## **SUPPLEMENTARY MATERIAL** Figure S1.

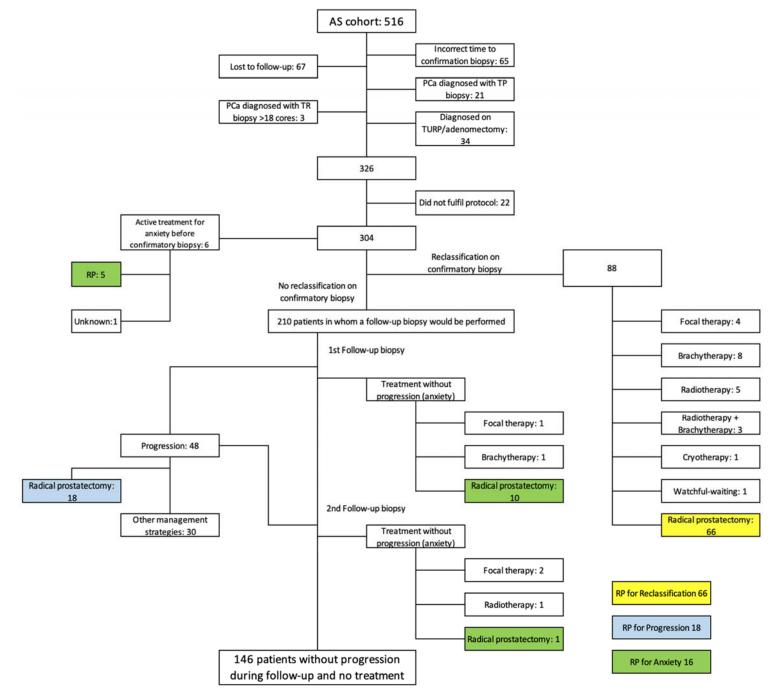


Table S1. Clinical and pathological characteristics of all patients under AS at our centre

Variable	Total	Induced AS	Per-protocol AS	P-value
	516 (100%)	162 (31 %)	354 (69%)	
PSA at diagnosis (ng/ml), Median (IQR)	5.3 (4-7.4)	6.2 (4.5-10.9)	5 (3.8-7)	<0.001
Age at diagnosis (years), Median (IQR)	65.8 (60.1- 70.7)	68.6 (64-73)	64.2 (59.3-69.3)	<0.001
Prostatic vol at diagnosis (ml), Median (IQR)	40 (31-55.7)	40 (30.5-50)	40 (31.9-57.7)	0.079
PSA density, Median (IQR)	0.13 (0.09- 0.19)	0.17 (0.12- 0.27)	0.12 (0.09-0.17)	<0.001
BMI at diagnosis, Median (IQR)	26.4 (24.1-29)	26.1 (23.2-29)	26.5 (24.3-28.9)	0.499
ASA risk at diagnosis, n (%)				0.053
3	45 (16)	20 (24)	25 (13)	
Charlson index at diagnosis, Median (IQR)	1.7 (0-2.8)	1.9 (0-3)	1.6 (0-2.7)	0.359
GS at diagnosis, n (%)				< 0.001
3+3	482 (94)	135 (83)	347 (98)	
3+4	27 (5)	20 (13)	7 (2)	
4+3	7 (1)	7 (4)	0 (0)	

Note: bold values indicate statistical significance (p< 0.05)

Abbreviations: AS, Active surveillance; PSA, Prostate specific antigen; IQR, Interquartile range; BMI, Body mass index.

**Table S2.** Secondary treatment strategy performed during follow up for the whole AS population stratified by indication.

	Focal therapy	Brachytherapy	Radiotherapy	Radiotherapy/ Brachytherapy	Cryotherapy	ADT	AS or watchful- waiting	Radical prostatectomy	Total	P-value
Reclassification, n (%)	4 (5)	8 (9)	5 (6)	3 (3)	1 (1)	0 (0)	1 (1)	66 (75)	88 (29)	<0.001
Progression, n (%)	1 (2)	6 (13)	4 (8)	2 (4)	1 (2)	1 (2)	15 (31)	18 (38)	48 (16)	
Not progression during follow-up and not treated, n (%)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	146 (100)	0 (0)	146 (48)	
Treated without progression after 1st follow-up biopsy, n (%)	1 (8)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	10 (84)	12 (4)	<0.001
Treated without progression after 2nd follow-up biopsy, n (%)	2 (50)	0 (0)	1 (25)	0 (0)	0 (0)	0 (0)	0 (0)	1 (25)	4 (1)	
Anxiety prior to first biopsy, n (%)	0 (0)	1 (17)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (83)	6 (2)	
Total	8 (3)	16 (5)	10 (3)	5 (2)	2 (1)	1 (0.33)	162 (53)	100 (33)	304 (100)	

Note: bold values indicate statistical significance (p< 0.05) Abbreviations: ADT, Androgen deprivation therapy; AS, Active surveillance.

Table S3. Additional clinical and pathological characteristics of patients who underwent RP post AS

Variable	Total	Induced AS	Per-protocol AS	P-value	Reclassification	Progression	Anxiety	P-value
	100 (100%)	31 (31 %)	69 (69%)		66 (66 %)	18 (18%)	16 (16%)	
Prostatic vol at diagnosis (ml), Median (IQR)	37.1 (26.9-45)	35 (26-44.5)	37.3 (27-45)	0.923	35.3 (25-43.9)	42.1 (36.3-49)	33.6 (28-42.1)	0.144
BMI at diagnosis, Median (IQR)	27 (25-29)	27 (25-29.4)	27 (25-28.6)	0.582	27 (24.9-29.4)	26.6 (25.3- 28.2)	27.4 (25.9- 28.5)	0.621
ASA risk, n (%)				0.628				0.832
3	6 (8)	2 (8)	4 (8)		5 (10)	1 (9)	0 (0)	
Perineural invasion, n (%)	52 (53)	17 (57)	35 (51)	0.798	37 (56)	10 (62)	5 (31)	0.145
Lymphatic invasion, n (%)	5 (6)	2 (9)	3 (5)	0.887	3 (6)	2 (12)	0 (0)	0.469

Abbreviations: AS, Active surveillance; Prostatic vol, Prostatic volume; IQR, Interquartile range; BMI, Body mass index; ASA: American Society of Anaesthesiologists.