**Supplementary Material 3: Site Specific Comparison of Demographic and Clinical Characteristics**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Site | Count | Gender | Age | Stage | Race/ethnicity | Cancer History |
|  |  | **Male** | **P-value** | **Late** | **P-value** | **Advanced** | **P-value** | **NHW** | **AA** | **H** | **As** | **Other** | **P-value** | **No Cancer** |  |
| Gastrointestinal Tract | 8,574  | 5,226 (60.95) |  | 5,890 (68.70) |  | 2,711 (31.62) |  | 5,701 (66.49) | 596 (6.95) | 1,365 (15.92) | 849 (9.90) | 63 (0.73) |  | 6,963 (81.21) |  |
| Bone marrow | 749 | 405 (54.07) | 0.000 | 546 (72.90) | 0.017 | 708 (94.53) | 0.000 | 530 (70.76) | 55 (7.34) | 81 (10.81) | 76 (10.15) | 7 (0.93) | 0.007 | 559 (74.63) | 0 |
| Breast | 754 | 28 (3.71) | 0.000 | 514 (68.17) | 0.765 | 161 (21.35) | 0.000 | 540 (71.62) | 42 (5.57) | 77 (10.21) | 91 (12.07) | 4 (0.53) | 0.000 | 610 (80.90)  | 0.835 |
| Endocrine organs | 1,108 | 404 (36.46) | 0.000 | 771 (69.58) | 0.548 | 198 (17.87) | 0.000 | 909 (82.04) | 23 (2.08) | 90 (8.12) | 84 (7.58) | 2 (0.18) | 0.000 | 919 (82.94) | 0.163 |
| Genitourinary | 2,194 | 1,542 (70.28) | 0.000 | 1,515 (69.05) | 0.748 | 672 (30.63) | 0.373 | 1,645 (74.98) | 116 (5.29) | 222 (10.12) | 193 (8.80) | 18 (0.82) | 0.000 | 1,778 (81.04) | 0.855 |
| Head & Neck | 3,572 | 1,984 (55.54) | 0.000 | 2,490 (69.71) | 0.272 | 712 (19.93) | 0.000 | 2,516 (70.44) | 256 (7.17) | 411 (11.51) | 360 (10.08) | 29 (0.81) | 0.000 | 2,952 (82.64) | 0.063 |
| Heart and mediastinum | 992 | 430 (43.35) | 0.000 | 207 (20.87) | 0.000 | 252 (25.40) | 0.000 | 681 (68.65) | 80 (8.06) | 124 (12.50) | 98 (9.88) | 9 (0.91) | 0.056 | 934 (94.15) | 0.000 |
| Musculoskeletal | 1,757 | 945 (53.78) | 0.000 | 991 (56.40) | 0.000 | 590 (33.58) | 0.108 | 1,347 (76.66) | 117 (6.66) | 199 (11.33) | 80 (4.55) | 14 (0.80) | 0.000 | 1,495 (85.09) | 0.000 |
| Nervous system | 4,174 | 2,223 (53.26) | 0.000 | 2,631 (63.03) | 0.000 | 802 (19.21) | 0.000 | 2,834 (67.90) | 256 (6.13) | 615 (14.73) | 444 (10.64) | 25 (0.60) | 0.077 | 3,501 (83.88) | 0.000 |
| Others | 698 | 395 (56.59) | 0.023 | 496 (71.06) | 0.195 | 436 (62.46) | 0.000 | 544 (77.94) | 43 (6.16) | 67 (9.60) | 41 (5.87) | 3 (0.43) | 0.000 | 556 (79.66) | 0.313 |
| Pancreas and hepatobiliary | 1,261 | 771 (61.14) | 0.897 | 829 (65.74) | 0.035 | 594 (47.11) | 0.000 | 908 (72.01) | 107 (8.49) | 160 (12.69) | 76 (6.03) | 10 (0.79) | 0.000 | 1,037 (82.24) | 0.190 |
| Respiratory tract | 1,566 | 795 (50.77) | 0.000 | 1,083 (69.16) | 0.717 | 703 (44.89) | 0.000 | 1,210 (77.27) | 114 (7.28) | 157 (10.03) | 69 (4.41) | 16 (1.02) | 0.000 | 1,229 (78.48) | 0.012 |
| Skin and Soft tissue | 2,891 | 1,493 (51.64) | 0.000 | 2,061 (71.29) | 0.009 | 750 (25.94) | 0.000 | 2,299 (79.52) | 164 (5.67) | 256 (8.86) | 145 (5.02) | 27 (0.93) | 0.000 | 2,271 (78.55) | 0.002 |