Table S1. Detailed basic characteristics of study population stratified by the time from diagnosis.

|  |  |
| --- | --- |
|  | Cancer survivors in recent 20 years ( n= 4619746) |
| Survival time | <12mth ( n= 4519749) | 12-35mth ( n= 54217) | 36-59mth ( n= 26658) | >=60mth ( n= 19122) |
| Survival status | Vascular events caused death ( n= 272304) | other ( n= 4247445) | Vascular events caused death ( n= 2624) | other ( n= 51593) | Vascular events caused death ( n= 1905) | other ( n= 24753) | Vascular events caused death ( n= 1519) | other ( n= 17603) |
| Cancer type |  |  |  |  |  |  |  |  |
| Stomach | 5731 (2.1%) | 110750 (2.6%) | 89 (3.4%) | 2100 (4.1%) | 35 (1.8%) | 527 (2.1%) | 30 (2.0%) | 256 (1.5%) |
| Colon and Rectum | 57663 (21.2%) | 640446 (15.1%) | 568 (21.6%) | 7975 (15.5%) | 382 (20.1%) | 4386 (17.7%) | 324 (21.3%) | 2826 (16.1%) |
| Liver | 2725 (1.0%) | 105622 (2.5%) | 47 (1.8%) | 1753 (3.4%) | 9 (0.5%) | 515 (2.1%) | 5 (0.3%) | 181 (1.0%) |
| Lung and Bronchus | 37723 (13.9%) | 873002 (20.6%) | 560 (21.3%) | 17917 (34.7%) | 204 (10.7%) | 3799 (15.3%) | 119 (7.8%) | 1630 (9.3%) |
| Non-Epithelial Skin | 2876 (1.1%) | 26688 (0.6%) | 38 (1.4%) | 343 (0.7%) | 25 (1.3%) | 203 (0.8%) | 16 (1.1%) | 108 (0.6%) |
| Breast | 54403 (20.0%) | 1015914 (23.9%) | 446 (17.0%) | 8564 (16.6%) | 429 (22.5%) | 6987 (28.2%) | 339 (22.3%) | 5687 (32.3%) |
| Cervix Uteri | 1680 (0.6%) | 62551 (1.5%) | 24 (0.9%) | 844 (1.6%) | 18 (0.9%) | 347 (1.4%) | 12 (0.8%) | 244 (1.4%) |
| Prostate | 80660 (29.6%) | 933871 (22.0%) | 546 (20.8%) | 6228 (12.1%) | 576 (30.2%) | 5144 (20.8%) | 522 (34.4%) | 4686 (26.6%) |
| Non-Hodgkin Lymphoma | 17659 (6.5%) | 283574 (6.7%) | 181 (6.9%) | 3330 (6.5%) | 150 (7.9%) | 1716 (6.9%) | 101 (6.6%) | 1242 (7.1%) |
| Leukemia | 11184 (4.1%) | 195027 (4.6%) | 125 (4.8%) | 2539 (4.9%) | 77 (4.0%) | 1129 (4.6%) | 51 (3.4%) | 743 (4.2%) |
| Gender |  |  |  |  |  |  |  |  |
| Male | 155754 (57.2%) | 2161007 (50.9%) | 1486 (56.6%) | 26418 (51.2%) | 1063 (55.8%) | 11864 (47.9%) | 858 (56.5%) | 8417 (47.8%) |
| Female | 116550 (42.8%) | 2086438 (49.1%) | 1138 (43.4%) | 25175 (48.8%) | 842 (44.2%) | 12889 (52.1%) | 661 (43.5%) | 9186 (52.2%) |
| Races |  |  |   |  |  |  |  |  |
| White | 226554 (83.2%) | 3409373 (80.3%) | 2122 (80.9%) | 40961 (79.4%) | 1581 (83.0%) | 19644 (79.4%) | 1274 (83.9%) | 14134 (80.3%) |
| Black | 31695 (11.6%) | 484406 (11.4%) | 349 (13.3%) | 6274 (12.2%) | 230 (12.1%) | 2886 (11.7%) | 171 (11.3%) | 2000 (11.4%) |
| Other | 13574 (5.0%) | 309436 (7.3%) | 147 (5.6%) | 3919 (7.6%) | 89 (4.7%) | 1944 (7.9%) | 73 (4.8%) | 1263 (7.2%) |
| Unknow | 481 (0.2%) | 44230 (1.0%) | 6 (0.2%) | 439 (0.9%) | 5 (0.3%) | 279 (1.1%) | 1 (0.1%) | 206 (1.2%) |
| Age at dignosis |  |  |  |  |  |  |  |  |
| <40 | 657 (0.2%) | 164643 (3.9%) | 7 (0.3%) | 1817 (3.5%) | 5 (0.3%) | 971 (3.9%) | 1 (0.1%) | 696 (4.0%) |
| 40-69 | 67298 (24.7%) | 2390253 (56.3%) | 626 (23.9%) | 27126 (52.6%) | 409 (21.5%) | 13718 (55.4%) | 331 (21.8%) | 10417 (59.2%) |
| ≥70 | 204349 (75.0%) | 1692549 (39.8%) | 1991 (75.9%) | 22650 (43.9%) | 1491 (78.3%) | 10064 (40.7%) | 1187 (78.1%) | 6490 (36.9%) |
| AJCC stage |  |  |  |  |  |  |  |  |
| 0 | 1967 (0.7%) | 19665 (0.5%) | 27 (1.0%) | 190 (0.4%) | 9 (0.5%) | 145 (0.6%) | 9 (0.6%) | 108 (0.6%) |
| I | 60008 (22.0%) | 904000 (21.3%) | 553 (21.1%) | 9168 (17.8%) | 469 (24.6%) | 7066 (28.5%) | 408 (26.9%) | 5658 (32.1%) |
| II | 67679 (24.9%) | 980399 (23.1%) | 593 (22.6%) | 8324 (16.1%) | 573 (30.1%) | 6490 (26.2%) | 485 (31.9%) | 5566 (31.6%) |
| III | 28409 (10.4%) | 539054 (12.7%) | 371 (14.1%) | 9858 (19.1%) | 180 (9.4%) | 3775 (15.3%) | 133 (8.8%) | 2389 (13.6%) |
| IV | 21930 (8.1%) | 684115 (16.1%) | 313 (11.9%) | 14095 (27.3%) | 132 (6.9%) | 3060 (12.4%) | 60 (3.9%) | 1209 (6.9%) |
| Unknow | 92311 (33.9%) | 1120212 (26.4%) | 767 (29.2%) | 9958 (19.3%) | 542 (28.5%) | 4217 (17.0%) | 424 (27.9%) | 2673 (15.2%) |
| Multiple primary cancers |  |  |  |  |  |  |  |  |
| Yes | 57975 (21.3%) | 840406 (19.8%) | 549 (20.9%) | 10011 (19.4%) | 377 (19.8%) | 5338 (21.6%) | 330 (21.7%) | 3917 (22.3%) |
| No | 214329 (78.7%) | 3407039 (80.2%) | 2075 (79.1%) | 41582 (80.6%) | 528 (27.7%) | 19415 (78.4%) | 1189 (78.3%) | 13686 (77.7%) |
| Surgery |  |  |  |  |  |  |  |  |
| Yes | 142524 (52.3%) | 2228941 (52.5%) | 1247 (47.5%) | 20715 (40.2%) | 1079 (56.6%) | 14884 (60.1%) | 919 (60.5%) | 11639 (66.1%) |
| No | 123010 (45.2%) | 1926925 (45.4%) | 1344 (51.2%) | 30131 (58.4%) | 799 (41.9%) | 9527 (38.5%) | 579 (38.1%) | 5797 (32.9%) |
| Unknow | 6770 (2.5%) | 91579 (2.2%) | 33 (1.3%) | 747 (1.4%) | 27 (1.4%) | 342 (1.4%) | 21 (1.4%) | 167 (0.9%) |
| Chemotherapy |  |  |  |  |  |  |  |  |
| Yes | 38305 (14.1%) | 1332744 (31.4%) | 506 (19.3%) | 24581 (47.6%) | 257 (13.5%) | 8444 (34.1%) | 169 (11.1%) | 5173 (29.4%) |
| No/Unknown | 233999 (85.9%) | 2914701 (68.6%) | 2118 (80.7%) | 27012 (52.4%) | 1648 (86.5%) | 16309 (65.9%) | 1350 (88.9%) | 12430 (70.6%) |
| Radiotherapy |  |  |  |  |  |  |  |  |
| Yes | 64443 (23.7%) | 1303818 (30.7%) | 576 (22.0%) | 17095 (33.1%) | 398 (20.9%) | 7398 (29.9%) | 381 (25.1%) | 5493 (31.2%) |
| No/Unknown | 207861 (76.3%) | 2943627 (69.3%) | 2048 (78.0%) | 34498 (66.9%) | 1507 (79.1%) | 17355 (70.1%) | 1138 (74.9%) | 12110 (68.8%) |