)	0.837	1.6(5.0)	0.0(0.0)	0.286	2.5(8.5)	0.0(0.0)	0.711
Pain	7.5(18.2)	16.7(28.2)	0.116	9.5(16.0)	23.3(33.1)	0.066	12.1(20.5)	17.4(28.0)	0.544	7.8(19.0)	15.0(31.5)	0.371	9.4(21.7)	9.1(15.6)	0.461	10.6(24.2)	2.1(5.9)	0.572
Dyspnoea	5.2(13.3)	10.3(25.4)	0.598	8.2(19.9)	14.3(27.0)	0.262	8.5(17.7)	19.4(32.5)	0.190	7.5(18.3)	21.7(31.1)	0.029	11.4(24.3)	9.1(15.6)	0.917	12.1(24.7)	8.3(23.6)	0.663
Insomnia	20.6(29.7)	26.4(37.1)	0.616	17.7(25.6)	27.0(30.9)	0.221	21.3(30.6)	33.3(36.8)	0.145	23.1(29.8)	25.0(30.3)	0.771	23.6(31.8)	18.2(31.1)	0.588	24.2(31.5)	20.8(35.4)	0.784
Appetite loss	5.2(15.1)	0.0(0.0)	0.041	2.7(9.2)	6.4(17.1)	0.409	2.1(8.2)	11.1(23.4)	0.057	2.7(11.5)	13.3(31.3)	0.077	8.1(24.5)	0.0(0.0)	0.228	3.0(9.7)	8.3(23.6)	0.859
Constipation	6.0(15.7)	1.2(6.2)	0.113	8.2(19.9)	13.3(19.9)	0.158	8.7(17.8)	18.1(29.5)	0.213	7.5(18.3)	11.7(27.1)	0.666	13.8(25.8)	9.1(21.6)	0.564	12.1(23.3)	8.3(23.6)	0.663
Diarrhoea	6.4(17.5)	1.2(6.2)	0.140	5.4(14.2)	7.9(18.0)	0.598	7.8(17.3)	11.1(18.8)	0.367	8.8(19.0)	11.7(24.8)	0.692	12.2(22.1)	3.0(10.1)	0.201	5.1(12.1)	20.8(35.4)	0.306
Financial difficulties	2.9(11.9)	0.0(0.0)	0.176	3.4(12.3)	11.1(21.9)	0.071	2.6(9.1)	1.4(6.8)	0.564	2.0(8.1)	0.0(0.0)	0.261	8.9(21.1)	6.1(20.1)	0.475	5.1(14.7)	4.2(11.8)	1.000
ICIQ	0.9(2.0)	2.6(3.8)	0.005	8.0(5.1)	10.4(5.6)	0.056	5.6(5.4)	7.7(5.6)	0.092	5.3(5.0)	7.8(5.8)	0.074	4.6(4.4)	8.3(6.4)	0.033	5.5(5.9)	9.8(6.4)	0.069
Pads/day				2.3(2.4)	3.5(3.7)	0.176	1.8(2.6)	1.9(2.4)	0.436	1.4(1.7)	1.8(2.4)	0.489						
IIEF(only patients																		
with IIEF ≥20 before prostatectomy)	23.6(1.7)	23.7(2.0)	0.892	6.3(7.5)	1.8(2.2)	0.156	11.7(10.3)	9.0(8.4)	0.543	12.1(10.2)	11.6(6.8)	0.933	11.6(10.1)	5.5(6.4)	0.641	11.6(11.8)	0.0(0.0)	0.545