

Table S1 The clinical characteristics between PCa and non-PCa patients before PSM

| Variables | Total (n=885) | Non-PCa (n=620) | PCa (n=265) | P value |
|-----------------------------|---------------|-----------------|--------------|---------|
| Age, n (%) | | | | <0.001 |
| ≤77 years | 733 (82.825) | 490 (79.032) | 243 (91.698) | |
| >77 years | 152 (17.175) | 130 (20.968) | 22 (8.302) | |
| Marital status, n (%) | | | | 0.20 |
| Unmarried | 89 (10.056) | 63 (10.161) | 26 (9.811) | |
| Married | 643 (72.655) | 459 (74.032) | 184 (69.434) | |
| SDWU | 153 (17.288) | 98 (15.806) | 55 (20.755) | |
| Race, n (%) | | | | 0.73 |
| White | 745 (84.181) | 524 (84.516) | 221 (83.396) | |
| Black | 103 (11.638) | 69 (11.129) | 34 (12.83) | |
| Other | 37 (4.181) | 27 (4.355) | 10 (3.774) | |
| Laterality, n (%) | | | | 0.72 |
| Left | 481 (54.35) | 334 (53.871) | 147 (55.472) | |
| Right | 404 (45.65) | 286 (46.129) | 118 (44.528) | |
| Histological, n (%) | | | | 0.97 |
| Infiltrating duct carcinoma | 717 (81.017) | 503 (81.129) | 214 (80.755) | |
| Other | 168 (18.983) | 117 (18.871) | 51 (19.245) | |
| Grade, n (%) | | | | 0.09 |
| I | 117 (13.22) | 71 (11.452) | 46 (17.358) | |
| II | 413 (46.667) | 295 (47.581) | 118 (44.528) | |
| III/IV | 229 (25.876) | 160 (25.806) | 69 (26.038) | |
| Unknown | 126 (14.237) | 94 (15.161) | 32 (12.075) | |
| AJCC, n (%) | | | | 0.19 |
| I | 324 (36.61) | 225 (36.29) | 99 (37.358) | |
| II | 360 (40.678) | 243 (39.194) | 117 (44.151) | |
| III/IV | 145 (16.384) | 112 (18.065) | 33 (12.453) | |
| Unknown | 56 (6.328) | 40 (6.452) | 16 (6.038) | |
| Tumor size, n (%) | | | | 0.36 |
| ≤3 cm | 507 (57.288) | 347 (55.968) | 160 (60.377) | |
| >3 cm | 108 (12.203) | 75 (12.097) | 33 (12.453) | |
| Unknown | 270 (30.508) | 198 (31.935) | 72 (27.17) | |
| ER, n (%) | | | | 0.19 |
| Negative | 21 (2.373) | 15 (2.419) | 6 (2.264) | |
| Positive | 757 (85.537) | 522 (84.194) | 235 (88.679) | |
| Unknown | 107 (12.09) | 83 (13.387) | 24 (9.057) | |
| PR, n (%) | | | | 0.19 |
| Negative | 79 (8.927) | 56 (9.032) | 23 (8.679) | |
| Positive | 692 (78.192) | 476 (76.774) | 216 (81.509) | |
| Unknown | 114 (12.881) | 88 (14.194) | 26 (9.811) | |
| HER2, n (%) | | | | 0.30 |
| Negative | 261 (29.492) | 181 (29.194) | 80 (30.189) | |
| Positive | 31 (3.503) | 18 (2.903) | 13 (4.906) | |
| Unknown | 593 (67.006) | 421 (67.903) | 172 (64.906) | |
| Surgery, n (%) | | | | 0.13 |
| No | 35 (3.955) | 29 (4.677) | 6 (2.264) | |
| Yes | 850 (96.045) | 591 (95.323) | 259 (97.736) | |
| Chemotherapy, n (%) | | | | 0.04 |
| No/unknown | 545 (61.582) | 396 (63.871) | 149 (56.226) | |
| Yes | 340 (38.418) | 224 (36.129) | 116 (43.774) | |
| Radiation, n (%) | | | | 0.24 |
| No/unknown | 670 (75.706) | 462 (74.516) | 208 (78.491) | |
| Yes | 215 (24.294) | 158 (25.484) | 57 (21.509) | |

PCa, prostate cancer; PSM, propensity score matching; SDWU, separated, divorced, widowed, or unmarried; AJCC, American Joint Committee on Cancer; ER, estrogen receptor; PR, progesterone receptor; HER2, human epidermal growth factor receptor 2.