

Supplemental-Table 1

Lesion detection rate	n (%)
Overall lesion detection rate	194/245 (79.2%)
At PSA < 0.5 ng/mL	27/56 (48.2%)*
At PSA 0.5 to < 1.0 ng/mL	26/35 (74.3%)
At PSA 1.0 to < 2.0 ng.mL	37/44 (84.0%)
At PSA 2.0 to < 5.0 ng/mL	59/61 (96.7%)
At PSA > 5.0 ng/mL	45/49 (91.8%)
For surgical cohort	
Overall lesion detection rate	148/195 (75.9%)
At PSA < 0.5 ng/mL	27/56 (48.2%)
At PSA 0.5 to < 1.0 ng/mL	26/33 (78.7%)
At PSA 1.0 to < 2.0 ng.mL	32/39 (82.0%)
At PSA 2.0 to < 5.0 ng/mL	39/40 (97.5%)
At PSA > 5.0 ng/mL	24/27 (88.9%)
For radiation cohort	
Overall lesion detection rate	45/50 (90.0%)
At PSA < 0.5 ng/mL	N/A
At PSA 0.5 to < 1.0 ng/mL	0/2 (0.0%)
At PSA 1.0 to < 2.0 ng.mL	5/5 (100%)
At PSA 2.0 to < 5.0 ng/mL	20/21 (95.2%)
At PSA > 5.0 ng/mL	21/22 (95.4%)
Cohort at Johns Hopkins	
Overall Lesion Detection Rate	76/98 (77.5%)
At PSA < 0.5 ng/mL	14/28 (50.0%)
At PSA 0.5 to < 1.0 ng/mL	13/16 (81.2%)
At PSA 1.0 to < 2.0 ng.mL	17/20 (85.0%)
At PSA 2.0 to < 5.0 ng/mL	22/23 (95.6%)
At PSA > 5.0 ng/mL	10/11 (90.9%)
Cohort at NCI	
Overall Lesion Detection Rate	118/147 (80.2%)
At PSA < 0.5 ng/mL	13/28 (46.4%)
At PSA 0.5 to < 1.0 ng/mL	13/19 (68.4%)
At PSA 1.0 to < 2.0 ng.mL	20/24 (83.3%)
At PSA 2.0 to < 5.0 ng/mL	37/38 (97.4%)
At PSA > 5.0 ng/mL	35/38 (92.1%)

*Lesion detection rate was 37.5% (6/16) for PSA 0.2 to 0.3, 42.3% (11/26) for 0.3 to 0.4 and 71.4% (10/14) for 0.4 to 0.5 ng/mL.

Supplemental-Table 2:

Location of Disease	n (%)
Overall population (n=245)	
Intrapelvic disease	114/245 (46.5%)
Extra-pelvic disease	80/245 (32.7%)
Negative scan	51/245 (20.8%)
Cohort at Johns Hopkins (n=98)	
Intrapelvic disease	38/98 (38.8%)
Extra-pelvic disease	38/98 (38.8%)
Negative scan	22/98 (22.4%)
Surgical Cohort (n=95)	
Intrapelvic disease	38/95 (40.0%)
Extra-pelvic disease	35/95 (36.8%)
Negative scan	22/95 (23.1%)
Radiation Cohort (n=3)	
Intrapelvic disease	0/3 (0.0%)
Extra-pelvic disease	3/3 (100.0%)
Negative scan	0/3 (0.0%)
Cohort at NCI (n=147)	
Intrapelvic disease	76/147 (51.7%)
Extra-pelvic disease	42/147 (28.6%)
Negative scan	29/147 (19.7%)
Surgical Cohort (n=100)	
Intrapelvic disease	52/100 (52.0%)
Extra-pelvic disease	23/100 (23.0%)
Negative scan	25/100 (25.0%)
Radiation Cohort (n=47)	
Intrapelvic disease	24/47 (51.0%)
Extra-pelvic disease	19/47 (40.4%)
Negative scan	4/47 (8.5%)

Supplemental - Table 3: Patients' characteristics by institution

	median ± sdt
Overall population (n=245)	
PSA	1.6 ± 4.6 ng/mL
PSAdt	6.9 ± 11.5 months
Time from prostatectomy to scan	5.0 ± 5.1 years
Cohort at Johns Hopkins (n=98)	
Surgical Cohort (n=95)	
PSA	1.2 ± 2.3 ng/mL
PSAdt	6.0 ± 4.6 months
Time from prostatectomy to scan	4.9 ± 5.6 years
Radiation Cohort (n=3)	
PSA	4.1 ± 0.8 ng/mL
PSAdt	18 ± 2 months
Cohort at NCI (n=147)	
Surgical Cohort (n=100)	
PSA	1.3 ± 3.4 ng/mL
PSAdt	6.7 ± 10.6 months
Time from prostatectomy to scan	5.1 ± 4.6 years
Radiation Cohort (n=47)	
PSA	4.1 ± 7.7 ng/mL
PSAdt	10.5 ± 14.7 months

*Std: standard deviation.

Supplemental-Figure 1: Patient's disease location by PSA (A, C) or PSAdt (B, D) vs. time from prostatectomy or radiation.



