



Supplementary Figure S1. Upgrading rate of all FBx patients (mp-MRI-fusion guided biopsy of the prostate) after radical prostatectomy over time. March 2015 – February 2016 vs. March 2021 – February 2022; $p = 0.53$.

Supplementary Table S1. Characteristics of the upgrading in the FBx AS cohort

Baseline Characteristic	Gleason score upgrading, n = 16	No Gleason score upgrading, n = 13	p-value
Age (years)	65.4 ± 8.3	63.5 ± 6.4	0.49
Positive PB cores (n)			0.36
1	6 (37.5%)	8 (61.5%)	
2	10 (62.5%)	5 (38.5%)	
PB cores (n)			0.093
13	12 (75.0%)	12 (92.3%)	
14	4 (25.0%)	0 (0.0%)	
15	0 (0.0%)	1 (7.7%)	
Infiltration at PB (%)	16.6 ± 14.3	10.6 ± 9.7	0.20
iPSA (ng/ml)	6.3 ± 1.7	5.7 ± 1.9	0.33
Prior biopsy (n)	5 (45.5%)	4 (36.4%)	>0.99
Highest PI-RADS score			0.59
3	3 (18.8%)	1 (7.7%)	
4	9 (56.2%)	7 (53.8%)	
5	4 (25.0%)	5 (38.5%)	
Prostate volume (mL)	42.3 ± 31.4	55.6 ± 25.5	0.31
Positive DRE	3 (60.0%)	1 (16.7%)	0.39

Baseline Characteristic	Gleason score upgrading, n = 16	No Gleason score upgrading, n = 13	p-value
Time between PB and RP (days)	186.4 ± 202.6	159.6 ± 240.2	0.75
Mean operative time (min)	106.5 ± 55.8	132.2 ± 63.2	0.26
T Stage after RP			0.12
2a	1 (6.2%)	5 (38.5%)	
2b	2 (12.5%)	0 (0.0%)	
2c	11 (68.8%)	6 (46.2%)	
3a	1 (6.2%)	2 (15.4%)	
3b	1 (6.2%)	0 (0.0%)	

Supplementary Table S2. Upgrading and staging of AS-eligible SBx patients.

Histopathology after SBx	Histopathology after RP	n =	%
GS 6, pT2a	GS 6 and pT2a	15	6.9
	GS 6 and >pT2a	111	51.2
	GS 7a	77	35.5
	GS 7b	10	4.6
	GS 8	2	0.9
	GS 9	2	0.9
	GS 10	0	0.0

Supplementary Table S3. Univariate and multivariable logistic regression analyses of upgraded GS 6 FBx patients (n = 132).

Characteristic	OR	Univariate 95% CI	p-value	OR	Multivariable 95% CI	p-value
Age	1.03	0.99, 1.08	0.20	1.01	0.96, 1.07	0.60
Percent of positive PB cores	11.80	1.49, 110	0.02	4.65	0.43, 58.2	0.20
Highest infiltration of the obtained biopsy cores	1.02	1.01, 1.04	0.01	1.02	1.00, 1.03	0.10
iPSA	1.00	0.96, 1.03	0.80	1.00	0.96, 1.04	>0.9
Highest PI-RADS score	1.32	0.81, 2.18	0.30	1.28	0.76, 2.18	0.40
Time between FBx and RP	1.00	0.99, 1.01	0.80	1.00	0.99, 1.01	0.40