

**Supplementary Table 1. Reason for progression to treatment on AS**

<b>Variable</b>	<b>Positive FH PC N = 300</b>	<b>Negative FH PC N = 555</b>	<b>Positive FH HCS N=95</b>	<b>Negative FH HCS N=760</b>
<b>Progressed to treatment on AS</b>				
Yes	131 (43.7%)	229 (41.3%)	47 (49.5%)	313 (41.2%)
Grade progression	73 (55.7%)	131 (57.2%)	28 (59.6%)	176 (56.2%)
Volume progression	41 (31.3%)	58 (25.3%)	14 (29.8%)	85 (27.2%)
PSA progression	7 (5.3%)	15 (6.6%)	3 (6.4%)	19 (6.1%)
Radiographic progression	1 (0.8%)	15 (6.6%)	0	16 (5.1%)
Patient driven	8 (6.1%)	6 (2.6%)	2 (4.2%)	12 (3.8%)
Metastasis	0	2 (0.9%)	0	2 (0.7%)
DRE progression	0	1 (0.4%)	0	1 (0.3%)
Physician driven	0	1 (0.4%)	0	1 (0.3%)
Other	1 (0.8%)	0	0	1 (0.3%)
No	169 (56.3%)	326 (58.7%)	48 (50.5%)	447 (58.8%)

**Supplementary Table 2.** Multivariable Cox proportional hazards model of biopsy progression-free survival in very low-risk and low-risk patients

Variable	Biopsy Progression-Free Survival	
	Hazard Ratio (95% CI)	P-value
<b>Prostate Cancer</b>		
No family history	-	-
FH PC	1.12 (0.88-1.43)	0.3
<b>HCS</b>		
No family history (S=0)	-	-
FH (0 < S ≤1)	1.10 (0.86-1.40)	0.5
FH HCS (S >1)	1.37 (0.96-1.96)	0.087

Multivariable model adjusted for age, PSA, % cores positive and maximum % core involvement at diagnosis.

Abbreviations: FH, family history; PC, prostate cancer; HCS, hereditary cancer syndrome; CI, confidence interval