Supplementary Figure 1. Timeline of the study.

****

Supplementary Table 1. Definition and number of cancer types.

|  |  |  |
| --- | --- | --- |
| Cancer types | ICD-7 codes |  Number |
| Oral (upper aerodigestive tract) | 140, 141, 143-148, 161 |  13874(1.9%) |
| Salivary gland | 142 |  1284(0.2%) |
| Oesophageal | 150 |  6796(0.9%) |
| Stomach | 151 |  17571(2.4%) |
| Small intestine | 152 |  3315(0.5%) |
| Colon | 153 |  60712(8.3%) |
| Rectum | 154 (except 1541) |  31868(4.4%) |
| Anus | 1541 |  1725(0.2%) |
| Liver | 155, 156 |  16697(2.3%) |
| Pancreas | 157 |  17248(2.4%) |
| Nose | 160 |  946(0.1%) |
| Lung | 162, 163 |  57763(7.9%) |
| Breast | 170 |  87300(11.9%) |
| Cervix | 171 |  4143(0.6%) |
| Endometrium | 172 |  22253(3.0%) |
| Uterus | 173 |  6(0.0%) |
| Ovary | 175 |  12022(1.6%) |
| Other female genital | 176 |  3405(0.5%) |
| Prostate | 177 | 152624(20.8%) |
| Testis | 178 |  446(0.1%) |
| Other male genital | 179 |  1314(0.2%) |
| Kidney | 180 |  16721(2.3%) |
| Urinary bladder | 181 |  39584(5.4%) |
| Melanoma | 190 |  25137(3.4%) |
| Skin | 191 |  49455(6.8%) |
| Eye | 192 |  1600(0.2%) |
| Nervous system | 193 |  14334(2.0%) |
| Thyroid gland | 194 |  3142(0.4%) |
| Endocrine glands | 195 |  9397(1.3%) |
| Bone | 196 |  538(0.1%) |
| Connective tissue | 197 |  3742(0.5%) |
| Non-Hodgkin's lymphoma | 200, 202 |  32053(4.4%) |
| Hodgkin's lymphoma | 201 |  1176(0.2%) |
| Myeloma | 203 |  10161(1.4%) |
| Leukaemia | 204, 209 |  12549(1.7%) |

Supplementary Table 2. E-value

|  |  |  |
| --- | --- | --- |
| Cancer types | E-value for the point estimate | E-value for the upper CI |
| Oral (upper aerodigestive tract) | 1.96 | 1.60 |
| Salivary gland | 1.21 | 1.00 |
| Oesophageal | 5.33 | 2.97 |
| Stomach | 2.78 | 2.17 |
| Small intestine | 2.04 | 1.11 |
| Colon | 1.77 | 1.60 |
| Rectum | 2.17 | 1.92 |
| Anus | 2.00 | 1.00 |
| Liver | 4.57 | 3.11 |
| Pancreas | 6.12 | 3.68 |
| Nose | 1.28 | 1.00 |
| Lung | 2.45 | 2.08 |
| Breast | 1.60 | 1.46 |
| Cervix | 1.63 | 1.00 |
| Endometrium | 1.81 | 1.60 |
| Ovary | 2.72 | 2.12 |
| Other female genitals | 1.74 | 1.00 |
| Prostate | 1.96 | 1.88 |
| Testis | 1.74 | 1.00 |
| Other male genitals | 2.08 | 1.00 |
| Kidney | 2.08 | 1.70 |
| Urinary bladder | 1.56 | 1.39 |
| Melanoma | 2.12 | 1.88 |
| Skin | 1.56 | 1.39 |
| Eye | 2.21 | 1.00 |
| Nervous system | 1.16 | 1.00 |
| Thyroid gland | 1.96 | 1.11 |
| Endocrine glands | 1.21 | 1.00 |
| Connective tissue | 1.77 | 1.00 |
| Non-Hodgkin's lymphoma | 2.00 | 1.74 |
| Hodgkin's disease | 2.12 | 1.00 |
| Myeloma | 1.88 | 1.39 |
| Leukaemia | 1.81 | 1.32 |
| Smoking-related# | 1.96 | 1.85 |
| Non-smoking-related | 1.81 | 1.77 |
| All | 1.85 | 1.81 |