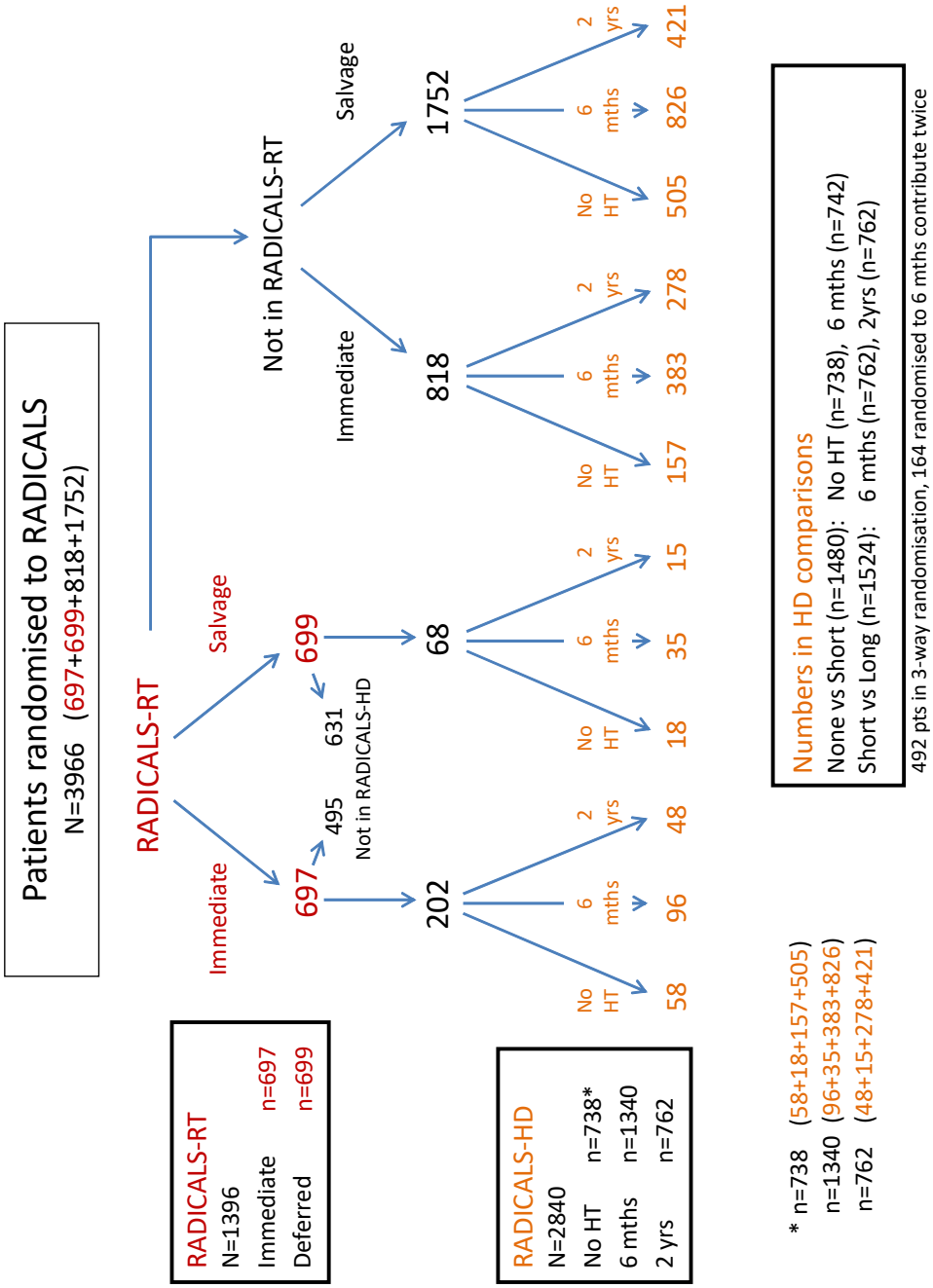
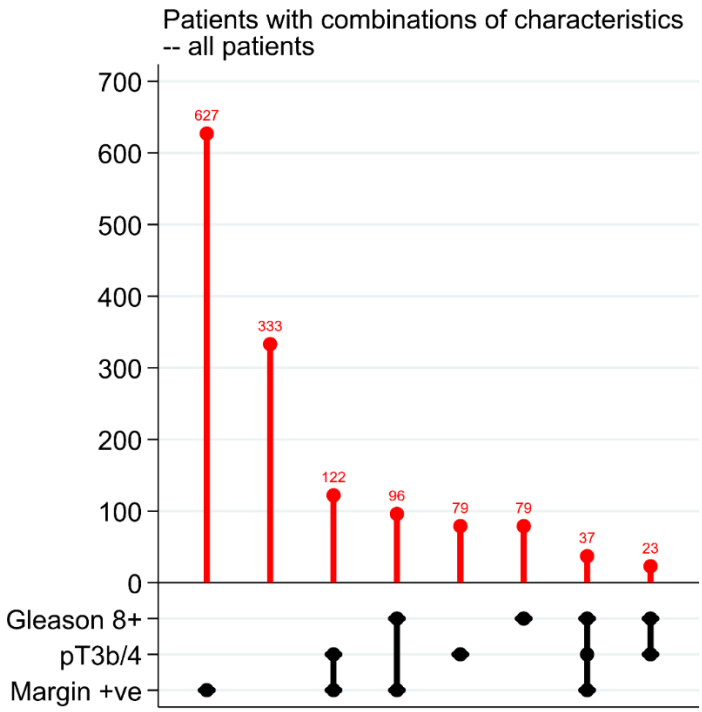
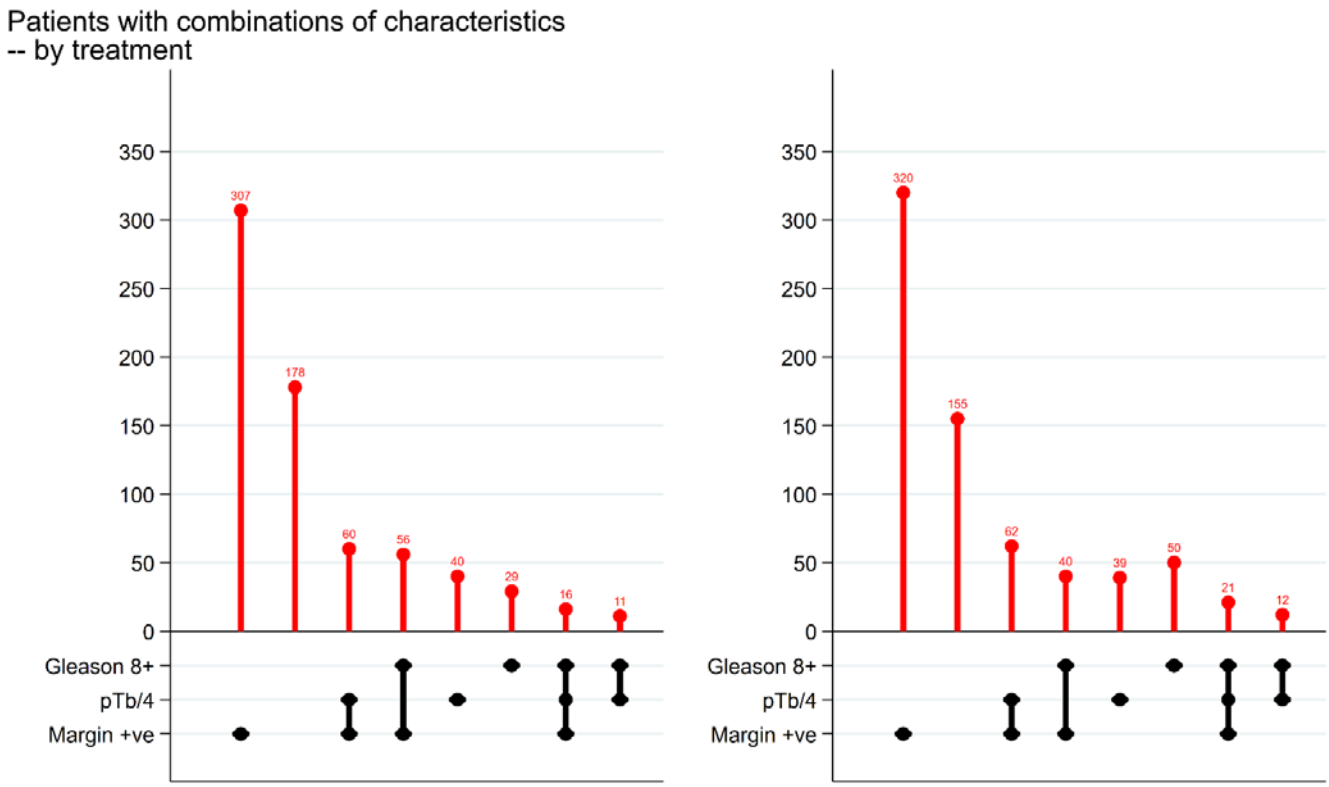
Supplementary Figure 1: Allocation of patients to RADICALS comparisons



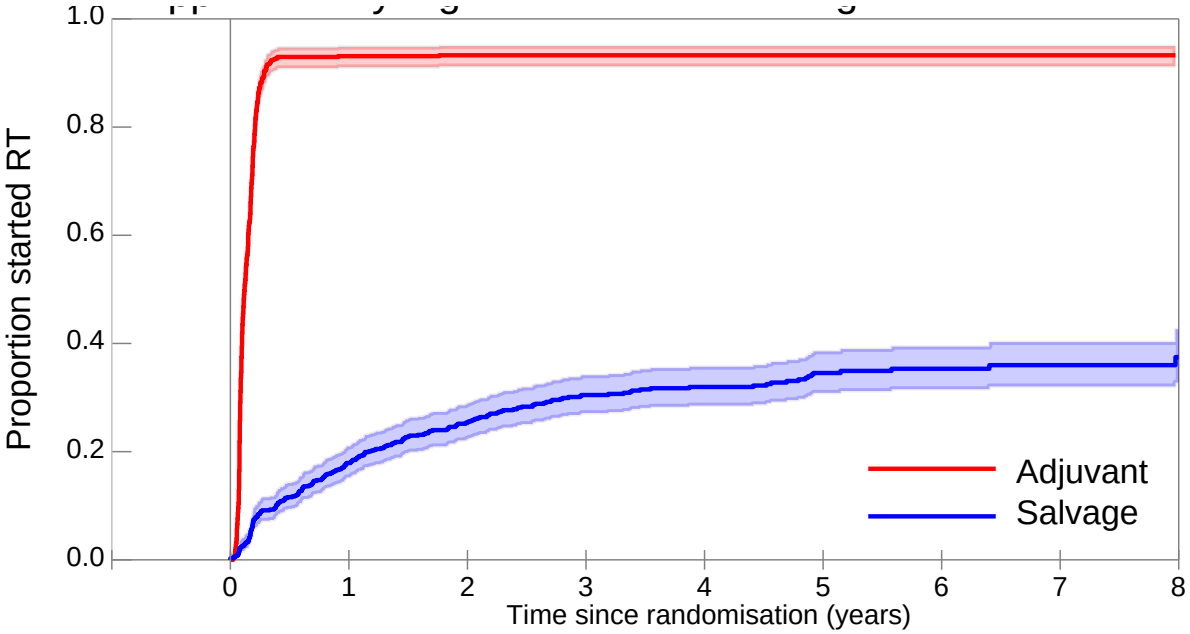
Supplementary Figure 2: Combinations of baseline characteristics of all patients



Supplementary Figure 3: Combinations of baseline characteristics of patients by treatment allocation



Supplementary Figure 4: Time to Starting Radiotherapy



Adjuvant									
At-risk	697	46	39	29	23	17	15	14	0
Censored	0	3	9	19	25	31	33	34	48
RT start	0	648	649	649	649	649	649	649	649
Salvage									
At-risk	699	571	491	375	289	210	143	86	37
Censored	0	3	31	117	196	266	331	387	435
RT start	0	125	177	207	214	223	225	226	227

Supplementary Table 1: Listing of Serious Adverse Events

Event	Salvage RT	Adjuvant RT	All
Urinary retention	0	5	5
Haematuria	2	2	4
Urethral stricture	0	3	3
Chest pain	0	2	2
Dehydration	2	0	2
Myocaridal infarction	2	0	2
Rectal haemorrhage	1	1	2
Abdominal pain	1	0	1
Angina	1	0	1
Blindness, left eye	0	1	1
Cholecystitis	0	1	1
Collapse	1	0	1
Crushed vertebra	0	1	1
Cut to hand	1	0	1
G.I. Diverticulitis	0	1	1
GU Haemorrhage	0	1	1
Hypotension	1	0	1
Infective COPD	0	1	1
Ischaemic colitis	0	1	1
Laparoscopic enucleation of pancreatic tumour	0	1	1
Light headedness	0	1	1
Malignant melanoma	0	1	1
Overdose	0	1	1
Palpitations	0	1	1
Pancreatitis	0	1	1
Pneumonitis	0	1	1
Pyelonephritis	1	0	1
Shortness of breath	0	1	1
Small Cell Lung Cancer	0	1	1
Treatment Induced AML	0	1	1
Respiratory failure	0	1	1
Venous thrombotic episode	0	1	1
Vein injury	0	1	1
Total	13	33	46

Supplementary Table 2: International Continence Society Male Short Form (ICSMaleSF) at randomisation (post-prostatectomy)

	Qu7, Does urine leak before you can get to the toilet?			Qu8, Does urine leak when you cough or sneeze?			Qu9, Does urine leak for no obvious reason?			Qu11, Had slight wetting of pants a few minutes after urinating?		
	Salvage n=544	Adjuvant n=518	p*	Salvage n=542	Adjuvant n=518	p	Salvage n=544	Adjuvant n=516	p	Salvage n=540	Adjuvant n=516	p
Never	134(25%)	133(26%)	0.47	109(20%)	101(20%)	0.78	230(42%)	214(41%)	0.22	201(37%)	183(35%)	0.88
Occasionally	247(45%)	236(46%)		225(42%)	215(42%)		173(32%)	179(35%)		235(44%)	227(44%)	
Sometimes	109(20%)	110(21%)		107(20%)	109(21%)		95(17%)	94(18%)		71(13%)	78(15%)	
Most of the time	35(6%)	30(6%)		59(11%)	62(12%)		26(5%)	21(4%)		24(4%)	21(4%)	
All of the time	19(3%)	9(2%)		42(8%)	31(6%)		20(4%)	8(2%)		9(2%)	7(1%)	

* Chi-square test

Supplementary Table 3: Subgroup analysis of bPFS, by CAPRA-S risk group

CAPRA-S score	Salvage	Adjuvant	HR (95%CI) for adjuvant treatment	p
Intermediate risk (3-5) N bPFS event, n (%)	384 33 (9%)	382 39 (10%)	1.13 (0.70 to 1.81)	0.62
High risk (6+) N bPFS event, n (%)	257 45 (18%)	260 48 (18%)	1.00 (0.66 to 1.52)	1.0