

## Supplemental Table 1

Analysis of patterns of missing data. For each treatment group, we give the number of patients missing 48-month questionnaires and not missing 48-month questionnaires, with difference in means for each domain at the time point specified. For each comparison, not missing 48-month questionnaire is the reference, so a coefficient of 5 would represent that respondents had a score higher by 5 points at that time point compared with non-respondents.

	Radical prostatectomy	Brachytherapy	External-beam radiotherapy	Androgen-deprivation therapy
3 months				
Urinary function	157 (46%) vs 181 (54%) 0.91 (-2.53, 4.35) 0.6	25 (14%) vs 153 (86%) 2.17 (-4.49, 8.83) 0.5	33 (20%) vs 129 (80%) 0.24 (-4.66, 5.14) 0.9	5 (16%) vs 26 (84%) 15.74 (-2.28, 33.75) 0.084
Urinary bother	159 (48%) vs 175 (52%) -0.85 (-5.17, 3.47) 0.7	23 (13%) vs 152 (87%) 1.49 (-5.55, 8.53) 0.7	33 (21%) vs 127 (79%) 3.04 (-1.29, 7.38) 0.2	4 (14%) vs 25 (86%) 7.42 (-6.99, 21.83) 0.3
Bowel function	161 (47%) vs 180 (53%) -0.68 (-1.92, 0.55) 0.3	25 (14%) vs 153 (86%) 2.53 (-0.94, 6.00) 0.2	32 (20%) vs 127 (80%) 3.91 (0.00, 7.83) 0.050	5 (17%) vs 25 (83%) 4.35 (0.28, 8.43) 0.037
Bowel bother	161 (47%) vs 181 (53%) -0.71 (-2.82, 1.40) 0.5	25 (14%) vs 150 (86%) 6.44 (0.07, 12.82) 0.048	34 (21%) vs 126 (79%) 3.95 (-2.18, 10.08) 0.2	5 (18%) vs 23 (82%) 7.15 (-1.89, 16.20) 0.11
Sexual function	165 (47%) vs 184 (53%) -3.17 (-7.79, 1.44) 0.2	24 (14%) vs 149 (86%) 8.08 (-2.55, 18.70) 0.14	35 (22%) vs 126 (78%) 1.11 (-8.36, 10.58) 0.8	5 (16%) vs 26 (84%) 2.79 (-14.73, 20.31) 0.7

Sexual bother	161 (47%) vs 179 (53%)	24 (14%) vs 148 (86%)	32 (20%) vs 125 (80%)	4 (13%) vs 26 (87%)
	-1.49 (-5.90, 2.92) 0.5	4.97 (-3.08, 13.01) 0.2	-1.32 (-7.92, 5.29) 0.7	-14.27 (-32.73, 4.19) 0.12
6 months				
Urinary function	148 (48%) vs 160 (52%)	29 (15%) vs 160 (85%)	35 (20%) vs 143 (80%)	7 (20%) vs 28 (80%)
	1.73 (-1.14, 4.60) 0.2	1.17 (-3.95, 6.29) 0.7	-2.56 (-6.52, 1.39) 0.2	-2.58 (-17.45, 12.29) 0.7
Urinary bother	149 (49%) vs 153 (51%)	27 (14%) vs 160 (86%)	35 (20%) vs 143 (80%)	6 (18%) vs 28 (82%)
	1.63 (-1.83, 5.09) 0.4	0.90 (-4.90, 6.69) 0.8	-1.45 (-5.38, 2.48) 0.5	7.89 (-3.76, 19.53) 0.2
Bowel function	150 (49%) vs 157 (51%)	29 (15%) vs 160 (85%)	35 (20%) vs 141 (80%)	7 (21%) vs 27 (79%)
	-0.19 (-1.60, 1.22) 0.8	0.75 (-2.12, 3.62) 0.6	-1.99 (-4.80, 0.82) 0.2	-2.62 (-11.34, 6.11) 0.5
Bowel bother	151 (49%) vs 157 (51%)	29 (16%) vs 158 (84%)	35 (20%) vs 140 (80%)	7 (22%) vs 25 (78%)
	0.26 (-1.85, 2.37) 0.8	-1.80 (-7.76, 4.15) 0.6	-5.39 (-10.61, -0.17) 0.043	-9.67 (-30.63, 11.29) 0.3
Sexual function	154 (49%) vs 160 (51%)	28 (15%) vs 156 (85%)	36 (20%) vs 140 (80%)	7 (20%) vs 28 (80%)
	-1.48 (-6.12, 3.15) 0.5	0.77 (-9.08, 10.63) 0.9	0.49 (-8.89, 9.86) 0.9	-10.18 (-25.27, 4.91) 0.2
Sexual bother	148 (48%) vs 159 (52%)	27 (15%) vs 155 (85%)	35 (20%) vs 137 (80%)	6 (18%) vs 27 (82%)
	-0.70 (-5.34, 3.95) 0.8	-2.14 (-10.70, 6.42) 0.6	-5.18 (-11.84, 1.47) 0.13	-8.71 (-22.75, 5.33) 0.2
9 months				
Urinary function	120 (44%) vs 150 (56%)	21 (12%) vs 156 (88%)	33 (20%) vs 133 (80%)	6 (19%) vs 26 (81%)
	0.62 (-2.30, 3.54) 0.7	-0.82 (-6.12, 4.49) 0.8	-0.55 (-3.83, 2.74) 0.7	-5.49 (-19.95, 8.96) 0.4
Urinary bother	118 (45%) vs 145 (55%)	20 (11%) vs 155 (89%)	33 (20%) vs 131 (80%)	6 (19%) vs 26 (81%)

	1.36 (-1.69, 4.42)	0.4	1.75 (-4.42, 7.92)	0.6	2.32 (-1.65, 6.29)	0.2	6.24 (-12.05, 24.52)	0.5
Bowel function	120 (44%) vs 152 (56%)		21 (12%) vs 156 (88%)		32 (20%) vs 131 (80%)		6 (19%) vs 25 (81%)	
	-0.47 (-1.72, 0.78)	0.5	1.43 (-1.72, 4.58)	0.4	0.66 (-2.21, 3.52)	0.7	1.89 (-6.90, 10.68)	0.7
Bowel bother	124 (45%) vs 150 (55%)		21 (12%) vs 154 (88%)		34 (20%) vs 132 (80%)		6 (20%) vs 24 (80%)	
	-0.30 (-2.40, 1.80)	0.8	0.05 (-6.53, 6.63)	1	2.10 (-3.37, 7.57)	0.4	5.60 (-15.55, 26.75)	0.6
Sexual function	127 (46%) vs 151 (54%)		20 (12%) vs 153 (88%)		35 (21%) vs 132 (79%)		6 (19%) vs 26 (81%)	
	-1.06 (-6.58, 4.46)	0.7	-1.29 (-12.60, 10.03)	0.8	1.08 (-8.81, 10.97)	0.8	-5.85 (-27.94, 16.24)	0.6
Sexual bother	123 (45%) vs 148 (55%)		20 (12%) vs 150 (88%)		34 (21%) vs 131 (79%)		5 (16%) vs 26 (84%)	
	-2.87 (-7.82, 2.08)	0.3	-3.03 (-12.54, 6.48)	0.5	-1.02 (-7.91, 5.87)	0.8	-12.08 (-30.64, 6.48)	0.2
12 months								
Urinary function	136 (45%) vs 163 (55%)		28 (16%) vs 147 (84%)		28 (17%) vs 134 (83%)		7 (21%) vs 26 (79%)	
	0.34 (-2.53, 3.22)	0.8	0.11 (-4.96, 5.18)	1	-2.52 (-6.01, 0.98)	0.2	-1.77 (-13.22, 9.68)	0.8
Urinary bother	133 (46%) vs 158 (54%)		27 (16%) vs 145 (84%)		28 (18%) vs 132 (83%)		7 (21%) vs 26 (79%)	
	1.22 (-2.04, 4.49)	0.5	-1.24 (-6.02, 3.54)	0.6	-0.62 (-4.71, 3.47)	0.8	1.39 (-11.85, 14.62)	0.8
Bowel function	138 (46%) vs 164 (54%)		28 (16%) vs 146 (84%)		28 (18%) vs 131 (82%)		7 (22%) vs 25 (78%)	
	-0.32 (-1.67, 1.02)	0.6	3.26 (0.52, 6.01)	0.020	-1.41 (-4.54, 1.71)	0.4	-3.12 (-8.05, 1.81)	0.2
Bowel bother	139 (46%) vs 163 (54%)		28 (16%) vs 145 (84%)		30 (19%) vs 130 (81%)		7 (23%) vs 23 (77%)	
	-0.17 (-2.18, 1.84)	0.9	-0.65 (-6.17, 4.86)	0.8	-1.72 (-6.88, 3.45)	0.5	-3.29 (-18.89, 12.30)	0.7
Sexual function	142 (46%) vs 164 (54%)		27 (16%) vs 143 (84%)		30 (19%) vs 130 (81%)		7 (22%) vs 25 (78%)	

	-0.47 (-5.80, 4.85)	0.9	-6.44 (-16.70, 3.82)	0.2	4.33 (-6.06, 14.71)	0.4	3.70 (-19.47, 26.87)	0.7
Sexual bother	140 (46%) vs 163 (54%)		27 (16%) vs 143 (84%)		28 (18%) vs 127 (82%)		6 (19%) vs 25 (81%)	
	1.29 (-3.77, 6.34)	0.6	-4.18 (-12.88, 4.53)	0.3	3.81 (-3.80, 11.42)	0.3	2.38 (-17.48, 22.25)	0.8
18 months								
Urinary function	119 (43%) vs 157 (57%)		22 (12%) vs 156 (88%)		26 (16%) vs 139 (84%)		5 (15%) vs 28 (85%)	
	0.15 (-2.72, 3.02)	0.9	-0.32 (-5.36, 4.73)	0.9	-4.22 (-7.58, -0.86)	0.014	2.74 (-11.83, 17.30)	0.7
Urinary bother	118 (43%) vs 154 (57%)		21 (12%) vs 156 (88%)		26 (16%) vs 137 (84%)		5 (16%) vs 27 (84%)	
	-0.81 (-4.11, 2.49)	0.6	1.45 (-4.87, 7.77)	0.7	-1.83 (-5.91, 2.25)	0.4	12.21 (-4.18, 28.60)	0.14
Bowel function	120 (43%) vs 158 (57%)		22 (12%) vs 155 (88%)		26 (16%) vs 136 (84%)		5 (16%) vs 27 (84%)	
	-0.18 (-1.44, 1.08)	0.8	1.51 (-1.78, 4.80)	0.4	-0.88 (-4.36, 2.61)	0.6	-1.32 (-8.17, 5.53)	0.7
Bowel bother	120 (43%) vs 158 (57%)		22 (13%) vs 153 (87%)		27 (17%) vs 135 (83%)		5 (17%) vs 25 (83%)	
	-1.24 (-3.33, 0.85)	0.2	1.83 (-5.37, 9.04)	0.6	-1.55 (-6.89, 3.79)	0.6	3.77 (-3.50, 11.04)	0.3
Sexual function	123 (44%) vs 158 (56%)		21 (12%) vs 148 (88%)		26 (16%) vs 133 (84%)		5 (16%) vs 27 (84%)	
	2.79 (-2.93, 8.52)	0.3	2.98 (-7.52, 13.47)	0.6	0.39 (-10.42, 11.21)	0.9	-4.85 (-28.89, 19.19)	0.7
Sexual bother	119 (43%) vs 157 (57%)		20 (12%) vs 148 (88%)		24 (15%) vs 132 (85%)		4 (13%) vs 26 (87%)	
	-0.90 (-5.82, 4.02)	0.7	-4.92 (-13.94, 4.11)	0.3	-1.80 (-10.28, 6.68)	0.7	-4.45 (-30.92, 22.02)	0.7
24 months								
Urinary function	114 (41%) vs 164 (59%)		19 (11%) vs 157 (89%)		25 (15%) vs 138 (85%)		3 (9.7%) vs 28 (90%)	
	1.56 (-1.15, 4.27)	0.3	0.66 (-4.35, 5.66)	0.8	-5.64 (-9.88, -1.39)	0.010	11.13 (-8.80, 31.06)	0.3

Urinary bother	116 (42%) vs 159 (58%)	19 (11%) vs 157 (89%)	25 (15%) vs 137 (85%)	3 (9.7%) vs 28 (90%)			
	1.32 (-1.82, 4.46) 0.4	4.45 (-1.10, 9.99) 0.12	-4.59 (-9.36, 0.19) 0.059	7.26 (-8.35, 22.86) 0.3			
Bowel function	113 (41%) vs 164 (59%)	19 (11%) vs 157 (89%)	25 (16%) vs 136 (84%)	3 (10%) vs 27 (90%)			
	-0.46 (-1.65, 0.73) 0.4	3.31 (-0.51, 7.12) 0.089	-0.60 (-3.31, 2.11) 0.7	-5.63 (-16.62, 5.37) 0.3			
Bowel bother	113 (41%) vs 164 (59%)	19 (11%) vs 155 (89%)	26 (16%) vs 134 (84%)	3 (11%) vs 25 (89%)			
	0.39 (-1.54, 2.33) 0.7	4.68 (-2.94, 12.30) 0.2	-4.64 (-10.82, 1.55) 0.14	-5.27 (-24.51, 13.97) 0.6			
Sexual function	117 (42%) vs 164 (58%)	18 (11%) vs 153 (89%)	25 (16%) vs 132 (84%)	3 (10%) vs 27 (90%)			
	4.30 (-1.27, 9.87) 0.13	-0.70 (-11.02, 9.63) 0.9	-3.71 (-14.30, 6.88) 0.5	-9.14 (-31.65, 13.38) 0.4			
Sexual bother	115 (42%) vs 162 (58%)	18 (11%) vs 152 (89%)	23 (15%) vs 131 (85%)	3 (10%) vs 26 (90%)			
	1.65 (-3.70, 7.01) 0.5	2.13 (-7.42, 11.69) 0.7	-6.21 (-13.82, 1.40) 0.11	-7.24 (-34.13, 19.66) 0.6			

### 36 months

Urinary function	100 (43%) vs 130 (57%)	16 (9%) vs 162 (91%)	20 (12%) vs 142 (88%)	3 (9.1%) vs 30 (91%)		
	3.32 (-0.00, 6.65) 0.050	-1.56 (-6.09, 2.96) 0.5	1.23 (-2.90, 5.36) 0.6	12.47 (-0.17, 25.12) 0.053		
Urinary bother	98 (44%) vs 127 (56%)	16 (9%) vs 162 (91%)	19 (12%) vs 141 (88%)	2 (6.3%) vs 30 (94%)		
	2.17 (-1.79, 6.13) 0.3	0.25 (-4.29, 4.79) 0.9	2.42 (-2.15, 6.99) 0.3	4.74 (-14.49, 23.97) 0.6		
Bowel function	102 (44%) vs 128 (56%)	16 (9%) vs 162 (91%)	19 (12%) vs 140 (88%)	3 (9.4%) vs 29 (91%)		
	-0.27 (-1.55, 1.01) 0.7	-0.07 (-3.89, 3.75) 1	4.83 (0.81, 8.84) 0.019	15.72 (6.48, 24.96) 0.002		
Bowel bother	103 (44%) vs 129 (56%)	16 (9.1%) vs 160 (91%)	20 (13%) vs 138 (87%)	3 (10%) vs 27 (90%)		

	-0.03 (-2.29, 2.23)	1	0.41 (-7.35, 8.17)	0.9	7.02 (0.57, 13.47)	0.033	16.60 (4.28, 28.93)	0.011
Sexual function	104 (45%) vs 129 (55%)		15 (8.9%) vs 154 (91%)		19 (12%) vs 136 (88%)		3 (9.1%) vs 30 (91%)	
	1.44 (-5.22, 8.09)	0.7	-0.91 (-12.38, 10.57)	0.9	-5.83 (-17.64, 5.98)	0.3	8.32 (-21.28, 37.93)	0.6
Sexual bother	101 (45%) vs 124 (55%)		15 (8.9%) vs 154 (91%)		18 (12%) vs 134 (88%)		2 (6.7%) vs 28 (93%)	
	3.47 (-2.69, 9.64)	0.3	0.94 (-9.10, 10.99)	0.9	-3.65 (-11.31, 4.01)	0.3	-6.69 (-35.53, 22.14)	0.6

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