**SUPPLEMENTARY MATERIALS**

**Use of alternative medicine for cancer and its impact on survival**

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**Supplementary Table 1. Patient characteristics of patients with breast, prostate, lung and colorectal cancer**

|  |  |  |
| --- | --- | --- |
| **Characteristics** | **Conventional Cancer Treatment, No. (%)** | **Alternative Medicine, No. (%)** |
| Total | 1,681,906 (99.98%) | 281 (0.02%) |
| Mean age (inter-quartile range) | 62 (55-70) | 60 (52-69) |
| Cancer Type |  |  |
| Breast | 644,864 (38.4%) | 123 (43.8%) |
| Prostate | 638,094 (37.9%) | 72 (25.6%) |
| Lung | 257,683 (15.3%) | 52 (18.5%) |
| Colorectal | 141,265 (8.4%) | 34 (12.1%) |
| Gender |  |  |
| Male | 861,985 (51.3%) | 122 (43.4%) |
| Female | 819,921 (48.7%) | 159 (56.6%) |
| Race |  |  |
| White | 1,334,020 (79.3%) | 217 (77.2%) |
| Black | 200,358 (11.9%) | 29 (10.3%) |
| Hispanic | 68,319 (4.1%) | 17 (6.1%) |
| Other | 79,209 (4.7%) | 18 (6.4%) |
| Income\* |  |  |
| <$48,000 | 641,602 (38.6%) | 85 (30.5%) |
| ≥$48,000 | 1,022,356 (61.4%) | 194 (69.5%) |
| Education† |  |  |
| <80% HSE | 606,823 (37.4%) | 75 (27.7%) |
| ≥80% HSE | 1,014,890 (62.6%) | 196 (72.3%) |
| Residence Setting |  |  |
| Metropolitan | 1,368,390 (84%) | 238 (87.4%) |
| Non-metropolitan | 261,236 (16%) | 34 (12.6%) |
| Geographic area |  |  |
| Northeast | 341,161 (20.9%) | 44 (16.7%) |
| South Atlantic | 367,532 (22.5%) | 33 (12.5%) |
| Midwest | 428,264 (26.3%) | 67 (25.5%) |
| South | 225,756 (13.8%) | 7 (2.7%) |
| Intermountain West | 71,560 (4.4%) | 34 (12.9%) |
| Pacific | 197,839 (12.1%) | 78 (29.7%) |
| Insurance Type |  |  |
| None | 37,689 (2.2%) | 12 (4.3%) |
| Private | 847,530 (50.4%) | 150 (53.4%) |
| Medicaid | 79,136 (4.7%) | 15 (5.3%) |
| Medicare | 670,590 (39.9%) | 87 (30.9%) |
| Government/Unknown | 46,961 (2.8%) | 17 (6.1%) |
| Facility Type |  |  |
| Community | 545,724 (37.2%) | 86 (37.2%) |
| Academic | 922,820 (62.8%) | 145 (62.8%) |
| Clinical Stage |  |  |
| I | 607,861 (35.9%) | 58 (20.6%) |
| II | 822,532 (48.6%) | 142 (50.4%) |
| III | 251,513 (14.8%) | 81 (28.7%) |
| Charlson-Deyo Comorbidity |  |  |
| 0 | 1,359,513 (80.8%) | 251 (89.3%) |
| 1 | 256,654 (15.3%) | 23 (8.2%) |
| ≥2 | 65,739 (3.9%) | 7 (2.5%) |

\* Income is expressed as median household income by zip code of residence. Abbreviations: HSE-High school education

† Education is expressed as the percentage of residents by zip code receiving a high school.

**Supplementary Table 2. Logistic regression of covariates associated with selection of alternative medicine**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Odds Ratio\* (95%CI)** | **P†** |
| Age, continuous | 0.99 (0.98-1.01) | 0.79 |
| Cancer Type |  |  |
| Prostate | 1.00 (Reference) |  |
| Breast | 2.56 (1.40-4.68) | 0.002 |
| Lung | 3.16 (1.85-5.40) | <0.001 |
| Colorectal | 1.60 (0.88-2.90) | 0.12 |
| Gender |  |  |
| Male | 1.00 (Reference) |  |
| Female | 1.02 (0.63-1.65) | 0.94 |
| Race |  |  |
| White | 1.00 (Reference) |  |
| Black | 1.29 (0.80-2.07) | 0.29 |
| Hispanic | 0.97 (0.50-1.89) | 0.94 |
| Other | 1.02 (0.59-1.76) | 0.93 |
| Income‡ |  |  |
| <$48,000 | 1.00 (Reference) |  |
| ≥$48,000 | 0.99 (0.70-1.42) | 0.96 |
| Education§ |  |  |
| <80% HSE | 1.00 (Reference) |  |
| ≥80% HSE | 1.46 (1.02-2.08) | 0.04 |
| Residence Setting |  |  |
| Metropolitan | 1.00 (Reference) |  |
| Non-metropolitan | 0.92 (0.60-1.41) | 0.72 |
| Geographic area |  |  |
| Northeast | 1.00 (Reference) |  |
| South Atlantic | 0.65 (0.38-1.12) | 0.12 |
| Midwest | 1.24 (0.82-1.87) | 0.32 |
| South | 0.26 (0.11-0.62) | 0.003 |
| Intermountain West | 3.09 (1.81-5.29) | <0.001 |
| Pacific | 3.16 (2.10-4.74) | <0.001 |
| Insurance Type |  |  |
| None | 1.00 (Reference) |  |
| Private | 0.79 (0.34-1.82) | 0.58 |
| Medicaid | 0.74 (0.28-1.98) | 0.55 |
| Medicare | 0.66 (0.27-1.58) | 0.35 |
| Government/Unknown | 1.41 (0.53-3.79) | 0.49 |
| Facility Type |  |  |
| Community | 1.00 (Reference) |  |
| Academic | 0.95 (0.71-1.26) | 0.70 |
| Clinical Stage |  |  |
| I | 1.00 (Reference) |  |
| II | 3.31 (2.21-4.95) | <0.001 |
| III | 3.87 (2.47-6.07) | <0.001 |
| Charlson-Deyo Comorbidity |  |  |
| 0 | 1.00 (Reference) |  |
| 1 | 0.52 (0.32-0.85) | 0.008 |
| ≥2 | 0.64 (0.28-1.46) | 0.27 |

\* Multivariate model. Abbreviations: CI=confidence interval; HSE=High school education.

† P values were calculated by a two-sided multivariable logistic regression

‡Income is expressed as median household income by zip code of residence

§Education is expressed as the percentage of residents by zip code receiving a high school