

Supplementary Online Content

Global Burden of Disease Cancer Collaboration. Global, regional, and national cancer incidence, mortality, years of life lost, years lived with disability, and disability-adjusted life years for 32 cancer groups, 1990 to 2015: a systematic analysis for the Global Burden of Disease Study 2015. *JAMA Oncology*. Published online December 1, 2016. doi:10.1001/jamaoncol.2016.5688

eAppendix. Definitions, data sources, mortality to incidence ratio estimation, modeling parameters, and other study methods

eTable 1. GATHER Guidelines checklist

eTable 2. Sources for cancer incidence and MI ratio data by country, year, and registry

eTable 3. Number of site years for cancer mortality data by type

eTable 4. List of International Classification of Diseases (ICD) codes mapped to the Global Burden of Disease cause list for cancer incidence data

eTable 5. List of International Classification of Diseases (ICD) codes mapped to the Global Burden of Disease cause list for cancer mortality data

eTable 6. Undefined cancer code categories (ICD-10) and respective target codes for cancer registry incidence data

eTable 7. Final MI ratio model selection

eTable 8. Socio-Demographic Index groupings by geography, based on 2015 values

eTable 9. Covariates selected for CODEm for each GBD cancer group and expected direction of covariate

eTable 10. Comparison of GBD 2013 and GBD 2015 covariates used and level of covariates

eTable 11. Results for CODEm model testing

eTable 12. Percent change before and after CoDCorrect by cancer for all ages, both sexes combined, 2015

eTable 13. Duration of four prevalence phases by cancer

eTable 14. Disability weights

eTable 15. Decomposition of trends in incidence by SDI quintile, both sexes, 2005 to 2015

eTable 16. Probability of developing cancer within selected age intervals, global, and by SDI quintile, by sex, 2010-2015 in % (odds)

eFigure 1. Flowchart GBD cancer mortality, YLL estimation

eFigure 2. Flowchart GBD cancer incidence, prevalence, YLD estimation

eFigure 3. Flowchart of algorithm used to adjust MI ratios

eFigure 4. Sociodemographic Index quintiles, 2015

eFigure 5. Percentage of deaths added to original ICD codes after redistribution of garbage codes, 2010, male

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eFigure 6. Percentage of deaths added to original ICD codes after redistribution of garbage codes, 2010, female

eFigure 7. Cancer ranking by total incidence based on global level for developing and developed regions and all countries, both sexes, 2015

eFigure 8. Cancer ranking by total mortality based on global level for developing and developed regions and all countries, both sexes, 2015

eFigure 9. Top ranked cancers by absolute incident cases for all ages in males, 2015

eFigure 10. Top ranked cancers by absolute incident cases for all ages in females, 2015

eFigure 11. Top ranked cancers by absolute deaths for all ages in males, 2015

eFigure 12. Top ranked cancers by absolute deaths for all ages in females, 2015

eFigure 13. Contribution of YLDs and YLLs to DALYs by cancer, global, both sexes, 2015

eFigure 14. Trends in Age-Standardized Incidence Rates for Esophageal Cancer, 1990-2015

eFigure 15. Trends in Age-Standardized Incidence Rates for Uterine Cancer, 1990-2015

eFigure 16. Trends in Age-Standardized Incidence Rates for Pancreatic Cancer, 1990-2015

eFigure 17. Trends in Age-Standardized Incidence Rates for Kidney Cancer, 1990-2015

eFigure 18. Trends in Age-Standardized Incidence Rates for Lip, and Oral Cavity Cancer, 1990-2015

eFigure 19. Trends in Age-Standardized Incidence Rates for Malignant Melanoma, 1990-2015

eFigure 20. Trends in Age-Standardized Incidence Rates for Thyroid Cancer, 1990-2015

eFigure 21. Trends in Age-Standardized Incidence Rates for Brain and Nervous System Cancer, 1990-2015

eFigure 22. Trends in Age-Standardized Incidence Rates for Ovarian Cancer, 1990-2015

eFigure 23. Trends in Age-Standardized Incidence Rates for Larynx Cancer, 1990-2015

eFigure 24. Trends in Age-Standardized Incidence Rates for Chronic Lymphoid Leukemia, 1990-2015

eFigure 25. Trends in Age-Standardized Incidence Rates for Acute Myeloid Leukemia, 1990-2015

eFigure 26. Trends in Age-Standardized Incidence Rates for Gallbladder and Biliary Tract Cancer, 1990-2015

eFigure 27. Trends in Age-Standardized Incidence Rates for Other Pharynx Cancer, 1990-2015

eFigure 28. Trends in Age-Standardized Incidence Rates for Acute Lymphoid Leukemia, 1990-2015

eFigure 29. Trends in Age-Standardized Incidence Rates for Multiple Myeloma, 1990-2015

eFigure 30. Trends in Age-Standardized Incidence Rates for Nasopharynx Cancer, 1990-2015

eFigure 31. Trends in Age-Standardized Incidence Rates for Hodgkin Lymphoma, 1990-2015

eFigure 32. Trends in Age-Standardized Incidence Rates for Testicular Cancer, 1990-2015

eFigure 33. Trends in Age-Standardized Incidence Rates for Chronic Myeloid Leukemia, 1990-2015

eFigure 34. Trends in Age-Standardized Incidence Rates for Mesothelioma, 1990-2015

eFigure 35. Trends in age-standardized incidence rates, other cancers, 1990–2015

This supplementary material has been provided by the authors to give readers additional information about their work.

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eAppendix

Definition of indicator	4
Data sources.....	4
Cancer incidence data sources.....	4
Mortality/Incidence ratio data sources	4
Cancer mortality data sources	4
Bias of categories of input data	4
Data analysis	5
Cancer registry data formatting.....	5
Mortality to incidence ratio estimation.....	6
Cause of death database formatting	8
CODEm models	8
CodCorrect	8
Incidence estimation.....	9
Prevalence and YLD estimation	9
Probability of cancer	10
References	11

eTable 1: GATHER Guidelines checklist.....	14
eTable 2: Sources for cancer incidence and MI ratio data by country, year, and registry	16
eTable 3: Number of site years for cancer mortality data by type	75
eTable 4: List of International Classification of Diseases (ICD) codes mapped to the Global Burden of Disease cause list for cancer incidence data.....	76
eTable 5: List of International Classification of Diseases (ICD) codes mapped to the Global Burden of Disease cause list for cancer mortality data	77
eTable 6: Undefined cancer code categories (ICD-10) and respective target codes for cancer registry incidence data.....	79
eTable 7: Final MI ratio model selection.....	80
eTable 8: Socio-Demographic Index groupings by geography, based on 2015 values.....	81
eTable 9: Covariates selected for CODEm for each GBD cancer group and expected direction of covariate	85
eTable 10: Comparison of GBD 2013 and GBD 2015 covariates used and level of covariates.....	120
eTable 11: Results for CODEm model testing.....	153
eTable 12: Percent change before and after CoDCorrect by cancer for all ages, both sexes combined, 2015	159
eTable 13: Duration of four prevalence phases by cancer	161
eTable 14: Disability weights	164
eTable 15: Decomposition of trends in incidence by SDI quintile, both sexes, 2005 to 2015.....	165
eTable 16: Probability of developing cancer within selected age intervals, global, and by SDI quintile, by sex, 2010-2015 in % (odds).....	174
eFigure 1: Flowchart GBD cancer mortality, YLL estimation	194
eFigure 2: Flowchart GBD cancer incidence, prevalence, YLD estimation	195
eFigure 3: Flowchart of algorithm used to adjust MI ratios	196
eFigure 4: Sociodemographic Index quintiles, 2015.....	197
eFigure 5: Percentage of deaths added to original ICD codes after redistribution of garbage codes, 2010, male	198
eFigure 6: Percentage of deaths added to original ICD codes after redistribution of garbage codes, 2010, female	199
eFigure 7: Cancer ranking by total incidence based on global level for developing and developed regions and all countries, both sexes, 2015	209
eFigure 8: Cancer ranking by total mortality based on global level for developing and developed regions and all countries, both sexes, 2015	217
eFigure 9: Top ranked cancers by absolute incident cases for all ages in males, 2015.....	218
eFigure 10: Top ranked cancers by absolute incident cases for all ages in females, 2015.....	219
eFigure 11: Top ranked cancers by absolute deaths for all ages in males, 2015.....	220
eFigure 12: Top ranked cancers by absolute deaths for all ages in females, 2015	221
eFigure 13: Contribution of YLDs and YLLs to DALYs by cancer, global, both sexes, 2015.....	222
eFigure 14: Trends in Age-Standardized Incidence Rates for Esophageal Cancer, 1990-2015	223
eFigure 15: Trends in Age-Standardized Incidence Rates for Uterine Cancer, 1990-2015.....	224
eFigure 16: Trends in Age-Standardized Incidence Rates for Pancreatic Cancer, 1990-2015.....	225
eFigure 17: Trends in Age-Standardized Incidence Rates for Kidney Cancer, 1990-2015.....	226

eFigure 18: Trends in Age-Standardized Incidence Rates for Lip, and Oral Cavity Cancer, 1990-2015.....	227
eFigure 19: Trends in Age-Standardized Incidence Rates for Malignant Melanoma, 1990-2015	228
eFigure 20: Trends in Age-Standardized Incidence Rates for Thyroid cancer, 1990-2015	229
eFigure 21: Trends in Age-Standardized Incidence Rates for Brain and Nervous System Cancer, 1990-2015	230
eFigure 22: Trends in Age-Standardized Incidence Rates for Ovarian Cancer, 1990-2015	231
eFigure 23: Trends in Age-Standardized Incidence Rates for Larynx Cancer, 1990-2015	232
eFigure 24: Trends in Age-Standardized Incidence Rates for Chronic Lymphoid Leukemia, 1990-2015 .	233
eFigure 25: Trends in Age-Standardized Incidence Rates for Acute Myeloid Leukemia, 1990-2015	234
eFigure 26: Trends in Age-Standardized Incidence Rates for Gallbladder and Biliary Tract Cancer, 1990-2015	235
eFigure 27: Trends in Age-Standardized Incidence Rates for Other Pharynx Cancer, 1990-2015	236
eFigure 28: Trends in Age-Standardized Incidence Rates for Acute Lymphoid Leukemia, 1990-2015	237
eFigure 29: Trends in Age-Standardized Incidence Rates for Multiple Myeloma, 1990-2015	238
eFigure 30: Trends in Age-Standardized Incidence Rates for Nasopharynx Cancer, 1990-2015.....	239
eFigure 31: Trends in Age-Standardized Incidence Rates for Hodgkin Lymphoma, 1990-2015.....	240
eFigure 32: Trends in Age-Standardized Incidence Rates for Testicular Cancer, 1990-2015	241
eFigure 33: Trends in Age-Standardized Incidence Rates for Chronic Myeloid Leukemia, 1990-2015	242
eFigure 34: Trends in Age-Standardized Incidence Rates for Mesothelioma, 1990-2015	243
eFigure 35: Trends in age-standardized incidence rates, other cancers, 1990–2015	244

Definition of indicator

In this publication estimates for 32 cancer groups, for both sexes, for the time from 1990 to 2015 and for the 5-year GBD age groups (0-5; 5-9; etc. until 85+) are presented for 195 countries or territories. All ICD9 codes pertaining to cancer (140-209) and ICD10 (C00-C96) except for Kaposi sarcoma (ICD10: C46) and non-melanoma skin cancer (ICD10: C44) are being included in these estimates. eTable 4 and eTable 5 list all ICD codes and their respective GBD cause. Countries and territories reported can be found in eTable 8.

Data sources

Cancer incidence data sources

Cancer incidence was sought from individual cancer registries or aggregated databases of cancer registry data like “Cancer Incidence In Five Continents” (CI5),¹⁻¹⁰ EUREG,¹¹ or NORDCAN¹². Data was excluded if they were not representative of the coverage population (e.g. hospital based registries), if they did not cover all malignant neoplasms as defined in ICD9 (140-208) or ICD10 (C00-C96) (e.g. specialty cancer registry), if they did not include data for both sexes and all age groups, if the data were limited to years prior to 1980, or if the source did not provide details on the population covered. Preference was given to registries with national coverage over those with only local coverage, except those from countries where the GBD study provides sub-national estimates. A list of the cancer registries included in our analysis and the years covered can be found in eTable 2. Additional metadata for each source is available in the online GBD citation tool <http://ghdx.healthdata.org/gbd-2015-data-citations>.

Mortality/Incidence ratio data sources

Most cancer registries only report cancer incidence. However, if a cancer registry also reported cancer mortality, mortality data were also extracted from the source to be used in the mortality to incidence estimation. In the case when high quality mortality data was available but not reported by the registry, processed (post-redistribution) vital registration mortality data from the cause of death database was matched to the registry’s incidence data. This was the case for certain registries in the following countries: Australia, Austria, Belgium, Bulgaria, Switzerland, Denmark, Estonia, Finland, Hungary, Ireland, Iceland, South Korea, Norway, and New Zealand.

Cancer mortality data sources

A detailed description of the data sources and processing steps for the cause of death database can be found in the appendix to the GBD 2015 “Global, regional, and national life expectancy, all-cause and cause-specific mortality for 249 causes of death, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015.”¹³

Bias of categories of input data

Bias of the input data included for the COD database is described elsewhere.¹³ Cancer registry data can be biased in multiple ways. A high proportion of ill-defined cancer cases in the registry data requires redistribution of these cases to other cancers, which introduces a potential for bias. Changes between coding systems can lead to artificial differences in disease estimates; however, we adjust for this bias by mapping the different coding systems to the GBD causes. Underreporting of cancers that require advanced diagnostic techniques (e.g. leukemia, brain, pancreatic, and liver cancer) can be an issue in cancer registries from low income countries. On the other hand, misclassification of metastatic sites as primary cancer can lead to overestimation of cancer sites that are common sites for metastases like brain or liver. Since many cancer registries are located in urban areas, the representativeness of the

registry for the general population can also be problematic. The accuracy of mortality data reported in cancer registries usually depends on the quality of the vital registration system. If the vital registration system is incomplete or of poor quality the mortality to incidence ratio can be biased to lower ratios.

Data analysis

Flowcharts describing the conceptual overview of the data processing are available in eFigure 1 and eFigure 2.

Cancer registry data formatting

Cancer registry data went through multiple processing steps before integration with the COD database. First, the original data were transformed into standardized files, which included standardization of format, categorization, and registry names (#1 in eFigure 1).

Second, some cancer registries report individual codes as well as aggregated totals (e.g. C18, C19, and C20 are reported individually but the aggregated group of C18-C20 (colorectal cancer) is also reported in the registry data). The data processing step “subtotal recalculation” (#2 in flowchart) verifies these totals and subtracts the values of any individual codes from the aggregates.

In the third step (#3 in the flowchart), cancer registry incidence data and cancer registry mortality data are mapped to GBD causes. A different map is used for incidence and for mortality data because of the assumption that there are no deaths for certain cancers. One example is basal cell carcinoma of the skin. In the cancer registry incidence data basal cell carcinoma is mapped to non-melanoma skin cancer (basal cell carcinoma). However, if basal cell skin cancer is recorded in the cancer registry mortality data, the deaths are instead mapped to non-melanoma skin cancer (squamous cell carcinoma) under the assumption that they were indeed misclassified squamous cell skin cancers. Other examples are benign or in situ neoplasms. Benign or in situ neoplasms found in the cancer registry incidence dataset were simply dropped from that dataset. The same neoplasms reported in a cancer registry mortality dataset were mapped to the respective invasive cancer (e.g. melanoma in situ in the cancer registry incidence dataset was dropped from the dataset; melanoma in situ in the cancer registry mortality dataset was mapped to melanoma). Mapping for incidence and mortality data can be found in eTable 4. Of note, chronic lymphoid leukemia and acute lymphoid leukemia are being reported as individual causes for GBD 2015 and are part of the parent group “leukemia” and not “Non-Hodgkin lymphoma”(NHL) as in prior GBD studies. This is different than what has been proposed in the most recent InterLymph classification where CLL and ALL are categorized under NHL.¹⁴

In the fourth data processing step (#4 in the flowchart) cancer registry data were standardized to the GBD age groups. Age-specific incidence rates were generated using CI5, SEER, and NORDCAN data, while age-specific mortality rates were generated from the CoD data.¹³ Age-specific weights were then generated by applying the age-specific rates to a given registry population that required age-splitting to produce the expected number of cases/deaths for that registry by age. The expected number of cases/deaths for each sex, age, and cancer were then normalized to 1, creating final, age-specific proportions. These proportions were then applied to the total number of cases/deaths by sex and cancer to get the age-specific number of cases/deaths.

In the rare case that the cancer registry only contained data for both sexes combined, the age-specific cases/deaths were split and re-assigned to separate sexes using the same weights that are used for the age-splitting process. Starting from the expected number of deaths, proportions were generated by sex for each age (e.g. if for ages 15-19 years old there are 6 expected deaths for males and 4 expected

deaths for females, then 60% of the combined-sex deaths for ages 15-19 years would be assigned to males and the remaining 40% would be assigned to females).

In the fifth step (#5 in the flowchart) data for cause entries that are aggregates of GBD causes were redistributed. Examples of these aggregated causes include some registries reporting ICD10 codes C00-C14 together as, “lip, oral cavity, and pharyngeal cancer.” These groups were broken down into subcauses that could be mapped to single GBD causes. In this example, those include lip and oral cavity cancer (C00-C08), nasopharyngeal cancer (C11), cancer of other parts of the pharynx (C09-C10, C12-C13), and “Malignant neoplasm of other and ill-defined sites in the lip, oral cavity and pharynx” (C14). To redistribute the data, weights were created using the same method employed in age-sex splitting (see step four above). For the undefined code (C14 in the example) an “average all cancer” weight was used, which was generated by adding all cases from SEER/NORDCAN/C15 and dividing those by the combined population. Then, proportions were generated by subcause for each aggregate cause as in the sex splitting example above (see step four). The total number of cases from the aggregated group (C00-C14) was recalculated for each subgroup and the undefined code (C14). C14 was then redistributed as a “garbage code” in step six. Distinct proportions were used for C46 (Kaposi sarcoma). C46 entries were redistributed as “other cancer”, and HIV.

In the sixth step (#6 in the flowchart) unspecified code (“garbage code”) was redistributed. Redistribution of cancer registry incidence and mortality data mirrored the process of the redistribution used in the cause of death database and has not changed compared to GBD 2013.¹³ eFigure 5 and eFigure 6 show an example of the increase in cancer deaths after redistribution of different types of garbage codes.

In the seventh step (#7 in the flowchart) duplicate or redundant sources were removed from the processed cancer registry dataset. Duplicate sources were present if, for example, the cancer registry was part of the CI5 dataset but we also had data from the registry directly. Redundancies occurred and were removed as described in “Inclusion and Exclusion Criteria,” where more detailed data were available, or when national registry data could replace regionally representative data. From here, two parallel selection processes were run to generate input data for the MI models and to generate incidence for final mortality estimation. Higher priority was given to registry data from the most standardized source when creating the final incidence input (generally CI5 data); whereas preference was given to registry data from sources with matching mortality and incidence for the MI model input.

Mortality to incidence ratio estimation

In the eighth step (#8 in the flowchart) the processed incidence and mortality data from cancer registries were matched by cancer, age, sex, year, and location to generate MI ratios. Because some cancer registries do not report mortality data – even though high quality vital registration system data are available to the registry’s coverage area –processed vital registration mortality data from the CoD database was matched to the registry’s incidence data for some countries. This was the case for certain registries in the following countries: Australia, Austria, Belgium, Bulgaria, Switzerland, Denmark, Estonia, Finland, Hungary, Ireland, Iceland, South Korea, Norway, and New Zealand.

The ninth step involved creating and selecting the MI models. Multiple logit random effect models were created. All models were run separately by cancer, and the best model was selected from the following list.

1. $\text{logit}(MI\ ratio_{c,a,s,t}) = \alpha + \beta_1 SDI_{c,t} + \sum_a^A \beta_2 I_a + \beta_3 I_s + \theta_c + \epsilon_{c,a,s,t}$
2. $\text{logit}(MI\ ratio_{c,a,s,t}) = \alpha + \beta_1 SDI_{c,t} + \sum_a^A \beta_2 I_a + \beta_3 I_s + \beta_4 t + \theta_c + \epsilon_{c,a,s,t}$
3. $\text{logit}(MI\ ratio_{c,a,s,t}) = \alpha + \beta_1 SDI_{c,t} + \sum_a^A \beta_2 I_a + \beta_3 I_s + \beta_4 DS + \theta_c + \epsilon_{c,a,s,t}$

4. $\text{logit}(MI\ ratio_{c,a,s,t}) = \alpha + \beta_1 SDI_{c,t} + \sum_a^A \beta_2 I_a + \beta_3 I_s + \beta_4 DS + \beta_5 t + \theta_c + \epsilon_{c,a,s,t}$
5. $\text{logit}(MI\ ratio_{c,a,s,t}) = \alpha + \beta_1 SDI_{c,t} + \sum_a^A \beta_2 I_a + \beta_3 I_s + \theta_c + \lambda_{SR}(SDS_{c,t}) + \beta_4 t + \epsilon_{c,a,s,t}$
6. $\text{logit}(MI\ ratio_{c,a,s,t}) = \alpha + \beta_1 SDI_{c,t} + \sum_a^A \beta_2 I_a + \beta_3 I_s + \theta_c + \lambda_{SR}(SDS_{c,t}) + \epsilon_{c,a,s,t}$
7. $\text{logit}(MI\ ratio_{c,a,s,t}) = \alpha + \beta_1 SDI_{c,t} + \sum_a^A \beta_2 I_a + \beta_3 I_s + \theta_c + \lambda_{SR}(SDS_{c,t}) + \beta_4 DS + \epsilon_{c,a,s,t}$
8. $\text{logit}(MI\ ratio_{c,a,s,t}) = \alpha + \beta_1 SDI_{c,t} + \sum_a^A \beta_2 I_a + \beta_3 I_s + \theta_c + \lambda_{SR}(SDS_{c,t}) + \beta_4 t + \beta_5 DS + \epsilon_{c,a,s,t}$

c: country, a: age group, t: time (years); s: sex

SDI: Socio-demographic index (index using log lag dependent income per capita (LDI), average educational attainment in the population over age 15, and total fertility rate (TFR))

I: indicator variable

DS: binary variable for development status

θ_c : random effect by country (intercept)

$\lambda_{SR}(SDI_c, t)$: random effect modifier between SDI and superregion (slope)

$\epsilon_{c,a,s,t}$: error term

All models were tested at multiple stages before creating the final model output. Models were initiated with SDI (Socio-Demographic Index) as covariate and first tested using the complete input dataset.¹³ If after that initial test the SDI covariate's coefficient was negative (as expected), the next step was to outlier any data point for which the residual from the prediction was greater than three times the MAD from the mean residual. Next, data were marked as outliers due to a random effect criterion: if the country-level random effect for a developing country was lower than the random effect for the USA, all data points for that country were marked as outliers. The rationale of choosing the US was that the MI ratio is expected to be lower in the US compared to a developing country. This process was run iteratively until all developing countries had country-level random effects greater than that of the USA. All data points marked outliers were dropped from the final dataset, and that dataset was used to create the final model predictions.

If the SDI coefficient was found to be positive (unexpected) after the initial SDI test, it was assumed to indicate an excess of unrealistic data in the input dataset. To remove these unrealistic data, SDI was temporarily removed from the model formula. The model proceeded as above without SDI until all unrealistic data points were removed and the SDI coefficient was found to be negative. Unrealistic data were marked as outliers using the same residual MAD and random effect methodology described above. Once SDI was established as negative (expected) the model proceeded as usual.

To select the best model formula, the initial model results were tested by comparing mean MI predictions and the mean root-mean-squared error (RMSE) values of 10 random samples of 80%/20% splits from the input dataset. Mean MI predictions were compared between developing and developed countries. Models were eliminated if the mean MI for developed countries was higher than the mean MI ratio for developing countries. For RMSE testing, the dataset was split into an 80% dataset for model development and a 20% dataset for model testing. The process was repeated 10 times. The best model for each cancer was selected based on the lowest mean out-of sample RMSE from those models remaining after checking the mean MI. eTable 7 contains the final models selected for each cancer. Once the best models were selected, data points were manually outliered based on the results of the first run of the model algorithm. Data points were outliered if they clearly influenced the model in an unrealistic way. For example, a data point was marked as an outlier if it created a single-year, single age

group spike in model predictions. This was mainly the case in countries with a small number of cases or deaths, or in age groups with small numbers of cases or deaths. Manual outliers were removed from the input dataset prior to initiating the second run of the model algorithm.

After best models were selected, all final outliers were dropped from the data input, and final linear predictions were created, the final linear predictions and residuals were used as input for space-time smoothing. Space-time smoothing is a spatiotemporal regression to smooth residuals over space, time, and age.¹⁵ The weighted residuals were added to the linear model predictions and used as priors for the third stage, a Gaussian process regression (GPR) implementing a Matern covariance function.^{16,17} GPR is a nonparametric technique for interpolating non-linear trends that has been used extensively in the estimation of time series data. Final MI ratio predictions with 95% uncertainty intervals were obtained by back-transforming 1000 draws from the posterior distribution.

Step 9 has undergone a revision compared to the GBD 2010 and GBD 2013. Whereas in GBD 2010 and GBD 2013 only one model was used to predict all MI ratios, for GBD 2015 we generated multiple models and chose a best model based on out-of sample validation. Another major difference is that LDI (lagged distributed income) was used as a covariate, which was replaced by SDI (Socio-demographic index) for GBD 2015.

Final MI ratios were matched with the cancer registry incidence dataset in the ninth step (#10 in the flowchart) to generate mortality estimates ($\text{Incidence} * \text{Mortality/Incidence} = \text{Mortality}$). Only the mean of estimated MI ratios was used to transform the incidence data to mortality estimates due to the current inability in the COD database to incorporate uncertainty other than sample size and representativeness. This leads to an underestimation of the uncertainty for the incidence based mortality estimates from cancer registries. The final mortality estimates were then uploaded into the COD database (#11 in the flowchart).

Cause of death database formatting

Formatting of data sources for the cause of death database has been described in detail elsewhere.¹³

CODEm models

Mortality estimates for each cancer were generated using CODEm. Methods describing the CODEm approach have been described elsewhere.^{13,18} In brief, the CODEm modeling approach is based on the principles that all types of available data should be used even if data quality varies; that individual models but also ensemble models should be tested for their predictive validity; and that the best model or sets of models should be chosen based on the out of sample predictive validity. Models were run separately for countries with extensive, and complete vital registration data and countries with less VR data to prevent an inflation in the uncertainty around the estimates in “data-rich” countries. Covariates were selected based on a possible predictive relationship between the covariate and the specific cancer mortality. Level 1 covariates have a proven strong relationship with the outcome such as etiological or biological roles. Level 2 covariates have a strong relationship but not a direct biological link. Covariates, which are more distal in the causal chain or are mediated through level 1 or 2 covariates are categorized as level 3.¹⁸ Differences in covariate selection between GBD 2013 and GBD 2015 by cause and direction of the covariate can be found in eTable 10.

CodCorrect

CODEm models estimate the individual cause level mortality without taking into account the all-cause mortality. To ensure that all single causes add up to the all-cause mortality and that all child-causes add

up to the parent cause, an algorithm called “CodCorrect” is being used. Details regarding the algorithm can be found elsewhere.¹³

Incidence estimation

GBD cancer incidence estimates were generated by dividing final mortality estimates (after CodCorrect adjustment) by the MI ratio for the specific cancer (step 1 in eFigure 2). To propagate uncertainty from the MI ratios and the mortality estimates to incidence this process was done at the 1000 draw level. It was assumed that uncertainty in the MI ratio is independent of uncertainty in the estimated age-specific death rates.

Prevalence and YLD estimation

Prevalence is estimated as 10-year prevalence for all cancers as in GBD 2013.¹⁹ To estimate cancer prevalence, relative cancer survival was estimated by scaling cancer specific survival between a “best case” and “worst case” survival. The methods and input data used to generate the best and worst case survival as well as to scale countries between these boundaries remained the same as for the GBD 2013 study (step 2, 3, and 5 in the flowchart).¹⁹ Since leukemia subtypes were added for GBD 2015, survival data was updated using SEER 1973 survival data for leukemia subtypes as the worst case scenario and SEER 2010 survival data for the leukemia subtypes as the best case survival. To transform relative to absolute survival (adjusting for background mortality) GBD 2015 lifetables were used (step 6 and 7 in the flowchart).¹³ The access to cancer care variable to scale countries between the best and worst case survival was estimated using the same method as for GBD 2013 (step 4 in the flowchart):¹⁹

$$\text{Access to care} = 1 - \frac{\text{Age standardized MI ratio}_{cys} - \text{Age standardized MI ratio}_{min}}{\text{Age standardized MI ratio}_{max} - \text{Age standardized MI ratio}_{min}}$$

c=country; y=year; s=sex; Age-standardized MI ratio_{min}=lowest MI ratio for all countries and years; Age standardized MI ratio_{max}=highest MI ratio for all countries and years

Duration of the treatment phases (1. diagnosis and primary therapy; 2. Controlled phases; 3. Metastatic phase; 4. Terminal phase) remained the same as for GBD 2013 with the exception of the leukemia subtypes, which were added for GBD 2015 (eTable 13). Total prevalence time was divided into phase 1; 3; and 4. for the population that died within 10 years, and the remaining prevalence was attributed to the controlled phase. For the population that survived beyond 10 years, prevalence person time was attributed to phase 1, and phase 2. YLDs were calculated by multiplying each phase with the respective disability weight (eTable 14). To generate the total YLDs for each cancer (with the exception of cancers where additional disability is added due to procedures – see next paragraph) the YLDs for each cancer sequela were added (step 13 in eFigure 2).

Additional disability was estimated for breast cancer (disability due to mastectomy), larynx cancer (disability due to laryngectomy), colon and rectum cancer (disability due to stoma), bladder cancer (disability due to incontinence), and prostatectomy (disability due to incontinence and impotence) (Step 10 in eFigure 2). Hospital data were used to estimate the number of cancer patients undergoing mastectomy, laryngectomy, stoma, prostatectomy and cystectomy. These proportions remained the same as in GBD 2013 and were used as input for proportion models that were run in Dismod-MR 2.0.^{19,20} The procedure proportions (proportion of cancer population that undergoes procedures) from hospital data was used as input for a proportion model in Dismod-MR 2.0 in order to estimate the proportions for all locations, by age, and by sex. These final procedure proportions were applied to the incidence

cases of the respective cancers to determine the incident cases of the cancer population that underwent procedures. Since colostomy or ileostomy procedures are done for reasons other than cancer a literature review was done to determine the proportion of ostomies due to colorectal cancer. The “all cause” colostomy proportions were multiplied by 0.58 based on the results of the literature review showing that on average 58% of ostomies are done for colorectal cancer.^{21–23} These incident cases of cancer patients having experienced the specific procedures were used again as an input for DisMod-MR 2.0 with a remission specification of zero and the cause specific mortality of the specific cancer to obtain prevalence of the procedure. By using the cause specific mortality the simplifying assumption was made that survival for cancer patients undergoing procedures is the same as for cancer patients who do not need a procedure. Since disability associated with prostatectomy comes from impotence and incontinence and not from the prostatectomy itself 18% of the prostatectomy prevalence was assumed to be incontinent and 55% was assumed to be impotent based on a literature review done for GBD 2013.^{24–31} Since all healthstates within a cause need to be mutually exclusive, the controlled phase for the cancers with additional procedure related disability was adjusted to only include the population without procedure related disability (= controlled phases prevalence of the total population– controlled phase prevalence of the proportion that experienced procedure related disability) (step 11 in eFigure 2). Lastly, the procedure sequelae prevalence was multiplied with disability weights for the procedures to obtain the number of YLDs (step 12 in the flowchart). These YLDs were then added to the YLDs for the specific cancer for the general sequelae to determine the total disability associated with each cancer (step 14 in the flowchart).

Probability of cancer

The cumulative probability of developing cancer for certain age groups and an approximated lifetime risk for all cancer groups (age 0 to 79) as well as the odds of developing cancer for 2015 were calculated. The method use does not take into account competing risks of death. The cancer risk is approximated using the following formula³²:

$$\text{Cumulative risk} = 1 - e^{-\text{cumulative rate}}$$

References

1. Doll R, Payne P, Waterhouse J. *Cancer Incidence in Five Continents I*. Geneva: Union Internationale Contre le Cancer; 1966.
2. Doll R, Muir C, Waterhouse J. *Cancer Incidence in Five Continents II*. Geneva: Union Internationale Contre le Cancer, Geneva; 1970.
3. Waterhouse J, Muir C, Correa P, Powell J. *Cancer Incidence in Five Continents III*. Lyon: IARC; 1976.
4. Waterhouse J, Muir C, Shanmugaratnam K, Powell J. *Cancer Incidence in Five Continents IV*. Lyon: IARC; 1982.
5. Muir C, Mack T, Powell J, Whelan S. *Cancer Incidence in Five Continents V*. Lyon: IARC; 1987.
6. Parkin D, Muir C, Whelan S, Gao Y, Ferlay J, Powell J. *Cancer Incidence in Five Continents VI*. Lyon: IARC; 1992.
7. Parkin D, Whelan S, Ferlay J, Raymond L, Young J. *Cancer Incidence in Five Continents VII*. Lyon: IARC; 1997.
8. Parkin D, Whelan S, Ferlay J, Teppo L, Thomas D. *Cancer Incidence in Five Continents VIII*. Lyon: IARC; 2002.
9. Curado M, Edwards B, Shin H, et al. *Cancer Incidence in Five Continents IX*. Lyon: IARC; 2007. <http://www.iarc.fr/en/publications/pdfs-online/epi/sp160/CI5vol9-A.pdf>.
10. Forman D, Bray F, Brewster D, et al. Cancer Incidence in Five Continents X. <http://ci5.iarc.fr>. Published 2013.
11. Steliarova-Foucher E, O'Callaghan M, Ferlay J, Masuyer E, Forman D, Comber H, Bray F. European Cancer Observatory: Cancer Incidence, Mortality, Prevalence and Survival in Europe. International Agency for Research on Cancer. <http://eco.iarc.fr>. Accessed August 10, 2016.
12. Engholm G, Ferlay J, Christensen N, et al. NORDCAN--a Nordic tool for cancer information, planning, quality control and research. *Acta Oncol*. 2010;49(5):725-736. doi:10.3109/02841861003782017.
13. GBD Mortality and Causes of Death Collaborators. Global, regional, and national life expectancy, all-cause and cause specific mortality for 249 causes of death, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015. *The Lancet*. August 2016.
14. Turner JJ, Morton LM, Linet MS, et al. InterLymph hierarchical classification of lymphoid neoplasms for epidemiologic research based on the WHO classification (2008): update and future directions. *Blood*. 2010;116(20):e90-e98. doi:10.1182/blood-2010-06-289561.
15. Wang H, Dwyer-Lindgren L, Lofgren KT, et al. Age-specific and sex-specific mortality in 187 countries, 1970–2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*. 2012;380(9859):2071-2094. doi:10.1016/S0140-6736(12)61719-X.

16. Murray CJ, Rosenfeld LC, Lim SS, et al. Global malaria mortality between 1980 and 2010: a systematic analysis. *The Lancet*. 2012;379(9814):413-431. doi:10.1016/S0140-6736(12)60034-8.
17. Rasmussen CE, Williams CKI. *Gaussian Processes for Machine Learning*. Cambridge, Mass: MIT Press; 2006.
18. Foreman KJ, Lozano R, Lopez AD, Murray CJ. Modeling causes of death: an integrated approach using CODEm. *Popul Health Metr*. 2012;10(1):1. doi:10.1186/1478-7954-10-1.
19. Fitzmaurice C, Dicker D, Pain A, et al. The Global Burden of Cancer 2013. *JAMA Oncol*. May 2015. doi:10.1001/jamaoncol.2015.0735.
20. Flaxman AD, Vos T, Murray C. *An Integrative MetaRegression Framework for Descriptive Epidemiology*. University of Washington Press; 2015.
21. Canova C, Giorato E, Roveron G, Turrini P, Zanotti R. Validation of a stoma-specific quality of life questionnaire in a sample of patients with colostomy or ileostomy. *Colorectal Dis Off J Assoc Coloproctology G B Irel*. 2013;15(11):e692-698. doi:10.1111/codi.12324.
22. Caricato M, Ausania F, Ripetti V, Bartolozzi F, Campoli G, Coppola R. Retrospective analysis of long-term defunctioning stoma complications after colorectal surgery. *Colorectal Dis Off J Assoc Coloproctology G B Irel*. 2007;9(6):559-561. doi:10.1111/j.1463-1318.2006.01187.x.
23. Erwin-Toth P, Thompson SJ, Davis JS. Factors impacting the quality of life of people with an ostomy in North America: results from the Dialogue Study. *J Wound Ostomy Cont Nurs Off Publ Wound Ostomy Cont Nurses Soc WOCN*. 2012;39(4):417-422-424. doi:10.1097/WON.0b013e318259c441.
24. Catalona WJ, Carvalhal GF, Mager DE, Smith DS. Potency, continence and complication rates in 1,870 consecutive radical retropubic prostatectomies. *J Urol*. 1999;162(2):433-438.
25. Donnellan SM, Duncan HJ, MacGregor RJ, Russell JM. Prospective assessment of incontinence after radical retropubic prostatectomy: objective and subjective analysis. *Urology*. 1997;49(2):225-230. doi:10.1016/S0090-4295(96)00451-7.
26. Eastham JA, Kattan MW, Rogers E, et al. Risk factors for urinary incontinence after radical prostatectomy. *J Urol*. 1996;156(5):1707-1713.
27. Kundu SD, Roehl KA, Eggener SE, Antenor JAV, Han M, Catalona WJ. Potency, continence and complications in 3,477 consecutive radical retropubic prostatectomies. *J Urol*. 2004;172(6 Pt 1):2227-2231.
28. Potosky AL, Davis WW, Hoffman RM, et al. Five-Year Outcomes After Prostatectomy or Radiotherapy for Prostate Cancer: The Prostate Cancer Outcomes Study. *JNCI J Natl Cancer Inst*. 2004;96(18):1358-1367. doi:10.1093/jnci/djh259.
29. Sacco E, Prayer-Galetti T, Pinto F, et al. Urinary incontinence after radical prostatectomy: incidence by definition, risk factors and temporal trend in a large series with a long-term follow-up. *BJU Int*. 2006;97(6):1234-1241. doi:10.1111/j.1464-410X.2006.06185.x.

30. Stanford JL, Feng Z, Hamilton AS, et al. Urinary and sexual function after radical prostatectomy for clinically localized prostate cancer: the Prostate Cancer Outcomes Study. *JAMA*. 2000;283(3):354-360.
31. Walsh PC, Marschke P, Ricker D, Burnett AL. Patient-reported urinary continence and sexual function after anatomic radical prostatectomy. *Urology*. 2000;55(1):58-61.
32. Esteve J, Benhamou E, Raymond L. *Descriptive Epidemiology*. Vol VI. IARC Scientific Publications No.128. Lyon, France: IARC Publications; 1994.
33. Neal RD, Din NU, Hamilton W, et al. Comparison of cancer diagnostic intervals before and after implementation of NICE guidelines: analysis of data from the UK General Practice Research Database. *Br J Cancer*. 2014;110(3):584-592. doi:10.1038/bjc.2013.791.
34. *Surveillance, Epidemiology, and End Results (SEER) Program (Www.seer.cancer.gov) SEER*Stat Database: Incidence - SEER 18 Regs Research Data + Hurricane Katrina Impacted Louisiana Cases, Nov 2012 Sub (1973-2010 Varying) - Linked To County Attributes - Total U.S., 1969-2011 Counties, National Cancer Institute, DCCPS, Surveillance Research Program, Surveillance Systems Branch, Released April 2013, Based on the November 2012 Submission.*
35. Allgar VL, Neal RD. Delays in the diagnosis of six cancers: analysis of data from the National Survey of NHS Patients: Cancer. *Br J Cancer*. 2005;92(11):1959-1970. doi:10.1038/sj.bjc.6602587.
36. Neal RD, Cannings-John R, Hood K, et al. Excision of malignant melanomas in North Wales: effect of location and surgeon on time to diagnosis and quality of excision. *Fam Pract*. 2008;25(4):221-227. doi:10.1093/fampra/cmn036.
37. Nolan RC, Chan MT-L, Heenan PJ. A clinicopathologic review of lethal nonmelanoma skin cancers in Western Australia. *J Am Acad Dermatol*. 2005;52(1):101-108. doi:10.1016/j.jaad.2004.08.016.
38. Kewalramani T, Nimer SD, Zelenetz AD, et al. Progressive disease following autologous transplantation in patients with chemosensitive relapsed or primary refractory Hodgkin's disease or aggressive non-Hodgkin's lymphoma. *Bone Marrow Transplant*. 2003;32(7):673-679. doi:10.1038/sj.bmt.1704214.
39. Esteban D, Tovar N, Jiménez R, et al. Patients with relapsed/refractory chronic lymphocytic leukaemia may benefit from inclusion in clinical trials irrespective of the therapy received: a case-control retrospective analysis. *Blood Cancer J*. 2015;5:e356. doi:10.1038/bcj.2015.78.

eTable 1: GATHER Guidelines checklist

Objectives and funding	Reported in the manuscript/appendix
1 Define the indicator(s), populations (including age, sex, and geographic entities), and time period(s) for which estimates were made.	See appendix: "Definition of indicator"
2 List the funding sources for the work.	See main manuscript
Data Inputs	
For all data inputs from multiple sources that are synthesized as part of the study:	
3 Describe how the data were identified and how the data were accessed.	See appendix: "Data sources"
4 Specify the inclusion and exclusion criteria. Identify all ad-hoc exclusions.	See appendix: "Data sources"
5 Provide information about all included data sources and their main characteristics. For each data source used, report reference information or contact name/institution, population represented, data collection method, year(s) of data collection, sex and age range, diagnostic criteria or measurement method, and sample size, as relevant.	http://ghdx.healthdata.org/gbd-2015-data-citations
6 Identify and describe any categories of input data that have potentially important biases (e.g., based on characteristics listed in item 5).	See appendix: "Bias of categories of input data"
For data inputs that contribute to the analysis but were not synthesized as part of the study:	
7 Describe and give sources for any other data inputs.	http://ghdx.healthdata.org/gbd-2015-data-citations
For all data inputs:	
8 Provide all data inputs in a file format from which data can be efficiently extracted (e.g., a spreadsheet rather than a PDF), including all relevant meta-data listed in item 5. For any data inputs that cannot be shared because of ethical or legal reasons, such as third-party ownership, provide a contact name or the name of the institution that retains the right to the data.	http://ghdx.healthdata.org/gbd-2015-data-citations
DATA ANALYSIS	
9 Provide a conceptual overview of the data analysis method. A diagram may be helpful.	See eFigure 1: Flowchart GBD cancer mortality, YLL estimation See eFigure 2: Flowchart GBD cancer incidence, prevalence, YLD estimation
10 Provide a detailed description of all steps of the analysis, including mathematical formulae. This description should cover, as relevant, data cleaning, data pre-processing, data adjustments and weighting of data sources, and mathematical or statistical model(s).	See appendix: "Data analysis"
11 Describe how candidate models were evaluated and how the final model(s) were selected.	See appendix "Mortality to incidence ratio estimation" See appendix "CODEm models"

	See eTable 7: Final MI ratio model selection See eTable 9: Covariates selected for CODEm for each GBD cancer group and expected direction of covariate
12 Provide the results of an evaluation of model performance, if done, as well as the results of any relevant sensitivity analysis.	See eTable 11: Results for CODEm model testing
13 Describe methods of calculating uncertainty of the estimates. State which sources of uncertainty were, and were not, accounted for in the uncertainty analysis.	See appendix “Data analysis”
14 State how analytic or statistical source code used to generate estimates can be accessed.	http://ghdx.healthdata.org/gbd-2015-code
RESULTS AND DISCUSSION	
15 Provide published estimates in a file format from which data can be efficiently extracted.	GBD 2015 estimates are available online (http://vizhub.healthdata.org/gbd-compare). WebTables specific to the GBD 2015 cancer results are available online (http://www.healthdata.org/research-article/global-burden-cancer-2015).
16 Report a quantitative measure of the uncertainty of the estimates (e.g., uncertainty intervals).	Done
17 Interpret results in light of existing evidence. If updating a previous set of estimates, describe the reasons for changes in estimates.	eTable 2: Sources for cancer incidence and MI ratio data by country, year, and registry eTable 10: Comparison of GBD 2013 and GBD 2015 covariates used and level of covariates
18 Discuss limitations of the estimates. Include a discussion of any modelling assumptions or data limitations that affect interpretation of the estimates.	See main manuscript “Limitations”

eTable 2: Sources for cancer incidence and MI ratio data by country, year, and registry

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Algeria	Algiers	1993-1997	1	1	0	0	1993-1997	1
Algeria	Batna	2000-2006	7	0	7	0	NA	NA
Algeria	Oran	2005-2006	2	0	2	0	NA	NA
Algeria	Setif	1986-1989, 1990-1993, 1998-2002, 2003-2007	4	4	0	0	1986-1989, 1990-1993, 1998-2002, 2003-2007	4
Argentina	Bahia Blanca	1993-1997, 1998-2002, 2003-2007	3	3	0	0	1993-1997, 1998-2002, 2003-2007	3
Argentina	Concordia	1990-1994, 1993-1997	2	2	0	0	1990-1994, 1993-1997	2
Argentina	Cordoba	2003-2007, 2004-2007	2	2	0	1	2003-2007, 2004-2007	2
Argentina	Mendoza	2003-2007	1	1	0	0	2003-2007	1
Argentina	Tierra Del Fuego	2003-2007	1	1	0	0	2003-2007	1
Australia	Australia National Registry	1982-2007	26	0	26	0	1970-2007	38
Australia	Capital Territory	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	6	6	0	0	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	6
Australia	New South Wales	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2002	26	26	0	0	1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002,	27

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
							2003-2007, 1983-2002	
Australia	Northern Territory	1993-1997, 1998-2002, 2003-2007	3	3	0	0	1993-1997, 1998-2002, 2003-2007	3
Australia	Queensland	1993-1997, 1998-2002, 2003-2007, 1982	4	4	0	0	1993-1997, 1998-2002, 2003-2007, 1982	4
Australia	South	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	30	30	0	0	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1977-2002	32
Australia	Tasmania	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	30	30	0	0	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1978-2002	31
Australia	Victoria	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1982-2002	26	26	0	0	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1982-2002	26
Australia	Western	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1982-2002	26	26	0	0	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1982-2002	26
Austria	Austria National Registry	1998-2002, 2003-2007, 1983-2010	30	2	28	0	1998-2002, 2003-2007, 1983-2010	30
Austria	Salzburg	-	0	0	0	0	1999-2006	8

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Austria	Tyrol	1988-1992, 1993-1997, 1998-2002, 2003-2007, 1988-2002	19	19	0	0	1988-1992, 1993-1997, 1998-2002, 2003-2007, 1988-2007	24
Austria	Vorarlberg	1993-1997, 1998-2002, 2003-2007	3	3	0	0	1993-1997, 1998-2002, 2003-2007	3
Bahrain	Bahrain National Registry	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007	2
Belarus	Belarus National Registry	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	5	5	0	0	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	5
Belgium	Antwerp	1998-2002	1	1	0	0	1998-2002	1
Belgium	Belgium National Registry	2004-2007, 2003-2010	9	1	8	0	2004-2007, 2003-2010	9
Belgium	Flanders	1998-2001	1	1	0	0	1998-2001	1
Belgium	Flanders Less Limburg	1997-1998	1	1	0	0	1997-1998	1
Belgium	Limburg	1997-1998	1	1	0	0	1997-1998	1
Bermuda	Bermuda National Registry	1983-1987	1	1	0	0	1983-1987	1
Brazil	Aracaju	2003-2006, 1996-2009	15	1	14	14	2003-2006	1
Brazil	Belem	1989-1991, 1996-2003	9	1	8	8	1989-1991	1
Brazil	Belo Horizonte	2003-2005, 2000-2005	7	1	6	6	2003-2005	1

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Brazil	Brasilia	1998-2001	1	1	0	0	1998-2001	1
Brazil	Campinas	1991-1995, 1991-1995	6	1	5	5	1991-1995	1
Brazil	Campo Grande	2000-2003, 2008	5	0	5	5	NA	NA
Brazil	Cuiaba	2000-2002, 2003-2006, 2003-2007, 2000-2007	11	3	8	9	2000-2002, 2003-2006, 2003-2007	3
Brazil	Curitiba	1998-2008	11	0	11	11	NA	NA
Brazil	Distrito Federal	1999-2002	4	0	4	4	NA	NA
Brazil	Espirito Santo	1997-2008	12	0	12	12	NA	NA
Brazil	Florianopolis	1990-2006, 2008-2009	19	0	19	19	NA	NA
Brazil	Fortaleza	1978-1982, 2003-2006	2	2	0	0	1978-1982, 2003-2006	2
Brazil	Goiania	1988-1989, 1990-1993, 1995-1998, 1999-2002, 2003-2007, 1988-2009	27	20	7	7	1988-1989, 1990-1993, 1995-1998, 1999-2002, 2003-2007, 1988-2002	20
Brazil	Jahu	1996-2011	16	0	16	16	NA	NA
Brazil	Joao Pessoa	1999-2007	9	0	9	9	NA	NA
Brazil	Manaus	1999-2005	7	0	7	7	NA	NA
Brazil	Mato Grosso Interior	2001-2005	5	0	5	5	NA	NA
Brazil	Natal	1999-2005	7	0	7	7	NA	NA
Brazil	Palmas	2000-2010	11	0	11	11	NA	NA
Brazil	Pocos De Caldas	2007-2011	5	0	5	5	NA	NA
Brazil	Porto Alegre	1979-1982, 1990-1992, 1987, 1993-2006	17	3	14	14	1979-1982, 1990-1992, 1987	3

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Brazil	Recife	1980, 1995-2007	14	1	13	13	1968-1971, 1980	2
Brazil	Roraima	2003-2005	3	0	3	3	NA	NA
Brazil	Salvador	1996-2005	10	0	10	10	NA	NA
Brazil	Santos	2008	1	0	1	1	NA	NA
Brazil	Sao Paulo	1998-2002, 2003-2007, 1997-2011	17	2	15	15	1973, 1998-2002, 2003-2007, 1978	4
Brazil	Teresina	2000-2002	3	0	3	3	NA	NA
Bulgaria	Bulgaria National Registry	1998-2002, 2003-2007, 2004-2010	9	2	7	0	1998-2002, 2003-2007, 2004-2010	9
Canada	Alberta	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	30	30	0	0	1969-1972, 1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2002	41
Canada	British Columbia	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	30	30	0	0	1969-1972, 1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2002	41
Canada	Canada National Registry	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	6	6	0	0	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	6
Canada	Manitoba	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	30	30	0	0	1968-1972, 1969-1972, 1973-1977, 1978-1982, 1983-	42

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
							1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2002	
Canada	Maritime Provinces	1978-1982, 1983-1987	2	2	0	0	1969-1972, 1973-1977, 1978-1982, 1983-1987	4
Canada	New Brunswick	1978-1982, 1983-1986, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2002-2006, 2003-2007, 1979-2002, 2006	33	31	2	0	1978-1982, 1983-1986, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1978-2002	32
Canada	Newfoundland	1979-2002	24	24	0	0	1970-2002	33
Canada	Newfoundland and Labrador	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	6	6	0	0	1969-1972, 1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	8
Canada	Northwest Territories	1983-1997, 1998-2002, 2003-2007	3	3	0	0	1983-1997, 1998-2002, 2003-2007	3
Canada	Northwest Territories and Yukon	1978-1982, 1983-1987	2	2	0	0	1973-1977, 1978-1982, 1983-1987	3
Canada	Nova Scotia	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002,	31	30	1	0	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-	31

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
		2000-2004, 2003-2007, 1979-2002					2002, 2003-2007, 1978-2002	
Canada	Ontario	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	30	30	0	0	1969-1971, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1978-2002	32
Canada	Prince Edward Island	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2002	26	26	0	0	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2002	26
Canada	Quebec	1978-1981, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 2003-2007	6	6	0	0	1969-1972, 1973-1977, 1978-1981, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 2003-2007	8
Canada	Saskatchewan	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2004	32	30	2	0	1968-1972, 1969-1972, 1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2002	42
Canada	Yukon	1983-1992, 1983-1997, 2003-2007	3	3	0	0	1983-1992, 1983-1997, 2003-2007	3
Chile	Antofagasta	2003-2007	1	1	0	0	2003-2007	1

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Chile	Biobio	2003-2007	1	1	0	0	2003-2007	1
Chile	Los Rios	2003-2007	1	0	1	0	2003-2007	1
Chile	Valdivia	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007	2
China	Anshan City Liaoning	1998-2009	12	0	12	0	1998-2009	12
China	Bading City Hebei	2009	1	0	1	0	2009	1
China	Beijing	1993-1997, 2003-2007, 1990-2009	22	2	20	0	1993-1997, 2003-2007, 1990-2009	22
China	Benxi City Liaoning	2003-2009	7	0	7	0	2003-2009	7
China	Changle City Fujian	1990-2009	20	0	20	0	1990-2009	20
China	Changle County Shandong	2004, 2006-2007	3	0	3	0	2004, 2006-2007	3
China	Chifeng City Inner Mongolia	2009	1	0	1	0	2009	1
China	Chuzhou District Huaian City	2004, 2006-2007	3	0	3	0	2004, 2006-2007	3
China	Cixian County Hebei	1993-1997, 2003-2007, 1990-2009	22	2	20	0	1993-1997, 2003-2007, 1990-2009	22
China	Dafeng City Jiangsu	2003-2009	7	0	7	0	2003-2009	7
China	Dalian City Liaoning	1998-2009	12	0	12	0	1998-2009	12

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
China	Dandong City Liaoning	2008-2009	2	0	2	0	2008-2009	2
China	Daoli District Heilongjiang	2005-2009	5	0	5	0	2005-2009	5
China	Dehui City Jilin	2009	1	0	1	0	2009	1
China	Donggang City Liaoning	2009	1	0	1	0	2009	1
China	Donghai County Jiangsu	2004, 2009	2	0	2	0	2004, 2009	2
China	Feicheng City Shandong	1998-2009	12	0	12	0	1998-2009	12
China	Feixi County Anhui	2009	1	0	1	0	2009	1
China	Fusui County Guangxi	1990-1997, 2003-2009	15	0	15	0	1990-1997, 2003-2009	15
China	Ganyu District Jiangsu	2004	1	0	1	0	2004	1
China	Gejiu City Yunnan	2004, 2008	2	0	2	0	2004, 2008	2
China	Guangzhou City Guangdong	2000-2002, 2000-2009	11	1	10	0	2000-2002, 2000-2009	11
China	Guanyun County Jiangsu	2004, 2007, 2009	3	0	3	0	2004, 2007, 2009	3
China	Haian County Jiangsu	2009	1	0	1	0	2009	1

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
China	Haimen City Jiangsu	2003-2009	7	0	7	0	2003-2009	7
China	Haining City Zhejiang	2003-2007, 1998-2009	13	1	12	0	2003-2007, 1998-2009	13
China	Hangzhou City Zhejiang	2000-2009	10	0	10	0	2000-2009	10
China	Hengdong County Hunan	2009	1	0	1	0	2009	1
China	Hong Kong	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2010	34	26	8	8	1974-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2010	35
China	Huaian District Jiangsu	1998-2009	12	0	12	0	1998-2009	12
China	Jianhu County Jiangsu	2003-2009	7	0	7	0	2003-2009	7
China	Jiashan County Zhejiang	1993-1997, 1998-2002, 2003-2007, 1990-2009	23	3	20	0	1993-1997, 1998-2002, 2003-2007, 1990-2009	23
China	Jiaxing City Zhejiang	2005-2007, 2000-2009	11	1	10	0	2005-2007, 2000-2009	11
China	Jingtai County Gansu	2009	1	0	1	0	2009	1
China	Jinhu County Jiangsu	2007-2009	3	0	3	0	2007-2009	3
China	Jintan City Jiangsu	2003-2007, 2009	6	0	6	0	2003-2007, 2009	6

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
China	Jiulongpo District Chongqing	2004, 2007, 2009	3	0	3	0	2004, 2007, 2009	3
China	Kunes County Xinjiang	2009	1	0	1	0	2009	1
China	Liangzhou District Gansu	2008-2009	2	0	2	0	2008-2009	2
China	Lianyungang Jiangsu	2004, 2007-2009	4	0	4	0	2004, 2007-2009	4
China	Linqu County Shandong	1998-2009	12	0	12	0	1998-2009	12
China	Linzhou City Henan	1990-2009	20	0	20	0	1990-2009	20
China	Liuzhou City Guangxi	2009	1	0	1	0	2009	1
China	Maanshan City Anhui	2003-2009	7	0	7	0	2003-2009	7
China	Macao	2003-2007	1	1	0	0	2003-2007	1
China	Nangang District Harbin City	1998-2002, 2003-2007, 1992-2009	20	2	18	0	1998-2002, 2003-2007, 1992-2009	20
China	Qianxi County Hebei	2009	1	0	1	0	2009	1
China	Qidong County Hunan	1983-1987, 1988-1992, 1993-1997, 2003-2007, 1990-2009	24	4	20	0	1983-1987, 1988-1992, 1993-1997, 2003-2007, 1990-2009	24

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
China	Qingyang District Sichuan	2009	1	0	1	0	2009	1
China	Shangdong	1993-1997	1	1	0	0	1993-1997	1
China	Shanghai	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1988-2009	28	21	7	0	1978-1982, 1983-1987, 1975, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1988-2009	29
China	Shangyu City Zhejiang	2009	1	0	1	0	2009	1
China	Shangzhi City Heilongjiang	2009	1	0	1	0	2009	1
China	Shenyang City Liaoning	2003-2009	7	0	7	0	2003-2009	7
China	Shenzhen	2004	1	0	1	0	2004	1
China	Shexian County Hebei	2003-2009	7	0	7	0	2003-2009	7
China	Sheyang County Jiangsu	2008-2009	2	0	2	0	2008-2009	2
China	Sihui City Guangdong	1998-2009	12	0	12	0	1998-2009	12
China	Suzhou City Jiangsu	2006-2009	4	0	4	0	2006-2009	4
China	Taixing City Jiangsu	2004-2005, 2007-2009	5	0	5	0	2004-2005, 2007-2009	5
China	Tianjin	1981-1982, 1983-1987, 1988-1992, 1993-1997, 1990-2004	19	4	15	0	1981-1982, 1983-1987, 1988-1992,	19

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
							1993-1997, 1990-2004	
China	Tongling City Anhui	2008-2009	2	0	2	0	2008-2009	2
China	Wenshang County Shandong	2009	1	0	1	0	2009	1
China	Wuhan City Hubei	1993-1997, 2003-2007, 1990-2009	22	2	20	0	1993-1997, 2003-2007, 1990-2009	22
China	Wuwei City Gansu	2004	1	0	1	0	2004	1
China	Wuxi Jiangsu	2006	1	0	1	0	2006	1
China	Xiamen City Fujian	2009	1	0	1	0	2009	1
China	Xianju County Zhejiang	2009	1	0	1	0	2009	1
China	Xining City Qinghai	2009	1	0	1	0	2009	1
China	Xiping County Henan	2009	1	0	1	0	2009	1
China	Xuyi County Jiangsu	2009	1	0	1	0	2009	1
China	Yangcheng County Shanxi	2003-2007, 2003-2009	8	1	7	0	2003-2007, 2003-2009	8
China	Yangquan City Shanxi	2009	1	0	1	0	2009	1
China	Yangzhong City Jiangsu	1998-2009	12	0	12	0	1998-2009	12
China	Yanji City Jilin	2009	1	0	1	0	2009	1

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
China	Yanshi City Henan	2009	1	0	1	0	2009	1
China	Yanting County Sichuan	2003-2007, 1998-2009	13	1	12	0	2003-2007, 1998-2009	13
China	Yunmeng County Hubei	2009	1	0	1	0	2009	1
China	Zhanggong District Jiangxi	2009	1	0	1	0	2009	1
China	Zhongshan City Guangdong	1998-2002, 2004-2007, 1998-2009	14	2	12	0	1998-2002, 2004-2007, 1998-2009	14
China	Zhongshan County Guangxi	2004, 2006-2007	3	0	3	0	2004, 2006-2007	3
China	Zhuanghe City Liaoning	2009	1	0	1	0	2009	1
China	Ziliujing District Sichuan	2009	1	0	1	0	2009	1
Colombia	Bucaramanga	2003-2007	1	1	0	0	2003-2007	1
Colombia	Cali	1977-1981, 1978-1981, 1982-1986, 1987-1991, 1992-1996, 1998-2002, 2003-2007, 1983-2002	27	27	0	0	1967-1971, 1972-1976, 1977-1981, 1978-1981, 1982-1986, 1987-1991, 1992-1996, 1998-2002, 2003-2007, 1983-2002	29

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Colombia	Colombia National Registry	2003-2010	8	0	8	0	NA	NA
Colombia	Manizales	2003-2007	1	1	0	0	2003-2007	1
Colombia	Pasto	2003-2007	1	1	0	0	2003-2007	1
Costa Rica	Costa Rica	1980-1982, 1984-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	6	6	0	1	1980-1982, 1984-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	6
Costa Rica	Costa Rica National Registry	1980-1982, 1983-1987, 1984-1987, 1988-1992, 1993-1997, 1995-1996, 1998-2002, 2003-2007, 1980-2002	31	31	0	0	1980-1982, 1983-1987, 1984-1987, 1988-1992, 1993-1997, 1995-1996, 1998-2002, 2003-2007, 1980-2002, 2012-2013	33
Cote d'Ivoire	Cote d'Ivoire National Registry	1995-1997	1	0	1	0	NA	NA
Croatia	Croatia National Registry	1988-1991, 1993-1997, 1998-2002, 2003-2007, 2003-2007, 2009-2010	11	4	7	5	1988-1991, 1993-1997, 1998-2002, 2003-2007, 2003-2007	9
Cuba	Cuba National Registry	1986-1987, 1986	2	2	0	0	1968-1972, 1973-1977, 1986-1987, 1986	4
Cuba	Villa Clara	1995-1997, 2004-2007	2	2	0	0	1995-1997, 2004-2007	2

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Cyprus	Cyprus National Registry	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007	2
Czech Republic	Czech Republic National Registry	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2010	33	25	8	0	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2010	33
Denmark	Denmark National Registry	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2012	40	30	10	4	1968-1972, 1973-1976, 1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2012	52
Ecuador	Cuenca	2003-2007	1	1	0	0	2003-2007	1
Ecuador	Quito	1985-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1985-2002	23	23	0	0	1985-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1985-2002	23
Egypt	Aswan	2008	1	0	1	0	NA	NA
Egypt	Damietta	2009	1	0	1	0	NA	NA
Egypt	Gharbiah	1999-2002, 2003-2007	2	2	0	0	1999-2002, 2003-2007	2
Egypt	Minia	2009	1	0	1	0	NA	NA
Estonia	Estonia National Registry	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2008	36	30	6	0	1968-1972, 1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997,	48

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
							1998-2002, 2003-2007, 1970-2009	
Fiji	Fiji National Registry	1998-2010	13	0	13	13	1998-2010	13
Finland	Finland National Registry	1977-1981, 1978-1982, 1982-1986, 1983-1987, 1987-1992, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2011	42	33	9	3	1966-1970, 1968-1972, 1971-1976, 1973-1977, 1977-1981, 1978-1982, 1982-1986, 1983-1987, 1987-1992, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2011	55
France	Bas-Rhin	1978-1981, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	31	31	0	0	1975-1977, 1978-1981, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1975-2002	36
France	C"te-d'Or	1993-1997, 1980-2009	31	1	30	30	1993-1997, 1980-2009	31
France	Calvados	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	30	30	0	0	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1978-2002	31
France	Calvados Digestive	1979-2009	31	0	31	31	1978-2009	32

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
France	Doubs	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2009	37	30	7	7	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1977-2009	39
France	Finistere Digestive	1984-2009	26	0	26	26	1984-2009	26
France	Haut-Rhin	1988-1992, 1993-1997, 1998-2002, 2003-2007, 1988-2009	26	19	7	7	1988-1992, 1993-1997, 1998-2002, 2003-2007, 1988-2009	26
France	Herault	1988-1992, 1993-1997, 1998-2002, 2003-2007, 1987-2009	27	19	8	8	1988-1992, 1993-1997, 1998-2002, 2003-2007, 1987-2009	27
France	Isere	1979-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2009	37	30	7	7	1979-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2009	37
France	La Martinique	1998-2002	1	1	0	0	1998-2002	1
France	La Reunion	1988-1992, 1993-1994	2	2	0	0	1988-1992, 1993-1994	2
France	Lille Area	2005, 2008-2009	3	0	3	3	2005, 2008-2009	3
France	Loire-Atlantique	1998-2002, 2003-2007, 1991-2009	21	2	19	19	1998-2002, 2003-2007, 1991-2009	21
France	Lower Normandy	2002-2009	8	0	8	8	2002-2009	8

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
France	Manche	1994-1997, 1998-2002, 2003-2007, 1994-2009	19	3	16	16	1994-1997, 1998-2002, 2003-2007, 1994-2009	19
France	Martinique	1981-1982, 1983-1987, 1993-1995, 1993-1997, 1998-2002, 2003-2007	6	6	0	0	1981-1982, 1983-1987, 1993-1995, 1993-1997, 1998-2002, 2003-2007	6
France	Somme	1983-1984, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1982-2009	34	26	8	8	1983-1984, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1982-2009	34
France	Tarn	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1982-2009	33	25	8	8	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1982-2009	33
France	Vendee	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007	2
Germany	Bavaria	2002-2007	6	0	6	6	2002-2007	6
Germany	Berlin	1998-2007	10	0	10	10	1998-2007	10
Germany	Brandenburg	1998-2002, 2003-2007, 1998-2007	12	2	10	10	1998-2002, 2003-2007, 1998-2007	12
Germany	Bremen	2003-2007, 2000-2008	10	1	9	9	2003-2007, 2000-2008	10
Germany	Eastern States (ex-GDR)	1978-1982, 1983-1987, 1988-1989	3	3	0	0	1968-1972, 1973-1977, 1978-1982, 1983-1987, 1988-1989	5

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Germany	Free State of Saxony	1998-2002, 2003-2007, 1998-2007	12	2	10	10	1998-2002, 2003-2007, 1998-2007	12
Germany	Germany National Registry	2000-2010	11	0	11	11	2000-2010	11
Germany	Germany Northrhine-Westphalia: Munster	-	0	0	0	0	1994-2003	10
Germany	Hamburg	1978-1979, 1998-2002, 2003-2007, 1995-2009	18	3	15	15	1969-1972, 1973-1977, 1978-1979, 1998-2002, 2003-2007, 1995-2010	21
Germany	Lower Saxony	2003-2007	5	0	5	5	2003-2007	5
Germany	Mecklenburg-Western Pomerania	1998-2002, 2003-2007, 1998-2007	12	2	10	10	1998-2002, 2003-2007, 1998-2007	12
Germany	Munich	1998-2002, 2003-2007, 2000-2007	10	2	8	8	1998-2002, 2003-2007, 2000-2007	10
Germany	Northrhine Westphalia	1998-2002, 2003-2007, 1998-2007	12	2	10	10	1998-2002, 2003-2007, 1998-2007	12
Germany	Rhineland Palatinate	2000-2007	8	0	8	8	2000-2007	8
Germany	Saarland	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2007	35	30	5	5	1968-1972, 1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2007	46

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Germany	Saxony Anhalt	1998-2007	10	0	10	10	1998-2007	10
Germany	Schleswig Holstein	2003-2007, 1998-2007	11	1	10	10	2003-2007, 1998-2007	11
Germany	Thuringen	1998-2007	10	0	10	10	1998-2007	10
Greece	Greece Cancer Registry	1990-1991	1	0	1	0	NA	NA
Grenada	St Georges Central Hospital	1996-2000	1	0	1	0	NA	NA
Guinea	Conakry	1992-1995	1	0	1	0	NA	NA
Hungary	County Szabolcs-Szatmar	1978-1982, 1983-1987	2	2	0	0	1969-1971, 1973-1977, 1978-1982, 1983-1987	4
Hungary	County Vas	1978-1982, 1983-1987	2	2	0	0	1968-1972, 1973-1977, 1978-1982, 1983-1987	4
Hungary	Hungary National Registry	2001-2011	11	0	11	0	2001-2011	11
Iceland	Iceland National Registry	1973-1982, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2012	41	31	10	4	1964-1972, 1968-1972, 1973-1977, 1973-1982, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2012	53

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
India	Ahmedabad	1983-1987, 1993-1997, 2004-2005, 2005-2008	4	2	2	0	1983-1987, 1993-1997, 2004-2005, 2005-2008	4
India	Ahmedabad Rural	2009-2010	1	0	1	1	2009-2010	1
India	Ahmedabad Urban	2009-2010	1	0	1	1	2009-2010	1
India	Aizawl	2005-2006	1	0	1	0	NA	NA
India	Aurangabad	2005-2008, 2009-2010	2	0	2	1	2005-2008, 2009-2010	2
India	Bangalore	1983-1987, 1988-1992, 1993-1997, 2004-2005, 2005-2007, 2005-2008, 2008-2009, 1982	8	5	3	1	1983-1987, 1988-1992, 1993-1997, 2004-2005, 2005-2007, 2005-2008, 2008-2009, 1982	8
India	Barshi	1988-1992	1	1	0	0	1988-1992	1
India	Barshi Expanded	2009	1	0	1	1	2009	1
India	Barshi Paranda and Bhum	2003-2007	1	1	0	0	2003-2007	1
India	Barshi Rural	2004-2005, 2005-2008, 2009-2010	3	0	3	1	2004-2005, 2005-2008, 2009-2010	3
India	Bhopal	2004-2005, 2004-2007, 2005-2008, 2009-2010	4	1	3	1	2004-2005, 2004-2007, 2005-2008, 2009-2010	4
India	Cachar District	2005-2008, 2009-2010	2	0	2	1	2005-2008, 2009-2010	2

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
India	Chennai	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 2004-2005, 2005-2008, 1982-2002, 2009	29	26	3	1	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 2004-2005, 2005-2008, 1982-2002, 2009	29
India	Delhi	1993-1996, 2004-2005, 2005-2008, 2008-2009	4	1	3	1	1993-1996, 2004-2005, 2005-2008, 2008-2009	4
India	Dibrugarh District	2005-2006, 2005-2008, 2009-2011	3	0	3	1	2005-2008, 2009-2011	2
India	Dindigul Ambillikai	2003-2007	1	1	0	0	2003-2007	1
India	Imphal West	2005-2006, 2009-2010	2	0	2	1	2009-2010	1
India	Kamrup Urban District	2005-2006, 2005-2008, 2009-2011	3	0	3	1	2005-2008, 2009-2011	2
India	Karunagappally	1991-1992, 1993-1997, 1998-2002, 2003-2007	4	4	0	0	1991-1992, 1993-1997, 1998-2002, 2003-2007	4
India	Kolkata	2005-2008, 2008-2009, 2005	3	0	3	1	2005-2008, 2008-2009, 2005	3
India	Kollam	2005-2008, 2009-2010	2	0	2	1	2005-2008, 2009-2010	2
India	Manipur	2005-2008, 2009-2010	2	0	2	1	2005-2008, 2009-2010	2
India	Manipur excluding Imphal West	2009-2010	1	0	1	1	2009-2010	1
India	Meghalaya	2010-2011	1	0	1	1	2010-2011	1

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
India	Mizoram	2003-2007, 2005-2008, 2009-2010	3	1	2	1	2003-2007, 2005-2008, 2009-2010	3
India	Mizoram excluding Aizawl	2005-2006	1	0	1	0	NA	NA
India	Mumbai	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 2004-2005, 2005-2008, 2009-2010, 1979-2002	33	30	3	1	1968-1972, 1973-1975, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 2004-2005, 2005-2008, 2009-2010, 1978-2002	36
India	Nagaland	2010	1	0	1	1	2010	1
India	Nagpur	1980-1982, 1993-1997, 1998-2002, 2005-2008, 2008-2009	5	3	2	1	1980-1982, 1993-1997, 1998-2002, 2005-2008, 2008-2009	5
India	New Delhi	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007	2
India	Pune	1978-1982, 1993-1997, 1998-2002, 2003-2007, 2005-2008, 2009-2010	6	4	2	1	1973-1977, 1978-1982, 1993-1997, 1998-2002, 2003-2007, 2005-2008, 2009-2010	7
India	Sikkim	2003-2007, 2005-2006, 2005-2008, 2009-2011	4	1	3	1	2003-2007, 2005-2008, 2009-2011	3
India	Silchar	2005-2006	1	0	1	0	NA	NA
India	Tripura	2010	1	0	1	1	2010	1

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
India	Trivandrum	1991-1992, 1993-1997, 1998-2002, 2005-2007, 2005-2008, 2009-2011	6	4	2	1	1991-1992, 1993-1997, 1998-2002, 2005-2007, 2005-2008, 2009-2011	6
India	Wardha	2010-2011	1	0	1	1	2010-2011	1
Iran	Ardabil	1996-1999, 1985, 2006-2008	5	0	5	0	NA	NA
Iran	Golestan	1996-2000, 2005-2007	2	1	1	0	2005-2007	1
Iran	Iran National Registry	2003-2004, 2004-2005, 2005-2006, 2006-2007, 2003-2004	6	0	6	0	NA	NA
Ireland	Ireland National Registry	1994-1997, 1998-2002, 2003-2007, 1994-2010	20	3	17	17	1994-1997, 1998-2002, 2003-2007, 1994-2010	20
Ireland	Southern	1980-1982, 1983-1986, 1988-1992	3	3	0	0	1980-1982, 1983-1986, 1988-1992	3
Israel	Israel National Registry	1977-1981, 1982-1986, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 2008-2010	9	6	3	0	1967-1971, 1972-1976, 1977-1981, 1982-1986, 1988-1992, 1993-1997, 1998-2002, 2003-2007	8
Italy	Alto Adige	2003-2006	1	1	0	0	2003-2006	1
Italy	Biella Province	1995-1997, 1998-2002, 2003-2007	3	3	0	0	1995-1997, 1998-2002, 2003-2007	3
Italy	Brescia Province	1999-2001, 2003-2006, 2003-2007	3	3	0	1	1999-2001, 2003-2006, 2003-2007	3
Italy	Catania and Messina	2003-2005	1	1	0	0	2003-2005	1
Italy	Catanzaro	2003-2007	1	1	0	0	2003-2007	1

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Italy	Como Province	2003-2007	1	1	0	0	2003-2007	1
Italy	Ferrara Province	1991-1992, 1993-1997, 1998-2002, 2003-2007	4	4	0	0	1991-1992, 1993-1997, 1998-2002, 2003-2007	4
Italy	Florence	1985-2002	18	18	0	0	1985-2002	18
Italy	Florence and Prato	1985-1987, 1988-1991, 1988-1992, 1993-1997, 1998-2002, 2003-2005, 2003-2007	7	7	0	1	1985-1987, 1988-1991, 1988-1992, 1993-1997, 1998-2002, 2003-2005, 2003-2007	7
Italy	Friuli Venezia Giulia	2003-2007	1	1	0	0	2003-2007	1
Italy	Genoa	1986-1987, 1988-1992, 1993-1996, 1998-2000, 2003-2006, 2003-2007	6	6	0	1	1986-1987, 1988-1992, 1993-1996, 1998-2000, 2003-2006, 2003-2007	6
Italy	Italy National Registry	2004-2009	6	0	6	0	2004-2009	6
Italy	Latina	1983-1985, 1988-1991, 2003-2007	3	3	0	0	1983-1985, 1988-1991, 2003-2007	3
Italy	Lecco	2003-2007	1	1	0	0	2003-2007	1
Italy	Macerata Province	1991-1992, 1993-1997, 1998-2000	3	3	0	0	1991-1992, 1993-1997, 1998-2000	3
Italy	Mantova	2003-2005, 2003-2007	2	2	0	1	2003-2005, 2003-2007	2
Italy	Milan	1999-2002, 2003-2006, 2003-2007	3	3	0	1	1999-2002, 2003-2006, 2003-2007	3

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Italy	Modena Province	1988-1992, 1993-1997, 1998-2002, 2003-2007, 1988-2007	24	19	5	0	1988-1992, 1993-1997, 1998-2002, 2003-2007, 1988-2002	19
Italy	Naples	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007	2
Italy	North East	1995-1997, 1998-2002	2	2	0	0	1995-1997, 1998-2002	2
Italy	Nuoro	2003-2007	1	1	0	0	2003-2007	1
Italy	Palermo Province	2003-2006, 2003-2007	2	2	0	1	2003-2006, 2003-2007	2
Italy	Parma Province	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	30	30	0	0	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1978-2002	31
Italy	Ragusa Province	1978-1982, 1981-1982, 1983-1987, 1986-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2002	28	28	0	0	1978-1982, 1981-1982, 1983-1987, 1986-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2002	28
Italy	Reggio Emilia Province	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007	2
Italy	Romagna Province	1985-1987, 1986-1987, 1989-1992, 1993-1997, 1998-2002, 2003-2007, 1988-2002	21	21	0	0	1985-1987, 1986-1987, 1989-1992, 1993-1997, 1998-2002, 2003-2007, 1988-2002	21

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Italy	Salerno Province	1998-2001, 2003-2007	2	2	0	0	1998-2001, 2003-2007	2
Italy	Sassari Province	1993-1997, 1998-2002, 2003-2007	3	3	0	0	1993-1997, 1998-2002, 2003-2007	3
Italy	Sondrio	1998-2002, 2003-2007, 2003-2007	7	2	5	0	1998-2002, 2003-2007	2
Italy	South Lombardy	2003-2005	1	1	0	0	2003-2005	1
Italy	South Tyrol	2003-2007	1	1	0	1	2003-2007	1
Italy	Syracuse Province	1999-2002, 2003-2007	2	2	0	0	1999-2002, 2003-2007	2
Italy	Torino	1984-1985, 1985-1987, 1988-1991, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1985-2002	25	25	0	0	1984-1985, 1985-1987, 1988-1991, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1985-2002	25
Italy	Trapani	2003-2006	1	1	0	0	2003-2006	1
Italy	Trento	2003-2006	1	1	0	0	2003-2006	1
Italy	Trieste	1983-1987, 1984-1985, 1989-1992	3	3	0	0	1983-1987, 1984-1985, 1989-1992	3
Italy	Umbria	1994-1996, 1998-2002, 2003-2005, 2003-2007, 2004-2006	5	3	2	0	1994-1996, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2004-2006	6
Italy	Varese Province	1978-1981, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2000, 2003-2007, 1979-2000	29	29	0	0	1976-1977, 1978-1981, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2000, 2003-2007, 1979-2000	31

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
							1998-2000, 2003-2007, 1978-2000	
Italy	Veneto Region	1988-1992, 1993-1996, 1998-2001, 2003-2006, 2003-2007	5	5	0	1	1988-1992, 1993-1996, 1998-2001, 2003-2006, 2003-2007	5
Jamaica	Kingston and St Andrew	1978-1982, 1988-1992, 1993-1997, 2003-2007	4	1	3	0	1967-1972, 1973-1977, 2003-2007	3
Japan	Aichi Prefecture	1998-2002, 2003-2007, 2006	3	2	1	0	1998-2002, 2003-2007, 2006	3
Japan	Fukuki Prefecture	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007	2
Japan	Fukuoka Prefecture	-	0	0	0	0	1974-1975	1
Japan	Hiroshima	1978-1980, 1981-1985, 1986-1990, 1991-1995, 1996-2000, 2003-2007	6	6	0	0	1978-1980, 1981-1985, 1986-1990, 1991-1995, 1996-2000, 2003-2007	6
Japan	Japan National Registry	1979-2010	32	0	32	32	1970-2013	44
Japan	Miyagi Prefecture	1978-1981, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	31	31	0	0	1968-1971, 1973-1977, 1978-1981, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1978-2002	34

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Japan	Nagasaki Prefecture	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	6	6	0	0	1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	7
Japan	Niigata Prefecture	2003-2007	1	1	0	0	2003-2007	1
Japan	Osaka Prefecture	1978-1982, 1979-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	31	31	0	0	1968-1972, 1970-1971, 1973-1977, 1978-1982, 1979-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2002	43
Japan	Saga Prefecture	1984-1986, 1988-1992, 1993-1997, 2003-2007	4	4	0	0	1984-1986, 1988-1992, 1993-1997, 2003-2007	4
Japan	Yamagata Prefecture	1983-1986, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 1983-2002	25	25	0	0	1983-1986, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 1983-2002	25
Jordan	Jordan Cancer Registry	2001-2008	8	0	8	0	NA	NA
Kenya	Nairobi Cancer Registry	2000-2002	3	0	3	0	NA	NA

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Kuwait	Kuwait National Registry	1979-1982, 1983-1987, 1988-1992, 1988-1993, 1993-1997, 1994-1997, 1994-1998, 1998-2002, 2003-2007	9	9	0	0	1979-1982, 1983-1987, 1988-1992, 1988-1993, 1993-1997, 1994-1997, 1994-1998, 1998-2002, 2003-2007	9
Kyrgyzstan	Kyrgyzstan National Registry	1986-1987	1	1	0	0	1986-1987	1
Latvia	Latvia National Registry	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2004-2007, 1988-2007	25	20	5	5	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2004-2007, 1988-2007	25
Lebanon	Lebanon National Registry	1998, 2005-2007	4	0	4	0	NA	NA
Libya	Benghazi	2003-2005	1	1	0	0	2003-2005	1
Lithuania	Lithuania	1993-1997, 1998-2002, 2003-2007, 2003, 2005	5	3	2	1	1993-1997, 1998-2002, 2003-2007	3
Lithuania	Lithuania National Registry	1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2011	37	28	9	3	1988-1992, 1993-1997, 1998-2002, 2003-2007, 1978-2011	38
Malawi	Blantyre	1994-1998, 2003-2007	2	1	1	0	2003-2007	1
Malaysia	Malaysia	2003	1	0	1	0	NA	NA
Malaysia	Penang	1998-2002, 2004-2007	2	2	0	0	1998-2002, 2004-2007	2
Malaysia	Sarawak	1998-2002	1	1	0	0	1998-2002	1

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Mali	Bamako	1987-1989, 1988-1992, 1994-1996	3	3	0	0	1987-1989, 1988-1992, 1994-1996	3
Malta	Malta National Registry	1992-1993, 1993-1997, 1998-2002, 2003-2007, 1994-2010	21	4	17	5	1969-1972, 1992-1993, 1993-1997, 1998-2002, 2003-2007, 1994-2010	22
Mongolia	Mongolia National Registry	2003-2007	1	0	1	0	NA	NA
Morocco	Greater Casablanca	2004	1	0	1	0	NA	NA
Namibia	Namibia National Registry	2002	1	0	1	0	NA	NA
Netherlands	Antilles Less Aruba	1978-1982	1	1	0	0	1973-1978, 1978-1982	2
Netherlands	Eindhoven	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	30	30	0	0	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1973-2002	36
Netherlands	Maastricht	1986-1988, 1988-1992, 1993-1997, 1998-2002	4	4	0	0	1986-1988, 1988-1992, 1993-1997, 1998-2002	4
Netherlands	Netherlands National Registry	1989-1992, 1993-1997, 1998-2002, 2003-2007, 1989-2015	31	4	27	27	1989-1992, 1993-1997, 1998-2002, 2003-2007, 1989-2015	31

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
New Zealand	New Zealand National Registry	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2007	31	26	5	0	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2007	31
Nigeria	Prof. Olikoye Ransome Kuti	-	0	0	0	0	2008-2009	2
Norway	Norway National Registry	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2011	39	30	9	3	1968-1972, 1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2011	50
Oman	Oman National Registry	1993-1997, 1998-2001, 2002-2008	9	2	7	0	1993-1997, 1998-2001	2
Pakistan	South Karachi	1995-1997, 1998-2002	2	2	0	0	1995-1997, 1998-2002	2
Palestine	West Bank	2010-2011	2	0	2	0	NA	NA
Panama	Panama National Registry	1988-1999	12	0	12	0	1988-2004	17
Paraguay	Asuncion	1988-1989	1	1	0	0	1988-1989	1
Peru	Lima	1990-1991	1	1	0	0	1990-1991	1
Peru	Trujillo	1984-1987, 1988-1990, 1998-2002	3	3	0	0	1984-1987, 1988-1990, 1998-2002	3
Philippines	Manila	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2002	25	25	0	0	1983-1987, 1988-1992, 1993-1997,	25

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
							1998-2002, 2003-2007, 1983-2002	
Philippines	Rizal	1978-1982, 1983-1987, 1993-1997, 2003-2007	4	4	0	0	1978-1982, 1983-1987, 1993-1997, 2003-2007	4
Poland	Cieszyn Area	-	0	0	0	0	1968-1972, 1973-1977	2
Poland	Cracow	1978-1981, 1978-1982, 1983-1986, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2006, 1979-2002	32	32	0	0	1968-1972, 1973-1977, 1978-1981, 1978-1982, 1983-1986, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2006, 1978-2002	35
Poland	Katowice District	-	0	0	0	0	1970-1972, 1973-1974, 1973-1977	3
Poland	Kielce	1988-1992, 1993-1996, 1988-1996, 1998-2002, 2003-2007, 1998-2002	18	18	0	0	1988-1992, 1993-1996, 1988-1996, 1998-2002, 2003-2007, 1998-2002	18
Poland	Lower Silesia	1984-1987, 1988-1992, 1993-1997, 2003-2007	4	4	0	0	1984-1987, 1988-1992, 1993-1997, 2003-2007	4
Poland	Nowy Sacz	1978-1981, 1983-1986	2	2	0	0	1973-1977, 1978-1981, 1983-1986	3
Poland	Opole	1985-1987	1	1	0	0	1985-1987	1

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Poland	Poland National Registry	1999-2011	13	0	13	13	1999-2011	13
Poland	Rzeszow	2003-2007	1	1	0	0	2003-2007	1
Poland	Warsaw City	1980-1982, 1983-1987, 1988-1992, 1989-1992, 1993-1997, 1998-2002, 1988-2002	21	21	0	0	1968-1972, 1973-1977, 1980-1982, 1983-1987, 1988-1992, 1989-1992, 1993-1997, 1998-2002, 1988-2002	23
Poland	Warsaw Rural Areas	1983-1987	1	1	0	0	1968-1972, 1973-1977, 1983-1987	3
Portugal	Azores	2003-2007, 1997-2011	16	1	15	15	2003-2007, 1981-2012	33
Portugal	Centre	2003-2007	5	0	5	5	2003-2007	5
Portugal	North Region	2000-2006	7	0	7	7	2000-2006	7
Portugal	Porto	1998-2002	1	1	0	0	1998-2002	1
Portugal	South Region	1999-2001, 1998-2007	11	1	10	10	1999-2001, 1998-2007	11
Portugal	Vila Nova De Gaia	1983-1987, 1993-1997	2	2	0	0	1983-1987, 1993-1997	2
Puerto Rico	Puerto Rico National Registry	1978-1982, 1983-1987, 1988-1991, 1992-1993, 2003-2007	5	5	0	0	1968-1972, 1973-1977, 1978-1982, 1983-1987, 1988-1991, 1992-1993, 2003-2007	7
Qatar	Qatar National Registry	2003-2007	1	1	0	0	2003-2007	1

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Romania	Cluj	1979-1982, 1983-1987, 2007	3	2	1	1	1974-1978, 1979-1982, 1983-1987, 2007	4
Romania	Timisoara	2008	1	0	1	1	1970-1972, 2008	2
Russia	St Petersburg	1983-1987, 1994-1997, 1998-2002, 2003-2007	4	4	0	0	1983-1987, 1994-1997, 1998-2002, 2003-2007	4
Samoa	Samoa National Registry	1980-1988	1	0	1	0	NA	NA
Saudi Arabia	Riyadh	2003-2007	1	1	0	0	2003-2007	1
Saudi Arabia	Saudi Cancer Registry	1994-2010	17	0	17	5	NA	NA
Senegal	Dakar	-	0	0	0	0	1969-1974	1
Serbia	Central	2003-2007, 2003-2007	6	1	5	5	2003-2007, 2003-2007	6
Serbia	Serbia National Registry	1999-2002	1	1	0	0	1999-2002	1
Serbia	Vojvodina	1988-1992, 1993-1997	2	2	0	0	1988-1992, 1993-1997	2
Singapore	Singapore National Registry	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 2004-2008	11	6	5	0	1968-1972, 1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	8

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Slovakia	Slovakia National Registry	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002, 2005	31	30	1	1	1968-1972, 1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2002, 2005, 2008-2010	45
Slovenia	Slovenia National Registry	1978-1981, 1978-1982, 1982-1987, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2009	39	32	7	0	1968-1972, 1973-1976, 1973-1977, 1978-1981, 1978-1982, 1982-1987, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2009	51
South Africa	PROMEC	1998-2002, 2003-2007	2	1	1	0	2003-2007	1
South Africa	South Africa National Registry	2003-2005	3	0	3	0	NA	NA
South Korea	Busan	1996-1997, 1998-2002, 2003-2007	3	3	0	0	1996-1997, 1998-2002, 2003-2007	3
South Korea	Daegu	1997-1998, 1998-2002, 2003-2007	3	3	0	0	1997-1998, 1998-2002, 2003-2007	3
South Korea	Daejeon	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007	2
South Korea	Gwangju	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007	2
South Korea	Incheon	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007	2

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
South Korea	Jejudo	2000-2002, 2004-2007	2	2	0	0	2000-2002, 2004-2007	2
South Korea	Kangwha County	1986-1992, 1993-1997	2	2	0	0	1986-1992, 1993-1997	2
South Korea	Seoul	1993-1997, 1998-2002, 2003-2007	3	3	0	0	1993-1997, 1998-2002, 2003-2007	3
South Korea	South Korea National Registry	1999-2002, 2003-2007, 2003-2008, 2010-2012	11	2	9	2	1999-2002, 2003-2007, 2003-2008, 2010-2012	11
South Korea	Ulsan	1999-2002, 2003-2007	2	2	0	0	1999-2002, 2003-2007	2
Spain	Albacete	1991-1992, 1993-1997, 1998-2001, 2003-2007, 1991-2007	21	4	17	17	1991-1992, 1993-1997, 1998-2001, 2003-2007, 1991-2007	21
Spain	Asturias	1988-1991, 1992-1995, 1996-2000, 2003-2007, 2003-2007	9	4	5	5	1988-1991, 1992-1995, 1996-2000, 2003-2007, 2003-2007	9
Spain	Balears	1988-2005	18	0	18	18	1988-2005	18
Spain	Basque Country	1986-1987, 1988-1991, 1998-2001, 2003-2007, 1986-2006	25	4	21	21	1986-1987, 1988-1991, 1998-2001, 2003-2007, 1986-2006	27
Spain	Canary Islands	1993-1995, 1997-2001, 2003-2004, 2003-2006	4	3	1	0	1993-1995, 1997-2001, 2003-2006	3
Spain	Ciudad Real	2004-2007	1	1	0	0	2004-2007	1

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Spain	Cuenca	1993-1997, 1998-2002, 2003-2007, 2000-2004	8	3	5	5	1993-1997, 1998-2002, 2003-2007, 2000-2004	8
Spain	Girona	1994-1997, 1995-1997, 1998-2002, 2003-2007, 1980-2007	32	4	28	28	1994-1997, 1995-1997, 1998-2002, 2003-2007, 1980-2008	33
Spain	Granada	1985-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1985-2007	28	23	5	5	1985-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1985-2007	28
Spain	La Rioja	2003-2007, 1993-2005	14	1	13	13	2003-2007, 1993-2007	16
Spain	Mallorca	1988-1992, 1993-1996, 2003-2007	3	3	0	0	1988-1992, 1993-1996, 2003-2007	3
Spain	Murcia	1983-1987, 1984-1987, 1988-1992, 1993-1996, 1997-2001, 2003-2007, 1983-2007	31	24	7	7	1983-1987, 1984-1987, 1988-1992, 1993-1996, 1997-2001, 2003-2007, 1983-2007	31
Spain	Navarra	1978-1982, 1983-1986, 1983-1987, 1987-1991, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2005	35	32	3	3	1973-1977, 1978-1982, 1983-1986, 1983-1987, 1987-1991, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1973-2008	45
Spain	Tarragona	1980-1983, 1983-1987, 1984-1987, 1988-1992, 1993-1997,	33	26	7	7	1980-1983, 1983-1987, 1984-1987,	33

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
		1998-2001, 2003-2007, 1980-2005					1988-1992, 1993-1997, 1998-2001, 2003-2007, 1980-2005	
Spain	Zaragoza	1978-1982, 1983-1985, 1983-1987, 1986-1990, 1988-1992, 1991-1995, 1993-1997, 1996-2000, 1979-2000	30	30	0	0	1968-1972, 1973-1977, 1978-1982, 1983-1985, 1983-1987, 1986-1990, 1988-1992, 1991-1995, 1993-1997, 1996-2000, 1978-2000	33
Sri Lanka	Sri Lanka National Registry	2001-2005, 2005	2	0	2	0	NA	NA
Sweden	Stockholm	2002-2010	9	0	9	9	NA	NA
Sweden	Sweden excluding Stockholm	2002-2010	9	0	9	9	NA	NA
Sweden	Sweden National Registry	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2007, 2009-2012	39	30	9	4	1966-1970, 1968-1972, 1971-1975, 1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2007, 2009-2012	52
Switzerland	Basel	1981-1982, 1983-1987, 1988-1992, 1993-1997, 2003-2007	5	5	0	0	1981-1982, 1983-1987, 1988-1992,	5

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
							1993-1997, 2003-2007	
Switzerland	Geneva	1978-1982, 1979-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2008	37	31	6	6	1970-1972, 1973-1977, 1978-1982, 1979-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1970-2008	48
Switzerland	Graubunden	1989-1992, 1993-1997	2	2	0	0	1989-1992, 1993-1997	2
Switzerland	Graubunden and Glarus	1998-2002, 2003-2007, 1989-2009	23	2	21	21	1998-2002, 2003-2007, 1980-2009	32
Switzerland	Neuchatel	1978-1982, 1983-1987, 1988-1992, 1993-1996, 1998-2002, 2003-2007, 2003-2007	11	6	5	5	1974-1976, 1978-1982, 1983-1987, 1988-1992, 1993-1996, 1998-2002, 2003-2007, 1980-2008	36
Switzerland	St Gall-Appenzell	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1980-2009	35	25	10	10	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1980-2009	35
Switzerland	Switzerland National Registry	1986-1990, 1991-1995, 1996-2000, 2001-2005, 2003-2007, 2006-2010	6	0	6	5	1986-1990, 1991-1995, 1996-2000, 1998-2002, 2001-2005, 2003-2007, 2006-2010	7

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Switzerland	Ticino	1996-1997, 1998-2002, 2003-2007, 1996-2007	15	3	12	12	1996-1997, 1998-2002, 2003-2007, 1996-2007	15
Switzerland	Valais	1989-1992, 1993-1997, 1998-2002, 2003-2007	4	4	0	0	1989-1992, 1993-1997, 1998-2002, 2003-2007	4
Switzerland	Vaud	1978-1982, 1983-1987, 1988-1992, 1993-1996, 1998-2002, 2003-2007, 2003-2007	11	6	5	5	1975-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1996, 1998-2002, 2003-2007, 1980-2008	36
Switzerland	Zurich	1980-1982, 1983-1987, 1988-1992, 1993-1996, 2003-2007, 1980-2009	35	5	30	30	1980-1982, 1983-1987, 1988-1992, 1993-1996, 2003-2007, 1980-2009	35
Taiwan	Taiwan National Registry	1980-2007	28	1	27	0	1980-2007	28
Thailand	Bangkok	1995-1997, 2001-2003, 2003-2007	3	2	1	0	1995-1997, 2003-2007	2
Thailand	Chiang Mai	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2001-2003, 2003-2007, 1983-2002	26	25	1	0	1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2002	25
Thailand	Chonburi	2001-2003, 2003-2007	2	1	1	0	2003-2007	1
Thailand	Khon Kaen	1988-1989, 1990-1993, 1993-1997, 2001-2003, 2003-2007	5	4	1	0	1988-1989, 1990-1993, 1993-1997, 2003-2007	4

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Thailand	Lampang	1993-1997, 1998-2002, 2001-2003, 2003-2007	4	3	1	0	1993-1997, 1998-2002, 2003-2007	3
Thailand	Lop Buri	2001-2003	1	0	1	0	NA	NA
Thailand	Nakhon Phanom	2001-2003	1	0	1	0	NA	NA
Thailand	Prachuap Khiri	2001-2003	1	0	1	0	NA	NA
Thailand	Rayong	2001-2003	1	0	1	0	NA	NA
Thailand	Songkhla	1993-1996, 1993-1997, 1998-2002, 2001-2003, 2004-2007	5	4	1	0	1993-1996, 1993-1997, 1998-2002, 2004-2007	4
Thailand	Surat Thani	2001-2003	1	0	1	0	NA	NA
Thailand	Ubon Ratchathani	2001-2003	1	0	1	0	NA	NA
Thailand	Udon Thani	2001-2003	1	0	1	0	NA	NA
The Gambia	The Gambia National Registry	1987-1989, 1988-1997, 1997-1998	3	2	1	0	1987-1989, 1997-1998	2
Trinidad and Tobago	Trinidad and Tobago National Registry	1995-2006	12	0	12	0	1995-2006	12
Tunisia	Centre Sousse	1998-2002	1	1	0	0	1998-2002	1
Tunisia	North	2003-2005	1	1	0	0	2003-2005	1
Turkey	Ankara	2002-2005	4	0	4	0	NA	NA
Turkey	Antalya	1998-2002, 2003-2007, 2002-2005, 2008	7	2	5	0	1998-2002, 2003-2007	2
Turkey	Edirne	2004-2007, 2002-2005	5	1	4	0	2004-2007	1
Turkey	Erzurum	2002-2003, 2005	3	0	3	0	NA	NA

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Turkey	Eskisehir	2002-2005	4	0	4	0	NA	NA
Turkey	Izmir	1998-2002, 2003-2007, 2002-2006, 2008	8	2	6	0	1998-2002, 2003-2007	2
Turkey	Samsun	2002-2005	4	0	4	0	NA	NA
Turkey	Trabzon	2005-2007, 2002-2005	5	1	4	0	2005-2007	1
Turkey	Turkey Active Cancer Registration System	2007-2008	2	0	2	0	NA	NA
Uganda	Kyadondo County	1991-1993, 1993-1997, 1998-2002, 2003-2007	4	4	0	0	1991-1993, 1993-1997, 1998-2002, 2003-2007	4
Ukraine	Ukraine National Registry	2003-2007, 2000-2007, 2009-2010	11	1	10	0	2003-2007, 2003, 2005, 2009-2010	5
United Kingdom	East Anglia	1988-1992, 1993-1997	2	2	0	0	1988-1992, 1993-1997	2
United Kingdom	England	1993-1997, 2003-2007	2	2	0	0	1993-1997, 2003-2007	2
United Kingdom	England and Wales	1979-1982, 1983-1986, 1983-1987, 1988-1990	4	4	0	0	1979-1982, 1983-1986, 1983-1987, 1988-1990	4
United Kingdom	England East Midlands	1990-2013	24	0	24	3	1981-2010	30
United Kingdom	England East Of England	1998-2002, 2003-2007, 1990-2013	26	2	24	3	1998-2002, 2003-2007, 1981-2010	32
United Kingdom	England Greater London	1990-2013	24	0	24	3	1981-2010	30

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
United Kingdom	England Merseyside and Cheshire	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 1979-2002	29	29	0	0	1968-1972, 1975-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 1975-2002	35
United Kingdom	England North Western	1979-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	30	30	0	0	1973-1977, 1979-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	31
United Kingdom	England Northern and Yorkshire	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007	2
United Kingdom	England Oxford	1979-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1985-2002	24	24	0	0	1968-1972, 1974-1977, 1979-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1985-2007	31
United Kingdom	England South and Western Regions	1978-1982, 1979-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	7	7	0	0	1966-1970, 1978-1982, 1979-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007	8
United Kingdom	England South Thames	1978-1982, 1983-1987, 1988-1992, 1993-1997, 2003-2007	5	5	0	1	1967-1971, 1968-1972, 1973-1977,	8

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
							1978-1982, 1983-1987, 1988-1992, 1993-1997, 2003-2007	
United Kingdom	England Thames	1998-2002, 2003-2007	2	2	0	0	1998-2002, 2003-2007, 1991-2007	19
United Kingdom	England Trent	1978-1982, 1979-1982, 1983-1987, 1993-1997, 1998-2002, 2005-2007	6	6	0	0	1967-1970, 1974-1976, 1978-1982, 1979-1982, 1983-1987, 1993-1997, 1998-2002, 2005-2007, 1991-2007	25
United Kingdom	England Wessex	1988-1992	1	1	0	0	1988-1992	1
United Kingdom	England West Midlands	1979-1982, 1983-1986, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2013	42	31	11	3	1968-1972, 1973-1976, 1979-1982, 1983-1986, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2010	41
United Kingdom	England Yorkshire	1983-1987, 1988-1992, 1993-1997, 1983-2002	23	23	0	0	1983-1987, 1988-1992, 1993-1997, 1983-2002	23
United Kingdom	England Yorkshire and The Humber	1990-2013	24	0	24	3	1981-2010	30
United Kingdom	North East England	1990-2013	24	0	24	3	1981-2010	30

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
United Kingdom	North West England	1990-2013	24	0	24	3	1981-2010	30
United Kingdom	Northern Ireland	1993-1997, 1998-2002, 2003-2007, 1993-2011	22	3	19	0	1993-1997, 1998-2002, 2003-2007, 1993-2011	22
United Kingdom	Scotland	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2011	39	30	9	0	1975-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1974-2011	45
United Kingdom	Scotland Aryshire	-	0	0	0	0	1970-1972	1
United Kingdom	Scotland East	1978-1982, 1983-1987	2	2	0	0	1973-1977, 1978-1982, 1983-1987	3
United Kingdom	Scotland North	1978-1982, 1983-1987	2	2	0	0	1973-1977, 1978-1982, 1983-1987	3
United Kingdom	Scotland North-East	1978-1982, 1983-1987	2	2	0	0	1973-1977, 1978-1982, 1983-1987	3
United Kingdom	Scotland South-East	1978-1982, 1983-1987	2	2	0	0	1973-1977, 1978-1982, 1983-1987	3
United Kingdom	Scotland West	1978-1982, 1983-1987, 1988-1992	3	3	0	0	1975-1977, 1978-1982, 1983-1987, 1988-1992	4
United Kingdom	South East England	1990-2013	24	0	24	3	1981-2010	30
United Kingdom	South West England	1990-2013	24	0	24	3	1981-2010	30

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
United Kingdom	Wales	2003-2007, 2006-2011	7	1	6	0	2003-2007, 1981-2011	32
United States	Alabama	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Alaska	1998-2002, 2003-2007, 1992-2011	22	2	20	3	1998-2002, 2003-2007, 1992-2011	22
United States	Arizona	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Arkansas	2003-2007, 1999-2011	14	1	13	13	2003-2007, 1999-2011	14
United States	California	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	California Alameda County	1978-1982, 1983-1987	2	2	0	0	1969-1973, 1973-1977, 1978-1982, 1983-1987	4
United States	California Central Valley	1988-1992	1	1	0	0	1988-1992	1
United States	California excluding SF/SJM/LA	2000-2008	9	0	9	0	2000-2009	10
United States	California Greater San Francisco Bay Area	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1979-2002	30	30	0	0	1969-1973, 1973-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1973-2002	38
United States	California Los Angeles	1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-	47	30	17	11	1973-1975, 1973-1977, 1976-1978, 1978-1982, 1979-	57

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
		1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1979-2008					1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1973-2009	
United States	California San Francisco-Oakland SMSA	1979-2008	30	0	30	0	1973-2009	37
United States	California San Jose-Monterey	1979-1981, 1982-1984, 1985-1987, 1988-1990, 1991-1993, 1994-1996, 1997-1999, 2000-2002, 2003-2005, 2006-2008, 2009-2012, 1992-2008	28	0	28	11	1973-1975, 1976-1978, 1979-1981, 1982-1984, 1985-1987, 1988-1990, 1991-1993, 1994-1996, 1997-1999, 2000-2002, 2003-2005, 2006-2008, 2009-2012, 1992-2009	31
United States	Colorado	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Connecticut	1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-	50	30	20	14	1968-1972, 1973-1975, 1973-1977, 1976-1978, 1978-	60

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
		1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1979-2011					1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1973-2011	
United States	Delaware	2003-2007, 1999-2011	14	1	13	13	2003-2007, 1999-2011	14
United States	District Of Columbia	1998-2002, 1999-2011	14	1	13	13	1998-2002, 1999-2011	14
United States	Florida	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Georgia	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Georgia Atlanta	1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1979-2008	47	30	17	11	1973-1975, 1975-1977, 1976-1978, 1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-	55

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
							1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1975-2009	
United States	Greater Georgia	1979-1981, 1982-1984, 1985-1987, 1988-1990, 1991-1993, 1994-1996, 1997-1999, 2000-2002, 2003-2005, 2006-2008, 2009-2012	11	0	11	11	1973-1975, 1976-1978, 1979-1981, 1982-1984, 1985-1987, 1988-1990, 1991-1993, 1994-1996, 1997-1999, 2000-2002, 2003-2005, 2006-2008, 2009-2012	13
United States	Hawaii	1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1979-2011	50	30	20	14	1968-1972, 1973-1975, 1973-1977, 1976-1978, 1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1973-2011	60

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
United States	Idaho	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Illinois	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Indiana	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Iowa	1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1979-2011	50	30	20	14	1969-1971, 1973-1975, 1973-1977, 1976-1978, 1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1973-2011	60
United States	Kansas	1999-2011	13	0	13	13	1999-2011	13
United States	Kentucky	1979-1981, 1982-1984, 1985-1987, 1988-1990, 1991-1993, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1999-2011	26	2	24	15	1973-1975, 1976-1978, 1979-1981, 1982-1984, 1985-1987, 1988-1990, 1991-1993, 1994-1996, 1997-1999,	28

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
							1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1999-2011	
United States	Louisiana	1979-1981, 1982-1984, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1999-2011	28	4	24	16	1973-1975, 1976-1978, 1979-1981, 1982-1984, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1999-2011	30
United States	Louisiana New Orleans	1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2002	26	26	0	0	1974-1977, 1978-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, 2003-2007, 1983-2002	27
United States	Maine	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Maryland	1999-2011	13	0	13	13	1999-2011	13
United States	Massachusetts	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
United States	Michigan	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Michigan Detroit	1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1979-2008	47	30	17	11	1969-1971, 1973-1975, 1973-1977, 1976-1978, 1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1973-2009	58
United States	Minnesota	1999-2011	13	0	13	13	1999-2011	13
United States	Mississippi	2003-2007, 1999-2011	14	1	13	13	2003-2007, 1999-2011	14
United States	Missouri	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Montana	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Nebraska	2003-2007, 1999-2011	14	1	13	13	2003-2007, 1999-2011	14
United States	Nevada	1999-2011	13	0	13	13	1999-2011	13

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
United States	New Hampshire	2003-2007, 1999-2011	14	1	13	13	2003-2007, 1999-2011	14
United States	New Jersey	1979-1981, 1982-1984, 1985-1987, 1988-1990, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1999-2011	27	3	24	15	1973-1975, 1976-1978, 1979-1981, 1982-1984, 1985-1987, 1988-1990, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1999-2011	29
United States	New Mexico	1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1979-2011	50	30	20	14	1969-1972, 1973-1975, 1973-1977, 1976-1978, 1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1973-2011	60

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
United States	New York	1993-1997, 1998-2002, 2003-2007, 1999-2011	16	3	13	13	1993-1997, 1998-2002, 2003-2007, 1999-2011	16
United States	New York City	1978-1982, 1983-1987	2	2	0	0	1978-1982, 1983-1987	2
United States	New York State (less New York City)	1978-1982, 1983-1987	2	2	0	0	1969-1971, 1973-1977, 1978-1982, 1983-1987	4
United States	North Carolina	2003-2007, 1999-2011	14	1	13	13	2003-2007, 1999-2011	14
United States	North Dakota	2003-2007, 1999-2011	14	1	13	13	2003-2007, 1999-2011	14
United States	Ohio	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Oklahoma	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Oregon	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Pennsylvania	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Rhode Island	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Rural Georgia	1979-1981, 1982-1984, 1985-1987, 1988-1990, 1991-1993, 1994-1996, 1997-1999, 2000-2002, 2003-2005, 2006-2008, 2009-2012, 1992-2008	28	0	28	11	1973-1975, 1976-1978, 1979-1981, 1982-1984, 1985-1987, 1988-1990, 1991-1993, 1994-1996, 1997-1999, 2000-2002, 2003-	31

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
							2005, 2006-2008, 2009-2012, 1992-2009	
United States	South Carolina	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	South Dakota	2003-2007, 1999-2011	14	1	13	13	2003-2007, 1999-2011	14
United States	Tennessee	2003-2007, 1999-2011	14	1	13	13	2003-2007, 1999-2011	14
United States	Texas	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Texas El Paso	-	0	0	0	0	1968-1970	1
United States	Utah	1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1979-2011	50	30	20	14	1966-1970, 1973-1975, 1973-1977, 1976-1978, 1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1973-2011	60

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
United States	Vermont	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Virginia	2003-2007, 1999-2011	14	1	13	13	2003-2007, 1999-2011	14
United States	Washington	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Washington Seattle	1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1979-2008	47	30	17	11	1973-1975, 1974-1977, 1976-1978, 1978-1982, 1979-1981, 1982-1984, 1983-1987, 1985-1987, 1988-1990, 1988-1992, 1991-1993, 1993-1997, 1994-1996, 1997-1999, 1998-2002, 2000-2002, 2003-2005, 2003-2007, 2006-2008, 2009-2012, 1974-2009	56
United States	West Virginia	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Wisconsin	1998-2002, 2003-2007, 1999-2011	15	2	13	13	1998-2002, 2003-2007, 1999-2011	15
United States	Wyoming	2003-2007, 1999-2011	14	1	13	13	2003-2007, 1999-2011	14
Uruguay	Montevideo	1990-1992, 1993-1995	2	2	0	0	1990-1992, 1993-1995	2

Location	Cancer Registry	Years included for incidence	Site yrs included for inc.	Site yrs used from CI5	Site yrs not used from CI5	Site yrs added for GBD 2015	Yrs included for MI ratio model	Site yrs included for MI ratio model
Uruguay	Uruguay National Registry	2002-2006, 2005-2007	2	1	1	0	2005-2007	1
Vietnam	Hanoi	1991-1993, 1993-1997	2	2	0	0	1991-1993, 1993-1997	2
Vietnam	Ho Chi Minh City	1995-1998	1	1	0	0	1995-1998	1
Zimbabwe	Bulawayo	-	0	0	0	0	1968-1972	1
Zimbabwe	Harare	1990-1992, 1993-1997, 1998-2002, 2003-2006	4	4	0	0	1990-1992, 1993-1997, 1998-2002, 2003-2006	4
Zimbabwe	Zimbabwe National Registry	2005-2006	2	0	2	0	NA	NA

eTable 3: Number of site years for cancer mortality data by type

Cause	Vital registration	Verbal autopsy	Surveillance	Cancer registry
Lip and oral cavity cancer	10049	134		2399
Nasopharynx cancer	10070			2354
Other pharynx cancer	10050			2323
Esophageal cancer	10408	132		2411
Stomach cancer	10414			2432
Colon and rectum cancer	10413	134		2432
Liver cancer	10118			2419
Gallbladder and biliary tract cancer	10090			2331
Pancreatic cancer	9796			2418
Larynx cancer	10390			2405
Tracheal, bronchus, and lung cancer	10413	147		2413
Malignant skin melanoma	10103			2305
Non-melanoma skin cancer	9680			1230
Non-melanoma skin cancer (squamous-cell carcinoma)	8526			1230
Breast cancer	10402	153	1	2417
Cervical cancer	10406			2382
Uterine cancer	10325			2373
Ovarian cancer	9802			2371
Prostate cancer	10356			2351
Testicular cancer	8869	84		2274
Kidney cancer	10095			2387
Bladder cancer	10100			2426
Brain and nervous system cancer	9801	1		2418
Thyroid cancer	9713			2375
Mesothelioma	9095			1293
Hodgkin lymphoma	10078			2289
Non-Hodgkin lymphoma	10102			2394
Multiple myeloma	10086			2294
Leukemia	10413		551	2396
Acute lymphoid leukemia	8236			260
Chronic lymphoid leukemia	8226			249
Acute myeloid leukemia	8235			259
Chronic myeloid leukemia	8234			259
Other neoplasms	10419		67	2444

eTable 4: List of International Classification of Diseases (ICD) codes mapped to the Global Burden of Disease cause list for cancer incidence data

Cause	ICD10	ICD9
Lip and oral cavity cancer	C0-C08.9,	140-145.9
Nasopharynx cancer	C11-C11.9,	147-147.9
Other pharynx cancer	C09-C10.9, C12-C13.9,	146-146.9, 148-148.9
Esophageal cancer	C15-C15.9	150-150.9
Stomach cancer	C16-C16.9	151-151.9,
Colon and rectum cancer	C18-C21.9	153-154.9
Liver cancer	C22-C22.9	155-155.9
Gallbladder and biliary tract cancer	C23-C24.9	156-156.9
Pancreatic cancer	C25-C25.9	157-157.9
Larynx cancer	C32-C32.9	161-161.9,
Tracheal, bronchus, and lung cancer	C33-C34.92	162-162.9
Malignant skin melanoma	C43-C43.9	172-172.9
Breast cancer	C50-C50.929,	174-175.9,
Cervical cancer	C53-C53.9	180-180.9
Uterine cancer	C54-C54.9	182-182.8
Ovarian cancer	C56-C56.9	183-183.0
Prostate cancer	C61-C61.9	185-185.9
Testicular cancer	C62-C62.92	186-186.9
Kidney cancer	C64-C65.9	189.0-189.1
Bladder cancer	C67-C67.9	188-188.9
Brain and nervous system cancer	C70-C72.9	191-192.9
Thyroid cancer	C73-C73.9	193-193.9
Mesothelioma	C45-C45.9	158.9, 163-163.9
Hodgkin lymphoma	C81-C81.99	201-201.98
Non-Hodgkin lymphoma	C82-C86.6, C96-C96.9	200-200.9, 202-202.98
Multiple myeloma	C88-C90.9	203-203.9
Leukemia	C91-C95.92	204-208.92
Acute lymphoid leukemia	C91.0-C91.02	204.0-204.02
Chronic lymphoid leukemia	C91.1-C91.12	204.1-204.12
Acute myeloid leukemia	C92.0-C92.02, C92.3-C92.62, C93.0-C93.02, C94.0-C94.02, C94.2-C94.22, C94.4-C94.5	205.0-205.02, 205.3-205.32, 206.0-206.02, 207.0
Chronic myeloid leukemia	C92.1-C92.12	205.1-205.12, 206.1-206.12, 207.1
Other neoplasms	C17-C17.9, C3-C31.9, C37-C38.8, C4-C41.9, C47-C5, C51-C52.9, C57-C57.8, C58-C58.0, C60-C60.9, C63-C63.8, C66-C66.9,	152-152.9, 158-158.8, 160-160.9, 164-164.9, 170-171.9, 181-181.9, 182.9, 183.2-183.8, 184.0-184.4, 184.8, 187.1-187.8, 189.2-189.8,

Cause	ICD10	ICD9
	C68.0-C68.8, C69-C7, C74-C75.8, D07.4, D09.2-D09.22, D13.2-D13.39, D14.0, D15-D16.9, D28.0-D28.1, D28.7, D29.0, D30.2-D30.22, D30.4-D30.8, D31-D33.9, D35-D36, D36.1-D36.7, D37.2, D38.2-D38.5, D39.2, D39.8, D41.2-D41.3, D42-D43.9, D44.1-D44.8, D45-D45.9, D47-D47.0, D47.2-D47.9, D48.0-D48.4, D49.6, D49.81, D00.00-D00.07, D10.0-D10.5, D11-D11.9, D37.01-D37.04, D37.09, D00.08, D10.6, D37.05, D10.7, , D00.1, D13.0, D00.2, D13.1, D37.1, D01.0-D01.3, D12-D12.9, D37.3-D37.5, D13.4, D13.5, D13.6-D13.7, D14.1, D38.0, D02.0, D14.2-D14.32, D38.1, D02.1-D02.3, D03-D03.9, D22-D23.9, D48.5, D04-D04.9, D49.2, D05-D05.92, D24-D24.9, D48.6-D48.62, D49.3, D06-D06.9, D26.0, D07.0-D07.2, D27-D27.9, D39.1-D39.12, D07.5, D29.1, D40.0,, D29.2-D29.8, D40.1-D40.8, D30.0-D30.12, D41.0-D41.12, D09.0, D30.3, D41.4-D41.8, D49.4, D09.3, D09.8, D34-D34.9, D44.0	190-190.9, 194-194.8, 209.0-209.03, 209.22, 209.31-209.43, 211.2, 211.8, 212.0, 212.5-212.8, 213-213.9, 221.0-221.8, 222.1, 222.8, 223.2, 223.8-223.89, 224-225.9, 227-228.9, 229.0, 229.8, 230.7-230.8, 233.31-233.32, 233.4-233.5, 234.0-234.8, 235.4, 235.8, 236.1, 236.99-237.3, 237.5-237.9, 238.0-238.1, 238.4-238.5, 239.2, 239.6 , 210.0-210.6, 235.0,210.7-210.9, 211.0, 230.1, 209.23, 209.63, 211.1, 230.2, 209.1-209.17, 209.5-209.57, 211.3-211.4, 230.3-230.6, 211.5, 209.25-209.27, 209.65-209.67, 211.6-211.7, 212.1, 231.0, 235.6, 209.21, 209.61, 212.2-212.3, 231.1-231.2, 235.7, 222.4, 232-232.9, 238.2, 222.4, 232-232.9, 238.2, 217-217.8, 233.0, 238.3, 239.3, 610-610.9, 219.0, 233.1, 233.2, 220-220.9, 236.2, 222.2, 236.5, 222.0, 222.3, 236.4, 209.24, 209.64, 223.0-223.1, 236.91, 223.3, 233.7, 236.7, 239.4, 226-226.9, 212.4

eTable 5: List of International Classification of Diseases (ICD) codes mapped to the Global Burden of Disease cause list for cancer mortality data

Cause	ICD10	ICD9
Lip and oral cavity cancer	C0-C08.9, D00.00-D00.07, D10.0-D10.5, D11-D11.9, D37.01-D37.04, D37.09	140-145.9, 210.0-210.6, 235.0
Nasopharynx cancer	C11-C11.9, D00.08, D10.6, D37.05	147-147.9, 210.7-210.9
Other pharynx cancer	C09-C10.9, C12-C13.9, D10.7	146-146.9, 148-148.9
Esophageal cancer	C15-C15.9, D00.1, D13.0	150-150.9, 211.0, 230.1
Stomach cancer	C16-C16.9, D00.2, D13.1, D37.1	151-151.9, 209.23, 209.63, 211.1, 230.2
Colon and rectum cancer	C18-C21.9, D01.0-D01.3, D12-D12.9, D37.3-D37.5	153-154.9, 209.1-209.17, 209.5-209.57, 211.3-211.4, 230.3-230.6

Cause	ICD10	ICD9
Liver cancer	C22-C22.9, D13.4	155-155.9, 211.5
Gallbladder and biliary tract cancer	C23-C24.9, D13.5	156-156.9, 209.25-209.27, 209.65-209.67
Pancreatic cancer	C25-C25.9, D13.6-D13.7	157-157.9, 211.6-211.7
Larynx cancer	C32-C32.9, D02.0, D14.1, D38.0	161-161.9, 212.1, 231.0, 235.6
Tracheal, bronchus, and lung cancer	C33-C34.92, D02.1-D02.3, D14.2-D14.32, D38.1	162-162.9, 209.21, 209.61, 212.2-212.3, 231.1-231.2, 235.7
Malignant skin melanoma	C43-C43.9, D03-D03.9, D22-D23.9, D48.5	172-172.9
Breast cancer	C50-C50.929, D05-D05.92, D24-D24.9, D48.6-D48.62, D49.3, N60-N60.99	174-175.9, 217-217.8, 233.0, 238.3, 239.3, 610-610.9
Cervical cancer	C53-C53.9, D06-D06.9, D26.0	180-180.9, 219.0, 233.1
Uterine cancer	C54-C54.9, D07.0-D07.2, N87-N87.9	182-182.8, 233.2
Ovarian cancer	C56-C56.9, D27-D27.9, D39.1-D39.12	183-183.0, 220-220.9, 236.2
Prostate cancer	C61-C61.9, D07.5, D29.1, D40.0	185-185.9, 222.2, 236.5
Testicular cancer	C62-C62.92, D29.2-D29.8, D40.1-D40.8	186-186.9, 222.0, 222.3, 236.4
Kidney cancer	C64-C65.9, D30.0-D30.12, D41.0-D41.12	189.0-189.1, 209.24, 209.64, 223.0-223.1, 236.91
Bladder cancer	C67-C67.9, D09.0, D30.3, D41.4-D41.8, D49.4	188-188.9, 223.3, 233.7, 236.7, 239.4
Brain and nervous system cancer	C70-C72.9	191-192.9
Thyroid cancer	C73-C73.9, D09.3, D09.8, D34-D34.9, D44.0	193-193.9, 226-226.9
Mesothelioma	C45-C45.9	158.9, 163-163.9, 212.4
Hodgkin lymphoma	C81-C81.99	201-201.98
Non-Hodgkin lymphoma	C82-C86.6, C96-C96.9	200-200.9, 202-202.98
Multiple myeloma	C88-C90.9	203-203.9
Leukemia	C91-C95.92	204-208.92
Acute lymphoid leukemia	C91.0-C91.02	204.0-204.02
Chronic lymphoid leukemia	C91.1-C91.12	204.1-204.12
Acute myeloid leukemia	C92.0-C92.02, C92.3-C92.62, C93.0-C93.02, C94.0-C94.02, C94.2-C94.22, C94.4-C94.5	205.0-205.02, 205.3-205.32, 206.0-206.02, 207.0

Cause	ICD10	ICD9
Chronic myeloid leukemia	C92.1-C92.12	205.1-205.12, 206.1-206.12, 207.1
Other neoplasms	C17-C17.9, C3-C31.9, C37-C38.8, C4-C41.9, C47-C5, C51-C52.9, C57-C57.8, C58-C58.0, C60-C60.9, C63-C63.8, C66-C66.9, C68.0-C68.8, C69-C7, C74-C75.8, D07.4, D09.2-D09.22, D13.2-D13.39, D14.0, D15-D16.9, D28.0-D28.1, D28.7, D29.0, D30.2-D30.22, D30.4-D30.8, D31-D33.9, D35-D36, D36.1-D36.7, D37.2, D38.2-D38.5, D39.2, D39.8, D41.2-D41.3, D42-D43.9, D44.1-D44.8, D45-D45.9, D47-D47.0, D47.2-D47.9, D48.0-D48.4, D49.6, D49.81, K31.7, K62.0-K62.1, K63.5, N84.0-N84.1	152-152.9, 158-158.8, 160-160.9, 164-164.9, 170-171.9, 181-181.9, 182.9, 183.2-183.8, 184.0-184.4, 184.8, 187.1-187.8, 189.2-189.8, 190-190.9, 194-194.8, 209.0-209.03, 209.22, 209.31-209.43, 211.2, 211.8, 212.0, 212.5-212.8, 213-213.9, 221.0-221.8, 222.1, 222.8, 223.2, 223.8-223.89, 224-225.9, 227-228.9, 229.0, 229.8, 230.7-230.8, 233.31-233.32, 233.4-233.5, 234.0-234.8, 235.4, 235.8, 236.1, 236.99-237.3, 237.5-237.9, 238.0-238.1, 238.4-238.5, 239.2, 239.6, 569.0, 569.43-569.44, 569.84-569.85
ICD codes specifying benign neoplasms in the raw mortality data from vital registration systems were mapped to the respective malignant		

eTable 6: Undefined cancer code categories (ICD-10) and respective target codes for cancer registry incidence data

Unspecified site cancer codes	Target codes for redistribution of these Unspecified site cancer
C14,C14.0-C14.3,C14.8	C00-C13.99
C26,C26.0,C26.1,C26.8,C26.9	C15.00-C25.99
C39,C39.0,C39.8,C39.9	C30.00-C38.99, C45.00-C45.99
C55,C55.1,C55.9	C53.00-C54.99
C57.9	C51.00-C54.99, C56.00-C58.99
C68.9	C64.00-C68.89
C63.9	C60.00-C63.89
C75.9	C73.00-C75.89
C76,C76.4,C76.5,C76.8,C77,C77.3-C77.5,C77.8,C77.9,C78,C79,C79.2-C79.9,C80,C80.0,C80.2	C00-C99 (Except any unspecified site cancer codes)
C76.0,C76.1,C77.0,C77.1,C78.0-C78.3	C00-C13.99, C15, C30-C34.99,C37-C38.99, C40-C42.99, C43-C50.99, C69-C73.9
C76.2,C76.3,C77.2,C7.5,C78.4-C78.8,C79.0,C79.1	C15.00-C25.99, C45.00-C45.99, C48.00-C54.99, C56.00-C58.99, C61, C63.00-C63.89, C64.00-C68.99, C74.00-C75.89, C81.00-C88.99

eTable 7: Final MI ratio model selection

Cancer	Final model number (for model numbers, see text)
Ovarian cancer	1
Uterine cancer	1
Gallbladder cancer	1
Kidney cancer	1
Larynx cancer	1
Acute lymphoid leukemia	1
Chronic myeloid leukemia	1
Lip and oral cavity cancer	1
Pancreatic cancer	1
Hodgkin lymphoma	2
Acute myeloid leukemia	2
Chronic lymphoid leukemia	2
Malignant skin melanoma	2
Bladder cancer	3
Brain and nervous system cancer	3
Esophageal cancer	3
Tracheal, bronchus and lung cancer	3
Mesothelioma	3
Multiple myeloma	3
Other cancer	3
Prostate cancer	4
Testicular cancer	4
Breast cancer	4
Colorectal cancer	4
Leukemia	4
Liver cancer	4
Non-Hodgkin lymphoma	4
Non-melanoma skin cancer (squamous cell carcinoma)	4
Stomach cancer	4
Nasopharynx cancer	6
Cervical cancer	7
Other pharynx cancer	8
Thyroid cancer	8

eTable 8: Socio-Demographic Index groupings by geography, based on 2015 values

Location	SDI level
Andorra	High SDI
Australia	High SDI
Austria	High SDI
Belarus	High SDI
Belgium	High SDI
Bermuda	High SDI
Brunei	High SDI
California	High SDI
Canada	High SDI
Cyprus	High SDI
Czech Republic	High SDI
Denmark	High SDI
France	High SDI
Germany	High SDI
Guam	High SDI
Hawaii	High SDI
Hungary	High SDI
Iceland	High SDI
Ireland	High SDI
Israel	High SDI
Italy	High SDI
Kuwait	High SDI
Latvia	High SDI
Lithuania	High SDI
Luxembourg	High SDI
Netherlands	High SDI
New Zealand	High SDI
Norway	High SDI
Poland	High SDI
Puerto Rico	High SDI
Russia	High SDI
Scotland	High SDI
Singapore	High SDI
Slovakia	High SDI
Slovenia	High SDI
South Korea	High SDI
Switzerland	High SDI
Taiwan	High SDI

Location	SDI level
The Bahamas	High SDI
Trinidad and Tobago	High SDI
United Arab Emirates	High SDI
Wales	High SDI
Yorkshire and the Humber	High SDI
Albania	High-middle SDI
Argentina	High-middle SDI
Armenia	High-middle SDI
Bahah	High-middle SDI
Bahrain	High-middle SDI
Barbados	High-middle SDI
Bosnia and Herzegovina	High-middle SDI
Bulgaria	High-middle SDI
Chile	High-middle SDI
Colombia	High-middle SDI
Costa Rica	High-middle SDI
Croatia	High-middle SDI
Cuba	High-middle SDI
Dominica	High-middle SDI
Dominican Republic	High-middle SDI
Ecuador	High-middle SDI
Fiji	High-middle SDI
Georgia	High-middle SDI
Greece	High-middle SDI
Greenland	High-middle SDI
Grenada	High-middle SDI
Iran	High-middle SDI
Jamaica	High-middle SDI
Jordan	High-middle SDI
Kazakhstan	High-middle SDI
Lebanon	High-middle SDI
Macedonia	High-middle SDI
Malaysia	High-middle SDI
Malta	High-middle SDI
Mauritius	High-middle SDI
México	High-middle SDI
Moldova	High-middle SDI
Mongolia	High-middle SDI
Montenegro	High-middle SDI
Nairobi	High-middle SDI

Location	SDI level
Northern Ireland	High-middle SDI
Oman	High-middle SDI
Panama	High-middle SDI
Peru	High-middle SDI
Portugal	High-middle SDI
Qatar	High-middle SDI
Romania	High-middle SDI
Serbia	High-middle SDI
Seychelles	High-middle SDI
Spain	High-middle SDI
Sri Lanka	High-middle SDI
Suriname	High-middle SDI
Thailand	High-middle SDI
Turkey	High-middle SDI
Turkmenistan	High-middle SDI
Ukraine	High-middle SDI
Uruguay	High-middle SDI
Uzbekistan	High-middle SDI
Venezuela	High-middle SDI
Algeria	Middle SDI
Belize	Middle SDI
Bolivia	Middle SDI
Botswana	Middle SDI
Egypt	Middle SDI
El Salvador	Middle SDI
Equatorial Guinea	Middle SDI
Federated States of Micronesia	Middle SDI
Gabon	Middle SDI
Guyana	Middle SDI
Honduras	Middle SDI
Indonesia	Middle SDI
Iraq	Middle SDI
Kyrgyzstan	Middle SDI
Libya	Middle SDI
Maldives	Middle SDI
Marshall Islands	Middle SDI
Namibia	Middle SDI
Nicaragua	Middle SDI
North Korea	Middle SDI
Palestine	Middle SDI

Location	SDI level
Paraguay	Middle SDI
Philippines	Middle SDI
Roraima	Middle SDI
Samoa	Middle SDI
Swaziland	Middle SDI
Syria	Middle SDI
Tajikistan	Middle SDI
Tonga	Middle SDI
Tunisia	Middle SDI
Vietnam	Middle SDI
Angola	Low-middle SDI
Bangladesh	Low-middle SDI
Bhutan	Low-middle SDI
Cambodia	Low-middle SDI
Cameroon	Low-middle SDI
Cape Verde	Low-middle SDI
Congo	Low-middle SDI
Djibouti	Low-middle SDI
Ghana	Low-middle SDI
Guatemala	Low-middle SDI
Haiti	Low-middle SDI
Kiribati	Low-middle SDI
Laos	Low-middle SDI
Lesotho	Low-middle SDI
Morocco	Low-middle SDI
Myanmar	Low-middle SDI
Nepal	Low-middle SDI
Nigeria	Low-middle SDI
Pakistan	Low-middle SDI
Papua New Guinea	Low-middle SDI
Sao Tome and Principe	Low-middle SDI
Solomon Islands	Low-middle SDI
Sudan	Low-middle SDI
Tanzania	Low-middle SDI
Tibet	Low-middle SDI
Timor-Leste	Low-middle SDI
Yemen	Low-middle SDI
Zambia	Low-middle SDI
Zimbabwe	Low-middle SDI
Afghanistan	Low SDI

Location	SDI level
Benin	Low SDI
Burkina Faso	Low SDI
Burundi	Low SDI
Central African Republic	Low SDI
Chad	Low SDI
Comoros	Low SDI
Cote d'Ivoire	Low SDI
Democratic Republic of the Congo	Low SDI
Eritrea	Low SDI
Ethiopia	Low SDI
Garissa	Low SDI
Guinea	Low SDI
Guinea-Bissau	Low SDI
Liberia	Low SDI
Madagascar	Low SDI
Malawi	Low SDI
Mali	Low SDI
Mauritania	Low SDI
Mozambique	Low SDI
Niger	Low SDI
Rwanda	Low SDI
Senegal	Low SDI
Sierra Leone	Low SDI
Somalia	Low SDI
South Sudan	Low SDI
The Gambia	Low SDI
Togo	Low SDI
Uganda	Low SDI

eTable 9: Covariates selected for CODEm for each GBD cancer group and expected direction of covariate

Cause	Sex	Age start	Age end	Direction	Covariate
Lip and oral cavity cancer	Male	15-19 years	80+ years	-1	Education (years per capita)
Lip and oral cavity cancer	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Lip and oral cavity cancer	Male	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Lip and oral cavity cancer	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)

Cause	Sex	Age start	Age end	Direction	Covariate
Lip and oral cavity cancer	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Lip and oral cavity cancer	Male	15-19 years	80+ years	0	Sociodemographic Status
Lip and oral cavity cancer	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Lip and oral cavity cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Lip and oral cavity cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (20 Years)
Lip and oral cavity cancer	Male	15-19 years	80+ years	1	Log-transformed SEV scalar: Mouth C
Lip and oral cavity cancer	Male	15-19 years	80+ years	1	Red Meat (kcal per capita)
Lip and oral cavity cancer	Male	15-19 years	80+ years	1	Smoking Prevalence
Lip and oral cavity cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Lip and oral cavity cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Lip and oral cavity cancer	Female	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Lip and oral cavity cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Lip and oral cavity cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Lip and oral cavity cancer	Female	15-19 years	80+ years	0	Sociodemographic Status
Lip and oral cavity cancer	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Lip and oral cavity cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Lip and oral cavity cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (20 Years)
Lip and oral cavity cancer	Female	15-19 years	80+ years	1	Red Meat (kcal per capita)
Lip and oral cavity cancer	Female	15-19 years	80+ years	1	Smoking Prevalence
Nasopharynx cancer	Male	5-9 years	80+ years	-1	Education (years per capita)
Nasopharynx cancer	Male	5-9 years	80+ years	-1	Fruits (kcal per capita)
Nasopharynx cancer	Male	5-9 years	80+ years	-1	Health System Access 2 (unitless)

Cause	Sex	Age start	Age end	Direction	Covariate
Nasopharynx cancer	Male	5-9 years	80+ years	-1	LDI (I\$ per capita)
Nasopharynx cancer	Male	5-9 years	80+ years	-1	Vegetables (kcal per capita)
Nasopharynx cancer	Male	5-9 years	80+ years	-1	Whole Grains (kcal per capita)
Nasopharynx cancer	Male	5-9 years	80+ years	0	Sociodemographic Status
Nasopharynx cancer	Male	5-9 years	80+ years	1	Alcohol (litres per capita)
Nasopharynx cancer	Male	5-9 years	80+ years	1	Log-transformed SEV scalar: Nasoph C
Nasopharynx cancer	Male	5-9 years	80+ years	1	Malnutrition (proportion <2SD weight for age)
Nasopharynx cancer	Male	5-9 years	80+ years	1	Population Density (over 1000 ppl/sqkm, proportion)
Nasopharynx cancer	Male	5-9 years	80+ years	1	Population Density (under 150 ppl/sqkm, proportion)
Nasopharynx cancer	Female	5-9 years	80+ years	-1	Education (years per capita)
Nasopharynx cancer	Female	5-9 years	80+ years	-1	Fruits (kcal per capita)
Nasopharynx cancer	Female	5-9 years	80+ years	-1	Health System Access 2 (unitless)
Nasopharynx cancer	Female	5-9 years	80+ years	-1	LDI (I\$ per capita)
Nasopharynx cancer	Female	5-9 years	80+ years	-1	Vegetables (kcal per capita)
Nasopharynx cancer	Female	5-9 years	80+ years	-1	Whole Grains (kcal per capita)
Nasopharynx cancer	Female	5-9 years	80+ years	0	Sociodemographic Status
Nasopharynx cancer	Female	5-9 years	80+ years	1	Alcohol (litres per capita)
Nasopharynx cancer	Female	5-9 years	80+ years	1	Log-transformed SEV scalar: Nasoph C
Nasopharynx cancer	Female	5-9 years	80+ years	1	Malnutrition (proportion <2SD weight for age)
Nasopharynx cancer	Female	5-9 years	80+ years	1	Population Density (over 1000 ppl/sqkm, proportion)
Nasopharynx cancer	Female	5-9 years	80+ years	1	Population Density (under 150 ppl/sqkm, proportion)
Other pharynx cancer	Male	15-19 years	80+ years	-1	Education (years per capita)

Cause	Sex	Age start	Age end	Direction	Covariate
Other pharynx cancer	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Other pharynx cancer	Male	15-19 years	80+ years	-1	Health System Access (capped)
Other pharynx cancer	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Other pharynx cancer	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Other pharynx cancer	Male	15-19 years	80+ years	-1	Whole Grains (kcal per capita)
Other pharynx cancer	Male	15-19 years	80+ years	0	Sociodemographic Status
Other pharynx cancer	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Other pharynx cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Other pharynx cancer	Male	15-19 years	80+ years	1	Log-transformed SEV scalar: Oth Phar C
Other pharynx cancer	Male	15-19 years	80+ years	1	Malnutrition (proportion <2SD weight for age)
Other pharynx cancer	Male	15-19 years	80+ years	1	Population Density (over 1000 ppl/sqkm, proportion)
Other pharynx cancer	Male	15-19 years	80+ years	1	Population Density (under 150 ppl/sqkm, proportion)
Other pharynx cancer	Male	15-19 years	80+ years	1	Smoking Prevalence
Other pharynx cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Other pharynx cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Other pharynx cancer	Female	15-19 years	80+ years	-1	Health System Access (capped)
Other pharynx cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Other pharynx cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Other pharynx cancer	Female	15-19 years	80+ years	-1	Whole Grains (kcal per capita)
Other pharynx cancer	Female	15-19 years	80+ years	0	Sociodemographic Status
Other pharynx cancer	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Other pharynx cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)

Cause	Sex	Age start	Age end	Direction	Covariate
Other pharynx cancer	Female	15-19 years	80+ years	1	Log-transformed SEV scalar: Oth Phar C
Other pharynx cancer	Female	15-19 years	80+ years	1	Malnutrition (proportion <2SD weight for age)
Other pharynx cancer	Female	15-19 years	80+ years	1	Population Density (over 1000 ppl/sqkm, proportion)
Other pharynx cancer	Female	15-19 years	80+ years	1	Population Density (under 150 ppl/sqkm, proportion)
Other pharynx cancer	Female	15-19 years	80+ years	1	Smoking Prevalence
Esophageal cancer	Male	15-19 years	80+ years	-1	Education (years per capita)
Esophageal cancer	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Esophageal cancer	Male	15-19 years	80+ years	-1	Improved Water Source (proportion with access)
Esophageal cancer	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Esophageal cancer	Male	15-19 years	80+ years	-1	Sanitation (proportion with access)
Esophageal cancer	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Esophageal cancer	Male	15-19 years	80+ years	0	Sociodemographic Status
Esophageal cancer	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Esophageal cancer	Male	15-19 years	80+ years	1	Indoor Air Pollution (All Cooking Fuels)
Esophageal cancer	Male	15-19 years	80+ years	1	Indoor Air Pollution (Biomass Cooking)
Esophageal cancer	Male	15-19 years	80+ years	1	Indoor Air Pollution (Coal Cooking)
Esophageal cancer	Male	15-19 years	80+ years	1	Mean BMI
Esophageal cancer	Male	15-19 years	80+ years	1	Smoking Prevalence
Esophageal cancer	Male	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Esophageal cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Esophageal cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Esophageal cancer	Female	15-19 years	80+ years	-1	Improved Water Source (proportion with access)

Cause	Sex	Age start	Age end	Direction	Covariate
Esophageal cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Esophageal cancer	Female	15-19 years	80+ years	-1	Sanitation (proportion with access)
Esophageal cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Esophageal cancer	Female	15-19 years	80+ years	0	Sociodemographic Status
Esophageal cancer	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Esophageal cancer	Female	15-19 years	80+ years	1	Indoor Air Pollution (All Cooking Fuels)
Esophageal cancer	Female	15-19 years	80+ years	1	Indoor Air Pollution (Biomass Cooking)
Esophageal cancer	Female	15-19 years	80+ years	1	Indoor Air Pollution (Coal Cooking)
Esophageal cancer	Female	15-19 years	80+ years	1	Mean BMI
Esophageal cancer	Female	15-19 years	80+ years	1	Smoking Prevalence
Esophageal cancer	Female	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Stomach cancer	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Stomach cancer	Male	15-19 years	80+ years	-1	Improved Water Source (proportion with access)
Stomach cancer	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Stomach cancer	Male	15-19 years	80+ years	-1	Sanitation (proportion with access)
Stomach cancer	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Stomach cancer	Male	15-19 years	80+ years	0	Sociodemographic Status
Stomach cancer	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Stomach cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Stomach cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (15 Years)
Stomach cancer	Male	15-19 years	80+ years	1	Indoor Air Pollution (All Cooking Fuels)
Stomach cancer	Male	15-19 years	80+ years	1	Indoor Air Pollution (Biomass Cooking)

Cause	Sex	Age start	Age end	Direction	Covariate
Stomach cancer	Male	15-19 years	80+ years	1	Indoor Air Pollution (Coal Cooking)
Stomach cancer	Male	15-19 years	80+ years	1	Log-transformed SEV scalar: Stomach C
Stomach cancer	Male	15-19 years	80+ years	1	Mean BMI
Stomach cancer	Male	15-19 years	80+ years	1	Outdoor Air Pollution (PM2.5)
Stomach cancer	Male	15-19 years	80+ years	1	Smoking Prevalence
Stomach cancer	Male	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Stomach cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Stomach cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Stomach cancer	Female	15-19 years	80+ years	-1	Improved Water Source (proportion with access)
Stomach cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Stomach cancer	Female	15-19 years	80+ years	-1	Sanitation (proportion with access)
Stomach cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Stomach cancer	Female	15-19 years	80+ years	0	Sociodemographic Status
Stomach cancer	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Stomach cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Stomach cancer	Female	15-19 years	80+ years	1	Indoor Air Pollution (All Cooking Fuels)
Stomach cancer	Female	15-19 years	80+ years	1	Indoor Air Pollution (Biomass Cooking)
Stomach cancer	Female	15-19 years	80+ years	1	Indoor Air Pollution (Coal Cooking)
Stomach cancer	Female	15-19 years	80+ years	1	Log-transformed SEV scalar: Stomach C
Stomach cancer	Female	15-19 years	80+ years	1	Mean BMI
Stomach cancer	Female	15-19 years	80+ years	1	Outdoor Air Pollution (PM2.5)
Stomach cancer	Female	15-19 years	80+ years	1	Smoking Prevalence

Cause	Sex	Age start	Age end	Direction	Covariate
Stomach cancer	Female	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Colon and rectum cancer	Male	15-19 years	80+ years	-1	Education (years per capita)
Colon and rectum cancer	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Colon and rectum cancer	Male	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Colon and rectum cancer	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Colon and rectum cancer	Male	15-19 years	80+ years	-1	Nuts & Seeds (kcal per capita)
Colon and rectum cancer	Male	15-19 years	80+ years	-1	PUFA Omega 3 - Seafood (kcal per capita)
Colon and rectum cancer	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Colon and rectum cancer	Male	15-19 years	80+ years	-1	Whole Grains (kcal per capita)
Colon and rectum cancer	Male	15-19 years	80+ years	-1	In-Milk (kcal per capita)
Colon and rectum cancer	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Colon and rectum cancer	Male	15-19 years	80+ years	1	Diabetes Age-Standardised Prevalence (proportion)
Colon and rectum cancer	Male	15-19 years	80+ years	1	Log-transformed SEV scalar: Colorect C
Colon and rectum cancer	Male	15-19 years	80+ years	1	Mean BMI
Colon and rectum cancer	Male	15-19 years	80+ years	1	Red Meat (kcal per capita)
Colon and rectum cancer	Male	15-19 years	80+ years	1	Smoking Prevalence
Colon and rectum cancer	Male	15-19 years	80+ years	1	Sociodemographic Status
Colon and rectum cancer	Male	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Colon and rectum cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Colon and rectum cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Colon and rectum cancer	Female	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Colon and rectum cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)

Cause	Sex	Age start	Age end	Direction	Covariate
Colon and rectum cancer	Female	15-19 years	80+ years	-1	Nuts & Seeds (kcal per capita)
Colon and rectum cancer	Female	15-19 years	80+ years	-1	PUFA Omega 3 - Seafood (kcal per capita)
Colon and rectum cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Colon and rectum cancer	Female	15-19 years	80+ years	-1	Whole Grains (kcal per capita)
Colon and rectum cancer	Female	15-19 years	80+ years	-1	In-Milk (kcal per capita)
Colon and rectum cancer	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Colon and rectum cancer	Female	15-19 years	80+ years	1	Diabetes Age-Standardised Prevalence (proportion)
Colon and rectum cancer	Female	15-19 years	80+ years	1	Log-transformed SEV scalar: Colorect C
Colon and rectum cancer	Female	15-19 years	80+ years	1	Mean BMI
Colon and rectum cancer	Female	15-19 years	80+ years	1	Red Meat (kcal per capita)
Colon and rectum cancer	Female	15-19 years	80+ years	1	Smoking Prevalence
Colon and rectum cancer	Female	15-19 years	80+ years	1	Sociodemographic Status
Colon and rectum cancer	Female	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Liver cancer	Male	5-9 years	80+ years	-1	Education (years per capita)
Liver cancer	Male	5-9 years	80+ years	-1	Health System Access 2 (unitless)
Liver cancer	Male	5-9 years	80+ years	-1	LDI (I\$ per capita)
Liver cancer	Male	5-9 years	80+ years	0	Sociodemographic Status
Liver cancer	Male	5-9 years	80+ years	1	Alcohol (litres per capita)
Liver cancer	Male	5-9 years	80+ years	1	Animal Fats (kcal per capita)
Liver cancer	Male	5-9 years	80+ years	1	Cumulative Cigarettes (15 Years)
Liver cancer	Male	5-9 years	80+ years	1	Cumulative Cigarettes (20 Years)
Liver cancer	Male	5-9 years	80+ years	1	Diabetes Age-Standardised Prevalence (proportion)

Cause	Sex	Age start	Age end	Direction	Covariate
Liver cancer	Male	5-9 years	80+ years	1	Hepatitis B Prevalence (proportion)
Liver cancer	Male	5-9 years	80+ years	1	Hepatitis C Prevalence (proportion)
Liver cancer	Male	5-9 years	80+ years	1	Log-transformed SEV scalar: Liver C
Liver cancer	Male	5-9 years	80+ years	1	Mean BMI
Liver cancer	Male	5-9 years	80+ years	1	Red Meat (kcal per capita)
Liver cancer	Male	5-9 years	80+ years	1	Tobacco (cigarettes per capita)
Liver cancer	Female	5-9 years	80+ years	-1	Education (years per capita)
Liver cancer	Female	5-9 years	80+ years	-1	Health System Access 2 (unitless)
Liver cancer	Female	5-9 years	80+ years	-1	LDI (I\$ per capita)
Liver cancer	Female	5-9 years	80+ years	0	Sociodemographic Status
Liver cancer	Female	5-9 years	80+ years	1	Alcohol (litres per capita)
Liver cancer	Female	5-9 years	80+ years	1	Animal Fats (kcal per capita)
Liver cancer	Female	5-9 years	80+ years	1	Cumulative Cigarettes (15 Years)
Liver cancer	Female	5-9 years	80+ years	1	Cumulative Cigarettes (20 Years)
Liver cancer	Female	5-9 years	80+ years	1	Diabetes Age-Standardised Prevalence (proportion)
Liver cancer	Female	5-9 years	80+ years	1	Hepatitis B Prevalence (proportion)
Liver cancer	Female	5-9 years	80+ years	1	Hepatitis C Prevalence (proportion)
Liver cancer	Female	5-9 years	80+ years	1	Log-transformed SEV scalar: Liver C
Liver cancer	Female	5-9 years	80+ years	1	Mean BMI
Liver cancer	Female	5-9 years	80+ years	1	Red Meat (kcal per capita)
Liver cancer	Female	5-9 years	80+ years	1	Tobacco (cigarettes per capita)
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	-1	Education (years per capita)

Cause	Sex	Age start	Age end	Direction	Covariate
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	-1	Health System Access (capped)
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	0	Sociodemographic Status
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	1	Diabetes Age-Standardised Prevalence (proportion)
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	1	Log-transformed SEV scalar: Gallblad C
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	1	Mean BMI
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	1	Smoking Prevalence
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Gallbladder and biliary tract cancer	Male	15-19 years	80+ years	1	Total Calories (kcal per capita)
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	-1	Health System Access (capped)
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	0	Sociodemographic Status
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)

Cause	Sex	Age start	Age end	Direction	Covariate
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	1	Diabetes Age-Standardised Prevalence (proportion)
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	1	Log-transformed SEV scalar: Gallblad C
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	1	Mean BMI
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	1	Smoking Prevalence
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Gallbladder and biliary tract cancer	Female	15-19 years	80+ years	1	Total Calories (kcal per capita)
Pancreatic cancer	Male	15-19 years	80+ years	-1	Education (years per capita)
Pancreatic cancer	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Pancreatic cancer	Male	15-19 years	80+ years	-1	Health System Access (unitless)
Pancreatic cancer	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Pancreatic cancer	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Pancreatic cancer	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Pancreatic cancer	Male	15-19 years	80+ years	1	Animal Fats (kcal per capita)
Pancreatic cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Pancreatic cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (20 Years)
Pancreatic cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Pancreatic cancer	Male	15-19 years	80+ years	1	Diabetes Age-Standardised Prevalence (proportion)
Pancreatic cancer	Male	15-19 years	80+ years	1	Log-transformed SEV scalar: Pancreas C
Pancreatic cancer	Male	15-19 years	80+ years	1	Mean BMI
Pancreatic cancer	Male	15-19 years	80+ years	1	Red Meat (kcal per capita)
Pancreatic cancer	Male	15-19 years	80+ years	1	Smoking Prevalence

Cause	Sex	Age start	Age end	Direction	Covariate
Pancreatic cancer	Male	15-19 years	80+ years	1	Sociodemographic Status
Pancreatic cancer	Male	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Pancreatic cancer	Male	15-19 years	80+ years	1	Total Calories (kcal per capita)
Pancreatic cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Pancreatic cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Pancreatic cancer	Female	15-19 years	80+ years	-1	Health System Access (unitless)
Pancreatic cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Pancreatic cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Pancreatic cancer	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Pancreatic cancer	Female	15-19 years	80+ years	1	Animal Fats (kcal per capita)
Pancreatic cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Pancreatic cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (20 Years)
Pancreatic cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Pancreatic cancer	Female	15-19 years	80+ years	1	Diabetes Age-Standardised Prevalence (proportion)
Pancreatic cancer	Female	15-19 years	80+ years	1	Log-transformed SEV scalar: Pancreas C
Pancreatic cancer	Female	15-19 years	80+ years	1	Mean BMI
Pancreatic cancer	Female	15-19 years	80+ years	1	Red Meat (kcal per capita)
Pancreatic cancer	Female	15-19 years	80+ years	1	Smoking Prevalence
Pancreatic cancer	Female	15-19 years	80+ years	1	Sociodemographic Status
Pancreatic cancer	Female	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Pancreatic cancer	Female	15-19 years	80+ years	1	Total Calories (kcal per capita)
Larynx cancer	Male	15-19 years	80+ years	-1	Education (years per capita)

Cause	Sex	Age start	Age end	Direction	Covariate
Larynx cancer	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Larynx cancer	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Larynx cancer	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Larynx cancer	Male	15-19 years	80+ years	0	Sociodemographic Status
Larynx cancer	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Larynx cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Larynx cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (15 Years)
Larynx cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (20 Years)
Larynx cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Larynx cancer	Male	15-19 years	80+ years	1	Log-transformed SEV scalar: Larynx C
Larynx cancer	Male	15-19 years	80+ years	1	Population Density (over 1000 ppl/sqkm, proportion)
Larynx cancer	Male	15-19 years	80+ years	1	Population Density (under 150 ppl/sqkm, proportion)
Larynx cancer	Male	15-19 years	80+ years	1	Smoking Prevalence
Larynx cancer	Male	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Larynx cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Larynx cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Larynx cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Larynx cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Larynx cancer	Female	15-19 years	80+ years	0	Sociodemographic Status
Larynx cancer	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Larynx cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Larynx cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (15 Years)

Cause	Sex	Age start	Age end	Direction	Covariate
Larynx cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (20 Years)
Larynx cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Larynx cancer	Female	15-19 years	80+ years	1	Log-transformed SEV scalar: Larynx C
Larynx cancer	Female	15-19 years	80+ years	1	Population Density (over 1000 ppl/sqkm, proportion)
Larynx cancer	Female	15-19 years	80+ years	1	Population Density (under 150 ppl/sqkm, proportion)
Larynx cancer	Female	15-19 years	80+ years	1	Smoking Prevalence
Larynx cancer	Female	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Tracheal, bronchus, and lung cancer	Male	15-19 years	80+ years	-1	Education (years per capita)
Tracheal, bronchus, and lung cancer	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Tracheal, bronchus, and lung cancer	Male	15-19 years	80+ years	0	Sociodemographic Status
Tracheal, bronchus, and lung cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Tracheal, bronchus, and lung cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (15 Years)
Tracheal, bronchus, and lung cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (20 Years)
Tracheal, bronchus, and lung cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Tracheal, bronchus, and lung cancer	Male	15-19 years	80+ years	1	Indoor Air Pollution (All Cooking Fuels)
Tracheal, bronchus, and lung cancer	Male	15-19 years	80+ years	1	Outdoor Air Pollution (PM2.5)
Tracheal, bronchus, and lung cancer	Male	15-19 years	80+ years	1	Smoking Prevalence
Tracheal, bronchus, and lung cancer	Male	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Tracheal, bronchus, and lung cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Tracheal, bronchus, and lung cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Tracheal, bronchus, and lung cancer	Female	15-19 years	80+ years	0	Sociodemographic Status
Tracheal, bronchus, and lung cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)

Cause	Sex	Age start	Age end	Direction	Covariate
Tracheal, bronchus, and lung cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (15 Years)
Tracheal, bronchus, and lung cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (20 Years)
Tracheal, bronchus, and lung cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Tracheal, bronchus, and lung cancer	Female	15-19 years	80+ years	1	Indoor Air Pollution (All Cooking Fuels)
Tracheal, bronchus, and lung cancer	Female	15-19 years	80+ years	1	Outdoor Air Pollution (PM2.5)
Tracheal, bronchus, and lung cancer	Female	15-19 years	80+ years	1	Smoking Prevalence
Tracheal, bronchus, and lung cancer	Female	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Malignant skin melanoma	Male	15-19 years	80+ years	-1	Education (years per capita)
Malignant skin melanoma	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Malignant skin melanoma	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Malignant skin melanoma	Male	15-19 years	80+ years	-1	Latitude 30 to 45 (proportion)
Malignant skin melanoma	Male	15-19 years	80+ years	-1	Latitude Over 45 (proportion)
Malignant skin melanoma	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Malignant skin melanoma	Male	15-19 years	80+ years	0	Latitude 15 to 30 (proportion)
Malignant skin melanoma	Male	15-19 years	80+ years	0	Sociodemographic Status
Malignant skin melanoma	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Malignant skin melanoma	Male	15-19 years	80+ years	1	Animal Fats (kcal per capita)
Malignant skin melanoma	Male	15-19 years	80+ years	1	Cumulative Cigarettes (20 Years)
Malignant skin melanoma	Male	15-19 years	80+ years	1	Mean BMI
Malignant skin melanoma	Male	15-19 years	80+ years	1	Smoking Prevalence
Malignant skin melanoma	Male	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Malignant skin melanoma	Female	15-19 years	80+ years	-1	Education (years per capita)

Cause	Sex	Age start	Age end	Direction	Covariate
Malignant skin melanoma	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Malignant skin melanoma	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Malignant skin melanoma	Female	15-19 years	80+ years	-1	Latitude 30 to 45 (proportion)
Malignant skin melanoma	Female	15-19 years	80+ years	-1	Latitude Over 45 (proportion)
Malignant skin melanoma	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Malignant skin melanoma	Female	15-19 years	80+ years	0	Latitude 15 to 30 (proportion)
Malignant skin melanoma	Female	15-19 years	80+ years	0	Sociodemographic Status
Malignant skin melanoma	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Malignant skin melanoma	Female	15-19 years	80+ years	1	Animal Fats (kcal per capita)
Malignant skin melanoma	Female	15-19 years	80+ years	1	Cumulative Cigarettes (20 Years)
Malignant skin melanoma	Female	15-19 years	80+ years	1	Mean BMI
Malignant skin melanoma	Female	15-19 years	80+ years	1	Smoking Prevalence
Malignant skin melanoma	Female	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Breast cancer	Male	15-19 years	80+ years	-1	Education (years per capita)
Breast cancer	Male	15-19 years	80+ years	-1	Fertility (15-19 year olds)
Breast cancer	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Breast cancer	Male	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Breast cancer	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Breast cancer	Male	15-19 years	80+ years	-1	Latitude 30 to 45 (proportion)
Breast cancer	Male	15-19 years	80+ years	-1	Latitude Over 45 (proportion)
Breast cancer	Male	15-19 years	80+ years	-1	Total Fertility Rate
Breast cancer	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)

Cause	Sex	Age start	Age end	Direction	Covariate
Breast cancer	Male	15-19 years	80+ years	0	Latitude 15 to 30 (proportion)
Breast cancer	Male	15-19 years	80+ years	0	Sociodemographic Status
Breast cancer	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Breast cancer	Male	15-19 years	80+ years	1	Animal Fats (kcal per capita)
Breast cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Breast cancer	Male	15-19 years	80+ years	1	Log-transformed SEV scalar: Breast C
Breast cancer	Male	15-19 years	80+ years	1	Mean BMI
Breast cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Breast cancer	Female	15-19 years	80+ years	-1	Fertility (15-19 year olds)
Breast cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Breast cancer	Female	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Breast cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Breast cancer	Female	15-19 years	80+ years	-1	Latitude 30 to 45 (proportion)
Breast cancer	Female	15-19 years	80+ years	-1	Latitude Over 45 (proportion)
Breast cancer	Female	15-19 years	80+ years	-1	Total Fertility Rate
Breast cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Breast cancer	Female	15-19 years	80+ years	0	Latitude 15 to 30 (proportion)
Breast cancer	Female	15-19 years	80+ years	0	Sociodemographic Status
Breast cancer	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Breast cancer	Female	15-19 years	80+ years	1	Animal Fats (kcal per capita)
Breast cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Breast cancer	Female	15-19 years	80+ years	1	Log-transformed SEV scalar: Breast C

Cause	Sex	Age start	Age end	Direction	Covariate
Breast cancer	Female	15-19 years	80+ years	1	Mean BMI
Cervical cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Cervical cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Cervical cancer	Female	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Cervical cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Cervical cancer	Female	15-19 years	80+ years	-1	Sociodemographic Status
Cervical cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Cervical cancer	Female	15-19 years	80+ years	1	Abortion On-Demand Illegal (binary)
Cervical cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Cervical cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (15 Years)
Cervical cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Cervical cancer	Female	15-19 years	80+ years	1	Fertility (15-19 year olds)
Cervical cancer	Female	15-19 years	80+ years	1	HIV age-standardized prevalence
Cervical cancer	Female	15-19 years	80+ years	1	Smoking Prevalence
Cervical cancer	Female	15-19 years	80+ years	1	Total Fertility Rate
Uterine cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Uterine cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Uterine cancer	Female	15-19 years	80+ years	-1	Health System Access (unitless)
Uterine cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Uterine cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Uterine cancer	Female	15-19 years	80+ years	0	Sociodemographic Status
Uterine cancer	Female	15-19 years	80+ years	0	Total Fertility Rate

Cause	Sex	Age start	Age end	Direction	Covariate
Uterine cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Uterine cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Uterine cancer	Female	15-19 years	80+ years	1	Diabetes Age-Standardised Prevalence (proportion)
Uterine cancer	Female	15-19 years	80+ years	1	Log-transformed SEV scalar: Uterus C
Uterine cancer	Female	15-19 years	80+ years	1	Mean BMI
Uterine cancer	Female	15-19 years	80+ years	1	Smoking Prevalence
Uterine cancer	Female	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Ovarian cancer	Female	15-19 years	80+ years	-1	Contraception (Modern) Prevalence (proportion)
Ovarian cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Ovarian cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Ovarian cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Ovarian cancer	Female	15-19 years	80+ years	-1	Latitude 30 to 45 (proportion)
Ovarian cancer	Female	15-19 years	80+ years	-1	Latitude Over 45 (proportion)
Ovarian cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Ovarian cancer	Female	15-19 years	80+ years	0	Latitude 15 to 30 (proportion)
Ovarian cancer	Female	15-19 years	80+ years	0	Sociodemographic Status
Ovarian cancer	Female	15-19 years	80+ years	0	Total Fertility Rate
Ovarian cancer	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Ovarian cancer	Female	15-19 years	80+ years	1	Animal Fats (kcal per capita)
Ovarian cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (20 Years)
Ovarian cancer	Female	15-19 years	80+ years	1	Diabetes Age-Standardised Prevalence (proportion)
Ovarian cancer	Female	15-19 years	80+ years	1	Log-transformed SEV scalar: Ovary C

Cause	Sex	Age start	Age end	Direction	Covariate
Ovarian cancer	Female	15-19 years	80+ years	1	Mean BMI
Ovarian cancer	Female	15-19 years	80+ years	1	Smoking Prevalence
Ovarian cancer	Female	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Ovarian cancer	Female	15-19 years	80+ years	1	Total Calories (kcal per capita)
Prostate cancer	Male	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Prostate cancer	Male	15-19 years	80+ years	0	Education (years per capita)
Prostate cancer	Male	15-19 years	80+ years	0	LDI (I\$ per capita)
Prostate cancer	Male	15-19 years	80+ years	0	Sociodemographic Status
Prostate cancer	Male	15-19 years	80+ years	1	Animal Fats (kcal per capita)
Prostate cancer	Male	15-19 years	80+ years	1	Log-transformed SEV scalar: Prostate C
Testicular cancer	Male	15-19 years	80+ years	-1	Education (years per capita)
Testicular cancer	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Testicular cancer	Male	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Testicular cancer	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Testicular cancer	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Testicular cancer	Male	15-19 years	80+ years	0	Sociodemographic Status
Testicular cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Testicular cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (15 Years)
Testicular cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Kidney cancer	Male	28-364 days	80+ years	-1	Education (years per capita)
Kidney cancer	Male	28-364 days	80+ years	-1	Health System Access 2 (unitless)
Kidney cancer	Male	28-364 days	80+ years	-1	LDI (I\$ per capita)

Cause	Sex	Age start	Age end	Direction	Covariate
Kidney cancer	Male	28-364 days	80+ years	0	Total Fertility Rate
Kidney cancer	Male	28-364 days	80+ years	1	Alcohol (litres per capita)
Kidney cancer	Male	28-364 days	80+ years	1	Cumulative Cigarettes (10 Years)
Kidney cancer	Male	28-364 days	80+ years	1	Cumulative Cigarettes (15 Years)
Kidney cancer	Male	28-364 days	80+ years	1	Cumulative Cigarettes (5 Years)
Kidney cancer	Male	28-364 days	80+ years	1	Diabetes Age-Standardised Prevalence (proportion)
Kidney cancer	Male	28-364 days	80+ years	1	Log-transformed SEV scalar: Kidney C
Kidney cancer	Male	28-364 days	80+ years	1	Mean BMI
Kidney cancer	Male	28-364 days	80+ years	1	Smoking Prevalence
Kidney cancer	Male	28-364 days	80+ years	1	Sociodemographic Status
Kidney cancer	Male	28-364 days	80+ years	1	Systolic Blood Pressure (mmHg)
Kidney cancer	Male	28-364 days	80+ years	1	Total Calories (kcal per capita)
Kidney cancer	Female	28-364 days	80+ years	-1	Education (years per capita)
Kidney cancer	Female	28-364 days	80+ years	-1	Health System Access 2 (unitless)
Kidney cancer	Female	28-364 days	80+ years	-1	LDI (I\$ per capita)
Kidney cancer	Female	28-364 days	80+ years	0	Total Fertility Rate
Kidney cancer	Female	28-364 days	80+ years	1	Alcohol (litres per capita)
Kidney cancer	Female	28-364 days	80+ years	1	Cumulative Cigarettes (10 Years)
Kidney cancer	Female	28-364 days	80+ years	1	Cumulative Cigarettes (15 Years)
Kidney cancer	Female	28-364 days	80+ years	1	Cumulative Cigarettes (5 Years)
Kidney cancer	Female	28-364 days	80+ years	1	Diabetes Age-Standardised Prevalence (proportion)
Kidney cancer	Female	28-364 days	80+ years	1	Log-transformed SEV scalar: Kidney C

Cause	Sex	Age start	Age end	Direction	Covariate
Kidney cancer	Female	28-364 days	80+ years	1	Mean BMI
Kidney cancer	Female	28-364 days	80+ years	1	Smoking Prevalence
Kidney cancer	Female	28-364 days	80+ years	1	Sociodemographic Status
Kidney cancer	Female	28-364 days	80+ years	1	Systolic Blood Pressure (mmHg)
Kidney cancer	Female	28-364 days	80+ years	1	Total Calories (kcal per capita)
Bladder cancer	Male	15-19 years	80+ years	-1	Education (years per capita)
Bladder cancer	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Bladder cancer	Male	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Bladder cancer	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Bladder cancer	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Bladder cancer	Male	15-19 years	80+ years	0	Sociodemographic Status
Bladder cancer	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Bladder cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Bladder cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (15 Years)
Bladder cancer	Male	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Bladder cancer	Male	15-19 years	80+ years	1	Log-transformed SEV scalar: Bladder C
Bladder cancer	Male	15-19 years	80+ years	1	Population Density (over 1000 ppl/sqkm, proportion)
Bladder cancer	Male	15-19 years	80+ years	1	Population Density (under 150 ppl/sqkm, proportion)
Bladder cancer	Male	15-19 years	80+ years	1	Smoking Prevalence
Bladder cancer	Female	15-19 years	80+ years	-1	Education (years per capita)
Bladder cancer	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Bladder cancer	Female	15-19 years	80+ years	-1	Health System Access 2 (unitless)

Cause	Sex	Age start	Age end	Direction	Covariate
Bladder cancer	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Bladder cancer	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Bladder cancer	Female	15-19 years	80+ years	0	Sociodemographic Status
Bladder cancer	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Bladder cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Bladder cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (15 Years)
Bladder cancer	Female	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Bladder cancer	Female	15-19 years	80+ years	1	Log-transformed SEV scalar: Bladder C
Bladder cancer	Female	15-19 years	80+ years	1	Population Density (over 1000 ppl/sqkm, proportion)
Bladder cancer	Female	15-19 years	80+ years	1	Population Density (under 150 ppl/sqkm, proportion)
Bladder cancer	Female	15-19 years	80+ years	1	Smoking Prevalence
Brain and nervous system cancer	Male	1-4 years	80+ years	-1	Education (years per capita)
Brain and nervous system cancer	Male	1-4 years	80+ years	-1	Fruits (kcal per capita)
Brain and nervous system cancer	Male	1-4 years	80+ years	-1	Health System Access 2 (unitless)
Brain and nervous system cancer	Male	1-4 years	80+ years	-1	LDI (I\$ per capita)
Brain and nervous system cancer	Male	1-4 years	80+ years	-1	Vegetables (kcal per capita)
Brain and nervous system cancer	Male	1-4 years	80+ years	1	Alcohol (litres per capita)
Brain and nervous system cancer	Male	1-4 years	80+ years	1	Animal Fats (kcal per capita)
Brain and nervous system cancer	Male	1-4 years	80+ years	1	Cholesterol (total, mean per capita)
Brain and nervous system cancer	Male	1-4 years	80+ years	1	Cumulative Cigarettes (10 Years)
Brain and nervous system cancer	Male	1-4 years	80+ years	1	Cumulative Cigarettes (15 Years)
Brain and nervous system cancer	Male	1-4 years	80+ years	1	Red Meat (kcal per capita)

Cause	Sex	Age start	Age end	Direction	Covariate
Brain and nervous system cancer	Male	1-4 years	80+ years	1	Smoking Prevalence
Brain and nervous system cancer	Male	1-4 years	80+ years	1	Sociodemographic Status
Brain and nervous system cancer	Male	1-4 years	80+ years	1	Systolic Blood Pressure (mmHg)
Brain and nervous system cancer	Female	1-4 years	80+ years	-1	Education (years per capita)
Brain and nervous system cancer	Female	1-4 years	80+ years	-1	Fruits (kcal per capita)
Brain and nervous system cancer	Female	1-4 years	80+ years	-1	Health System Access 2 (unitless)
Brain and nervous system cancer	Female	1-4 years	80+ years	-1	LDI (I\$ per capita)
Brain and nervous system cancer	Female	1-4 years	80+ years	-1	Vegetables (kcal per capita)
Brain and nervous system cancer	Female	1-4 years	80+ years	1	Alcohol (litres per capita)
Brain and nervous system cancer	Female	1-4 years	80+ years	1	Animal Fats (kcal per capita)
Brain and nervous system cancer	Female	1-4 years	80+ years	1	Cholesterol (total, mean per capita)
Brain and nervous system cancer	Female	1-4 years	80+ years	1	Cumulative Cigarettes (10 Years)
Brain and nervous system cancer	Female	1-4 years	80+ years	1	Cumulative Cigarettes (15 Years)
Brain and nervous system cancer	Female	1-4 years	80+ years	1	Red Meat (kcal per capita)
Brain and nervous system cancer	Female	1-4 years	80+ years	1	Smoking Prevalence
Brain and nervous system cancer	Female	1-4 years	80+ years	1	Sociodemographic Status
Brain and nervous system cancer	Female	1-4 years	80+ years	1	Systolic Blood Pressure (mmHg)
Thyroid cancer	Male	10-14 years	80+ years	-1	Education (years per capita)
Thyroid cancer	Male	10-14 years	80+ years	-1	Fruits (kcal per capita)
Thyroid cancer	Male	10-14 years	80+ years	-1	Improved Water Source (proportion with access)
Thyroid cancer	Male	10-14 years	80+ years	-1	LDI (I\$ per capita)
Thyroid cancer	Male	10-14 years	80+ years	-1	Sanitation (proportion with access)

Cause	Sex	Age start	Age end	Direction	Covariate
Thyroid cancer	Male	10-14 years	80+ years	-1	Vegetables (kcal per capita)
Thyroid cancer	Male	10-14 years	80+ years	0	Sociodemographic Status
Thyroid cancer	Male	10-14 years	80+ years	1	Alcohol (litres per capita)
Thyroid cancer	Male	10-14 years	80+ years	1	Log-transformed SEV scalar: Thyroid C
Thyroid cancer	Male	10-14 years	80+ years	1	Mean BMI
Thyroid cancer	Male	10-14 years	80+ years	1	Red Meat (kcal per capita)
Thyroid cancer	Male	10-14 years	80+ years	2	Smoking Prevalence
Thyroid cancer	Male	10-14 years	80+ years	2	Tobacco (cigarettes per capita)
Thyroid cancer	Female	10-14 years	80+ years	-1	Education (years per capita)
Thyroid cancer	Female	10-14 years	80+ years	-1	Fruits (kcal per capita)
Thyroid cancer	Female	10-14 years	80+ years	-1	Improved Water Source (proportion with access)
Thyroid cancer	Female	10-14 years	80+ years	-1	LDI (I\$ per capita)
Thyroid cancer	Female	10-14 years	80+ years	-1	Sanitation (proportion with access)
Thyroid cancer	Female	10-14 years	80+ years	-1	Vegetables (kcal per capita)
Thyroid cancer	Female	10-14 years	80+ years	0	Sociodemographic Status
Thyroid cancer	Female	10-14 years	80+ years	1	Alcohol (litres per capita)
Thyroid cancer	Female	10-14 years	80+ years	1	Log-transformed SEV scalar: Thyroid C
Thyroid cancer	Female	10-14 years	80+ years	1	Mean BMI
Thyroid cancer	Female	10-14 years	80+ years	1	Red Meat (kcal per capita)
Thyroid cancer	Female	10-14 years	80+ years	2	Smoking Prevalence
Thyroid cancer	Female	10-14 years	80+ years	2	Tobacco (cigarettes per capita)
Mesothelioma	Male	15-19 years	80+ years	-1	Education (years per capita)

Cause	Sex	Age start	Age end	Direction	Covariate
Mesothelioma	Male	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Mesothelioma	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Mesothelioma	Male	15-19 years	80+ years	0	Sociodemographic Status
Mesothelioma	Male	15-19 years	80+ years	1	Asbestos production (binary)
Mesothelioma	Male	15-19 years	80+ years	1	Asbestos production (kg) per capita
Mesothelioma	Male	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Mesothelioma	Male	15-19 years	80+ years	1	Elevation 500 to 1500m (proportion)
Mesothelioma	Male	15-19 years	80+ years	1	Elevation Over 1500m (proportion)
Mesothelioma	Male	15-19 years	80+ years	1	Gold production (binary)
Mesothelioma	Male	15-19 years	80+ years	1	Gold production (kg) per capita
Mesothelioma	Male	15-19 years	80+ years	1	Indoor Air Pollution (Coal Cooking)
Mesothelioma	Male	15-19 years	80+ years	1	Log-transformed SEV scalar: Mesothel
Mesothelioma	Male	15-19 years	80+ years	1	Population Density (over 1000 ppl/sqkm, proportion)
Mesothelioma	Male	15-19 years	80+ years	1	Population Over 65 (proportion)
Mesothelioma	Male	15-19 years	80+ years	1	Smoking Prevalence
Mesothelioma	Female	15-19 years	80+ years	-1	Education (years per capita)
Mesothelioma	Female	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Mesothelioma	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Mesothelioma	Female	15-19 years	80+ years	0	Sociodemographic Status
Mesothelioma	Female	15-19 years	80+ years	1	Asbestos production (binary)
Mesothelioma	Female	15-19 years	80+ years	1	Asbestos production (kg) per capita
Mesothelioma	Female	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)

Cause	Sex	Age start	Age end	Direction	Covariate
Mesothelioma	Female	15-19 years	80+ years	1	Elevation 500 to 1500m (proportion)
Mesothelioma	Female	15-19 years	80+ years	1	Elevation Over 1500m (proportion)
Mesothelioma	Female	15-19 years	80+ years	1	Gold production (binary)
Mesothelioma	Female	15-19 years	80+ years	1	Gold production (kg) per capita
Mesothelioma	Female	15-19 years	80+ years	1	Indoor Air Pollution (Coal Cooking)
Mesothelioma	Female	15-19 years	80+ years	1	Log-transformed SEV scalar: Mesothel
Mesothelioma	Female	15-19 years	80+ years	1	Population Density (over 1000 ppl/sqkm, proportion)
Mesothelioma	Female	15-19 years	80+ years	1	Population Over 65 (proportion)
Mesothelioma	Female	15-19 years	80+ years	1	Smoking Prevalence
Hodgkin lymphoma	Male	28-364 days	80+ years	-1	Education (years per capita)
Hodgkin lymphoma	Male	28-364 days	80+ years	-1	Health System Access 2 (unitless)
Hodgkin lymphoma	Male	28-364 days	80+ years	-1	LDI (I\$ per capita)
Hodgkin lymphoma	Male	28-364 days	80+ years	0	Sociodemographic Status
Hodgkin lymphoma	Male	28-364 days	80+ years	1	Latitude 15 to 30 (proportion)
Hodgkin lymphoma	Male	28-364 days	80+ years	1	Latitude 30 to 45 (proportion)
Hodgkin lymphoma	Male	28-364 days	80+ years	1	Latitude Over 45 (proportion)
Hodgkin lymphoma	Male	28-364 days	80+ years	1	Latitude Under 15 (proportion)
Hodgkin lymphoma	Female	28-364 days	80+ years	-1	Education (years per capita)
Hodgkin lymphoma	Female	28-364 days	80+ years	-1	Health System Access 2 (unitless)
Hodgkin lymphoma	Female	28-364 days	80+ years	-1	LDI (I\$ per capita)
Hodgkin lymphoma	Female	28-364 days	80+ years	-1	Latitude 30 to 45 (proportion)
Hodgkin lymphoma	Female	28-364 days	80+ years	-1	Latitude Over 45 (proportion)

Cause	Sex	Age start	Age end	Direction	Covariate
Hodgkin lymphoma	Female	28-364 days	80+ years	0	Sociodemographic Status
Hodgkin lymphoma	Female	28-364 days	80+ years	1	Latitude 15 to 30 (proportion)
Hodgkin lymphoma	Female	28-364 days	80+ years	1	Latitude Under 15 (proportion)
Non-Hodgkin lymphoma	Male	28-364 days	80+ years	-1	Health System Access 2 (unitless)
Non-Hodgkin lymphoma	Male	28-364 days	80+ years	-1	LDI (I\$ per capita)
Non-Hodgkin lymphoma	Male	28-364 days	80+ years	0	Sociodemographic Status
Non-Hodgkin lymphoma	Male	28-364 days	80+ years	0	Total Fertility Rate
Non-Hodgkin lymphoma	Male	28-364 days	80+ years	1	Alcohol (litres per capita)
Non-Hodgkin lymphoma	Male	28-364 days	80+ years	1	Cumulative Cigarettes (10 Years)
Non-Hodgkin lymphoma	Male	28-364 days	80+ years	1	Smoking Prevalence
Non-Hodgkin lymphoma	Female	28-364 days	80+ years	-1	Health System Access 2 (unitless)
Non-Hodgkin lymphoma	Female	28-364 days	80+ years	-1	LDI (I\$ per capita)
Non-Hodgkin lymphoma	Female	28-364 days	80+ years	0	Sociodemographic Status
Non-Hodgkin lymphoma	Female	28-364 days	80+ years	0	Total Fertility Rate
Non-Hodgkin lymphoma	Female	28-364 days	80+ years	1	Alcohol (litres per capita)
Non-Hodgkin lymphoma	Female	28-364 days	80+ years	1	Cumulative Cigarettes (10 Years)
Non-Hodgkin lymphoma	Female	28-364 days	80+ years	1	Smoking Prevalence
Multiple myeloma	Male	15-19 years	80+ years	-1	Education (years per capita)
Multiple myeloma	Male	15-19 years	80+ years	-1	Fruits (kcal per capita)
Multiple myeloma	Male	15-19 years	80+ years	-1	Improved Water Source (proportion with access)
Multiple myeloma	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Multiple myeloma	Male	15-19 years	80+ years	-1	Sanitation (proportion with access)

Cause	Sex	Age start	Age end	Direction	Covariate
Multiple myeloma	Male	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Multiple myeloma	Male	15-19 years	80+ years	0	Sociodemographic Status
Multiple myeloma	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Multiple myeloma	Male	15-19 years	80+ years	1	Mean BMI
Multiple myeloma	Male	15-19 years	80+ years	1	Red Meat (kcal per capita)
Multiple myeloma	Male	15-19 years	80+ years	1	Smoking Prevalence
Multiple myeloma	Male	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Multiple myeloma	Female	15-19 years	80+ years	-1	Education (years per capita)
Multiple myeloma	Female	15-19 years	80+ years	-1	Fruits (kcal per capita)
Multiple myeloma	Female	15-19 years	80+ years	-1	Improved Water Source (proportion with access)
Multiple myeloma	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Multiple myeloma	Female	15-19 years	80+ years	-1	Sanitation (proportion with access)
Multiple myeloma	Female	15-19 years	80+ years	-1	Vegetables (kcal per capita)
Multiple myeloma	Female	15-19 years	80+ years	0	Sociodemographic Status
Multiple myeloma	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Multiple myeloma	Female	15-19 years	80+ years	1	Mean BMI
Multiple myeloma	Female	15-19 years	80+ years	1	Red Meat (kcal per capita)
Multiple myeloma	Female	15-19 years	80+ years	1	Smoking Prevalence
Multiple myeloma	Female	15-19 years	80+ years	1	Tobacco (cigarettes per capita)
Leukemia	Male	28-364 days	80+ years	-1	Education (years per capita)
Leukemia	Male	28-364 days	80+ years	-1	Health System Access 2 (unitless)
Leukemia	Male	28-364 days	80+ years	-1	LDI (I\$ per capita)

Cause	Sex	Age start	Age end	Direction	Covariate
Leukemia	Male	28-364 days	80+ years	1	Alcohol (litres per capita)
Leukemia	Male	28-364 days	80+ years	1	Cumulative Cigarettes (10 Years)
Leukemia	Male	28-364 days	80+ years	1	Cumulative Cigarettes (15 Years)
Leukemia	Male	28-364 days	80+ years	1	Cumulative Cigarettes (5 Years)
Leukemia	Male	28-364 days	80+ years	1	Log-transformed SEV scalar: Leukemia
Leukemia	Male	28-364 days	80+ years	1	Smoking Prevalence
Leukemia	Male	28-364 days	80+ years	1	Sociodemographic Status
Leukemia	Female	28-364 days	80+ years	-1	Education (years per capita)
Leukemia	Female	28-364 days	80+ years	-1	Health System Access 2 (unitless)
Leukemia	Female	28-364 days	80+ years	-1	LDI (I\$ per capita)
Leukemia	Female	28-364 days	80+ years	0	Total Fertility Rate
Leukemia	Female	28-364 days	80+ years	1	Alcohol (litres per capita)
Leukemia	Female	28-364 days	80+ years	1	Cumulative Cigarettes (10 Years)
Leukemia	Female	28-364 days	80+ years	1	Cumulative Cigarettes (15 Years)
Leukemia	Female	28-364 days	80+ years	1	Log-transformed SEV scalar: Leukemia
Leukemia	Female	28-364 days	80+ years	1	Smoking Prevalence
Leukemia	Female	28-364 days	80+ years	1	Sociodemographic Status
Acute lymphoid leukemia	Male	28-364 days	80+ years	-1	Education (years per capita)
Acute lymphoid leukemia	Male	28-364 days	80+ years	-1	Health System Access 2 (unitless)
Acute lymphoid leukemia	Male	28-364 days	80+ years	-1	LDI (I\$ per capita)
Acute lymphoid leukemia	Male	28-364 days	80+ years	1	Alcohol (litres per capita)
Acute lymphoid leukemia	Male	28-364 days	80+ years	1	Cumulative Cigarettes (10 Years)

Cause	Sex	Age start	Age end	Direction	Covariate
Acute lymphoid leukemia	Male	28-364 days	80+ years	1	Cumulative Cigarettes (5 Years)
Acute lymphoid leukemia	Male	28-364 days	80+ years	1	Log-transformed SEV scalar: Leukemia
Acute lymphoid leukemia	Male	28-364 days	80+ years	1	Smoking Prevalence
Acute lymphoid leukemia	Male	28-364 days	80+ years	1	Sociodemographic Status
Acute lymphoid leukemia	Female	28-364 days	80+ years	-1	Education (years per capita)
Acute lymphoid leukemia	Female	28-364 days	80+ years	-1	Health System Access 2 (unitless)
Acute lymphoid leukemia	Female	28-364 days	80+ years	-1	LDI (I\$ per capita)
Acute lymphoid leukemia	Female	28-364 days	80+ years	1	Alcohol (litres per capita)
Acute lymphoid leukemia	Female	28-364 days	80+ years	1	Cumulative Cigarettes (10 Years)
Acute lymphoid leukemia	Female	28-364 days	80+ years	1	Cumulative Cigarettes (5 Years)
Acute lymphoid leukemia	Female	28-364 days	80+ years	1	Log-transformed SEV scalar: Leukemia
Acute lymphoid leukemia	Female	28-364 days	80+ years	1	Smoking Prevalence
Acute lymphoid leukemia	Female	28-364 days	80+ years	1	Sociodemographic Status
Chronic lymphoid leukemia	Male	15-19 years	80+ years	-1	Education (years per capita)
Chronic lymphoid leukemia	Male	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Chronic lymphoid leukemia	Male	15-19 years	80+ years	-1	LDI (I\$ per capita)
Chronic lymphoid leukemia	Male	15-19 years	80+ years	1	Alcohol (litres per capita)
Chronic lymphoid leukemia	Male	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Chronic lymphoid leukemia	Male	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Chronic lymphoid leukemia	Male	15-19 years	80+ years	1	Log-transformed SEV scalar: Leukemia
Chronic lymphoid leukemia	Male	15-19 years	80+ years	1	Smoking Prevalence
Chronic lymphoid leukemia	Male	15-19 years	80+ years	1	Sociodemographic Status

Cause	Sex	Age start	Age end	Direction	Covariate
Chronic lymphoid leukemia	Female	15-19 years	80+ years	-1	Education (years per capita)
Chronic lymphoid leukemia	Female	15-19 years	80+ years	-1	Health System Access 2 (unitless)
Chronic lymphoid leukemia	Female	15-19 years	80+ years	-1	LDI (I\$ per capita)
Chronic lymphoid leukemia	Female	15-19 years	80+ years	1	Alcohol (litres per capita)
Chronic lymphoid leukemia	Female	15-19 years	80+ years	1	Cumulative Cigarettes (10 Years)
Chronic lymphoid leukemia	Female	15-19 years	80+ years	1	Cumulative Cigarettes (5 Years)
Chronic lymphoid leukemia	Female	15-19 years	80+ years	1	Log-transformed SEV scalar: Leukemia
Chronic lymphoid leukemia	Female	15-19 years	80+ years	1	Smoking Prevalence
Chronic lymphoid leukemia	Female	15-19 years	80+ years	1	Sociodemographic Status
Acute myeloid leukemia	Male	28-364 days	80+ years	-1	Education (years per capita)
Acute myeloid leukemia	Male	28-364 days	80+ years	-1	Health System Access 2 (unitless)
Acute myeloid leukemia	Male	28-364 days	80+ years	-1	LDI (I\$ per capita)
Acute myeloid leukemia	Male	28-364 days	80+ years	1	Alcohol (litres per capita)
Acute myeloid leukemia	Male	28-364 days	80+ years	1	Cumulative Cigarettes (10 Years)
Acute myeloid leukemia	Male	28-364 days	80+ years	1	Cumulative Cigarettes (5 Years)
Acute myeloid leukemia	Male	28-364 days	80+ years	1	Log-transformed SEV scalar: Leukemia
Acute myeloid leukemia	Male	28-364 days	80+ years	1	Smoking Prevalence
Acute myeloid leukemia	Male	28-364 days	80+ years	1	Sociodemographic Status
Acute myeloid leukemia	Male	28-364 days	80+ years	1	Tobacco (cigarettes per capita)
Acute myeloid leukemia	Female	28-364 days	80+ years	-1	Education (years per capita)
Acute myeloid leukemia	Female	28-364 days	80+ years	-1	Health System Access 2 (unitless)
Acute myeloid leukemia	Female	28-364 days	80+ years	-1	LDI (I\$ per capita)

Cause	Sex	Age start	Age end	Direction	Covariate
Acute myeloid leukemia	Female	28-364 days	80+ years	1	Alcohol (litres per capita)
Acute myeloid leukemia	Female	28-364 days	80+ years	1	Cumulative Cigarettes (10 Years)
Acute myeloid leukemia	Female	28-364 days	80+ years	1	Cumulative Cigarettes (5 Years)
Acute myeloid leukemia	Female	28-364 days	80+ years	1	Log-transformed SEV scalar: Leukemia
Acute myeloid leukemia	Female	28-364 days	80+ years	1	Smoking Prevalence
Acute myeloid leukemia	Female	28-364 days	80+ years	1	Sociodemographic Status
Acute myeloid leukemia	Female	28-364 days	80+ years	1	Tobacco (cigarettes per capita)
Chronic myeloid leukemia	Male	28-364 days	80+ years	-1	Education (years per capita)
Chronic myeloid leukemia	Male	28-364 days	80+ years	-1	LDI (I\$ per capita)
Chronic myeloid leukemia	Male	28-364 days	80+ years	1	Alcohol (litres per capita)
Chronic myeloid leukemia	Male	28-364 days	80+ years	1	Cumulative Cigarettes (10 Years)
Chronic myeloid leukemia	Male	28-364 days	80+ years	1	Cumulative Cigarettes (5 Years)
Chronic myeloid leukemia	Male	28-364 days	80+ years	1	Health System Access 2 (unitless)
Chronic myeloid leukemia	Male	28-364 days	80+ years	1	Log-transformed SEV scalar: Leukemia
Chronic myeloid leukemia	Male	28-364 days	80+ years	1	Smoking Prevalence
Chronic myeloid leukemia	Male	28-364 days	80+ years	1	Sociodemographic Status
Chronic myeloid leukemia	Female	28-364 days	80+ years	-1	Education (years per capita)
Chronic myeloid leukemia	Female	28-364 days	80+ years	-1	LDI (I\$ per capita)
Chronic myeloid leukemia	Female	28-364 days	80+ years	1	Alcohol (litres per capita)
Chronic myeloid leukemia	Female	28-364 days	80+ years	1	Cumulative Cigarettes (10 Years)
Chronic myeloid leukemia	Female	28-364 days	80+ years	1	Cumulative Cigarettes (5 Years)
Chronic myeloid leukemia	Female	28-364 days	80+ years	1	Health System Access 2 (unitless)

Cause	Sex	Age start	Age end	Direction	Covariate
Chronic myeloid leukemia	Female	28-364 days	80+ years	1	Log-transformed SEV scalar: Leukemia
Chronic myeloid leukemia	Female	28-364 days	80+ years	1	Smoking Prevalence
Chronic myeloid leukemia	Female	28-364 days	80+ years	1	Sociodemographic Status
Other neoplasms	Male	0-6 days	80+ years	-1	Education (years per capita)
Other neoplasms	Male	0-6 days	80+ years	-1	Fruits (kcal per capita)
Other neoplasms	Male	0-6 days	80+ years	-1	Health System Access 2 (unitless)
Other neoplasms	Male	0-6 days	80+ years	-1	LDI (I\$ per capita)
Other neoplasms	Male	0-6 days	80+ years	-1	Nuts & Seeds (kcal per capita)
Other neoplasms	Male	0-6 days	80+ years	-1	PUFA Omega 3 - Seafood (kcal per capita)
Other neoplasms	Male	0-6 days	80+ years	-1	Vegetables (kcal per capita)
Other neoplasms	Male	0-6 days	80+ years	0	Sociodemographic Status
Other neoplasms	Male	0-6 days	80+ years	1	Smoking Prevalence
Other neoplasms	Male	0-6 days	80+ years	1	Tobacco (cigarettes per capita)
Other neoplasms	Female	0-6 days	80+ years	-1	Education (years per capita)
Other neoplasms	Female	0-6 days	80+ years	-1	Fruits (kcal per capita)
Other neoplasms	Female	0-6 days	80+ years	-1	Health System Access 2 (unitless)
Other neoplasms	Female	0-6 days	80+ years	-1	LDI (I\$ per capita)
Other neoplasms	Female	0-6 days	80+ years	-1	Nuts & Seeds (kcal per capita)
Other neoplasms	Female	0-6 days	80+ years	-1	PUFA Omega 3 - Seafood (kcal per capita)
Other neoplasms	Female	0-6 days	80+ years	-1	Vegetables (kcal per capita)
Other neoplasms	Female	0-6 days	80+ years	0	LDI (I\$ per capita)
Other neoplasms	Female	0-6 days	80+ years	0	Sociodemographic Status

Cause	Sex	Age start	Age end	Direction	Covariate
Other neoplasms	Female	0-6 days	80+ years	1	Smoking Prevalence
Other neoplasms	Female	0-6 days	80+ years	1	Tobacco (cigarettes per capita)

eTable 10: Comparison of GBD 2013 and GBD 2015 covariates used and level of covariates

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Lip and oral cavity cancer	Male	Alcohol (litres per capita)	X			X		
Lip and oral cavity cancer	Male	Cumulative Cigarettes (10 Years)	X			X		
Lip and oral cavity cancer	Male	Cumulative Cigarettes (20 Years)	X			X		
Lip and oral cavity cancer	Male	Log-transformed SEV scalar: Mouth C				X		
Lip and oral cavity cancer	Male	Smoking Prevalence	X			X		
Lip and oral cavity cancer	Male	Fruits (kcal per capita)	X				X	
Lip and oral cavity cancer	Male	Health System Access 2 (unitless)		X			X	
Lip and oral cavity cancer	Male	Red Meat (kcal per capita)		X			X	
Lip and oral cavity cancer	Male	Vegetables (kcal per capita)	X				X	
Lip and oral cavity cancer	Male	Education (years per capita)			X			X
Lip and oral cavity cancer	Male	LDI (I\$ per capita)			X			X
Lip and oral cavity cancer	Male	Sociodemographic Status						X
Lip and oral cavity cancer	Male	Cumulative Cigarettes (5 Years)	X					
Lip and oral cavity cancer	Female	Alcohol (litres per capita)	X			X		
Lip and oral cavity cancer	Female	Cumulative Cigarettes (10 Years)	X			X		
Lip and oral cavity cancer	Female	Cumulative Cigarettes (20 Years)	X			X		
Lip and oral cavity cancer	Female	Smoking Prevalence	X			X		

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Lip and oral cavity cancer	Female	Vegetables (kcal per capita)	X			X		
Lip and oral cavity cancer	Female	Fruits (kcal per capita)	X				X	
Lip and oral cavity cancer	Female	Health System Access 2 (unitless)		X			X	
Lip and oral cavity cancer	Female	Red Meat (kcal per capita)		X			X	
Lip and oral cavity cancer	Female	Education (years per capita)			X			X
Lip and oral cavity cancer	Female	LDI (I\$ per capita)			X			X
Lip and oral cavity cancer	Female	Sociodemographic Status						X
Lip and oral cavity cancer	Female	Cumulative Cigarettes (5 Years)	X					
Nasopharynx cancer	Male	Alcohol (litres per capita)	X			X		
Nasopharynx cancer	Male	Log-transformed SEV scalar: Nasoph C				X		
Nasopharynx cancer	Male	Vegetables (kcal per capita)	X			X		
Nasopharynx cancer	Male	Fruits (kcal per capita)		X			X	
Nasopharynx cancer	Male	Health System Access 2 (unitless)		X			X	
Nasopharynx cancer	Male	Malnutrition (proportion <2SD weight for age)		X			X	
Nasopharynx cancer	Male	Population Density (over 1000 ppl/sqkm, proportion)		X			X	
Nasopharynx cancer	Male	Population Density (under 150 ppl/sqkm, proportion)		X			X	
Nasopharynx cancer	Male	Whole Grains (kcal per capita)		X			X	
Nasopharynx cancer	Male	Education (years per capita)			X			X
Nasopharynx cancer	Male	LDI (I\$ per capita)			X			X
Nasopharynx cancer	Male	Sociodemographic Status						X
Nasopharynx cancer	Female	Alcohol (litres per capita)	X			X		
Nasopharynx cancer	Female	Log-transformed SEV scalar: Nasoph C				X		
Nasopharynx cancer	Female	Vegetables (kcal per capita)	X			X		
Nasopharynx cancer	Female	Fruits (kcal per capita)		X			X	
Nasopharynx cancer	Female	Health System Access 2 (unitless)		X			X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Nasopharynx cancer	Female	Malnutrition (proportion <2SD weight for age)		X			X	
Nasopharynx cancer	Female	Population Density (over 1000 ppl/sqkm, proportion)		X			X	
Nasopharynx cancer	Female	Population Density (under 150 ppl/sqkm, proportion)		X			X	
Nasopharynx cancer	Female	Whole Grains (kcal per capita)		X			X	
Nasopharynx cancer	Female	Education (years per capita)			X			X
Nasopharynx cancer	Female	LDI (I\$ per capita)			X			X
Nasopharynx cancer	Female	Sociodemographic Status						X
Other pharynx cancer	Male	Alcohol (litres per capita)	X			X		
Other pharynx cancer	Male	Fruits (kcal per capita)	X			X		
Other pharynx cancer	Male	Log-transformed SEV scalar: Oth Phar C				X		
Other pharynx cancer	Male	Smoking Prevalence	X			X		
Other pharynx cancer	Male	Vegetables (kcal per capita)	X			X		
Other pharynx cancer	Male	Cumulative Cigarettes (5 Years)		X			X	
Other pharynx cancer	Male	Health System Access (capped)		X			X	
Other pharynx cancer	Male	Malnutrition (proportion <2SD weight for age)		X			X	
Other pharynx cancer	Male	Population Density (over 1000 ppl/sqkm, proportion)		X			X	
Other pharynx cancer	Male	Population Density (under 150 ppl/sqkm, proportion)		X			X	
Other pharynx cancer	Male	Whole Grains (kcal per capita)		X			X	
Other pharynx cancer	Male	Education (years per capita)			X			X
Other pharynx cancer	Male	LDI (I\$ per capita)			X			X
Other pharynx cancer	Male	Sociodemographic Status						X
Other pharynx cancer	Female	Alcohol (litres per capita)	X			X		
Other pharynx cancer	Female	Fruits (kcal per capita)	X			X		
Other pharynx cancer	Female	Log-transformed SEV scalar: Oth Phar C				X		
Other pharynx cancer	Female	Smoking Prevalence	X			X		

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Other pharynx cancer	Female	Vegetables (kcal per capita)	X			X		
Other pharynx cancer	Female	Cumulative Cigarettes (5 Years)		X			X	
Other pharynx cancer	Female	Health System Access (capped)		X			X	
Other pharynx cancer	Female	Malnutrition (proportion <2SD weight for age)		X			X	
Other pharynx cancer	Female	Population Density (over 1000 ppl/sqkm, proportion)		X			X	
Other pharynx cancer	Female	Population Density (under 150 ppl/sqkm, proportion)		X			X	
Other pharynx cancer	Female	Whole Grains (kcal per capita)		X			X	
Other pharynx cancer	Female	Education (years per capita)			X			X
Other pharynx cancer	Female	LDI (I\$ per capita)			X			X
Other pharynx cancer	Female	Sociodemographic Status						X
Esophageal cancer	Male	Alcohol (litres per capita)	X			X		
Esophageal cancer	Male	Fruits (kcal per capita)	X			X		
Esophageal cancer	Male	Mean BMI	X			X		
Esophageal cancer	Male	Smoking Prevalence	X			X		
Esophageal cancer	Male	Tobacco (cigarettes per capita)	X			X		
Esophageal cancer	Male	Improved Water Source (proportion with access)		X			X	
Esophageal cancer	Male	Indoor Air Pollution (All Cooking Fuels)		X			X	
Esophageal cancer	Male	Indoor Air Pollution (Biomass Cooking)		X			X	
Esophageal cancer	Male	Indoor Air Pollution (Coal Cooking)		X			X	
Esophageal cancer	Male	Sanitation (proportion with access)		X			X	
Esophageal cancer	Male	Vegetables (kcal per capita)		X			X	
Esophageal cancer	Male	Education (years per capita)			X			X
Esophageal cancer	Male	LDI (I\$ per capita)			X			X
Esophageal cancer	Male	Sociodemographic Status						X
Esophageal cancer	Male	Cumulative Cigarettes (15 Years)	X					

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Esophageal cancer	Male	Cumulative Cigarettes (20 Years)	X					
Esophageal cancer	Male	Outdoor Air Pollution (PM2.5)		X				
Esophageal cancer	Male	Total Calories (kcal per capita)		X				
Esophageal cancer	Female	Alcohol (litres per capita)	X			X		
Esophageal cancer	Female	Fruits (kcal per capita)	X			X		
Esophageal cancer	Female	Mean BMI	X			X		
Esophageal cancer	Female	Smoking Prevalence	X			X		
Esophageal cancer	Female	Tobacco (cigarettes per capita)	X			X		
Esophageal cancer	Female	Improved Water Source (proportion with access)		X			X	
Esophageal cancer	Female	Indoor Air Pollution (All Cooking Fuels)		X			X	
Esophageal cancer	Female	Indoor Air Pollution (Biomass Cooking)		X			X	
Esophageal cancer	Female	Indoor Air Pollution (Coal Cooking)		X			X	
Esophageal cancer	Female	Sanitation (proportion with access)		X			X	
Esophageal cancer	Female	Vegetables (kcal per capita)		X			X	
Esophageal cancer	Female	Education (years per capita)			X			X
Esophageal cancer	Female	LDI (I\$ per capita)			X			X
Esophageal cancer	Female	Sociodemographic Status						X
Esophageal cancer	Female	Cumulative Cigarettes (15 Years)	X					
Esophageal cancer	Female	Cumulative Cigarettes (20 Years)	X					
Esophageal cancer	Female	Outdoor Air Pollution (PM2.5)		X				
Esophageal cancer	Female	Total Calories (kcal per capita)		X				
Stomach cancer	Male	Alcohol (litres per capita)		X		X		
Stomach cancer	Male	Cumulative Cigarettes (10 Years)	X			X		

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Stomach cancer	Male	Cumulative Cigarettes (15 Years)	X			X		
Stomach cancer	Male	Log-transformed SEV scalar: Stomach C				X		
Stomach cancer	Male	Smoking Prevalence	X			X		
Stomach cancer	Male	Tobacco (cigarettes per capita)	X			X		
Stomach cancer	Male	Fruits (kcal per capita)		X			X	
Stomach cancer	Male	Improved Water Source (proportion with access)		X			X	
Stomach cancer	Male	Indoor Air Pollution (All Cooking Fuels)		X			X	
Stomach cancer	Male	Indoor Air Pollution (Biomass Cooking)		X			X	
Stomach cancer	Male	Indoor Air Pollution (Coal Cooking)		X			X	
Stomach cancer	Male	Mean BMI		X			X	
Stomach cancer	Male	Outdoor Air Pollution (PM2.5)		X			X	
Stomach cancer	Male	Sanitation (proportion with access)		X			X	
Stomach cancer	Male	Vegetables (kcal per capita)		X			X	
Stomach cancer	Male	LDI (I\$ per capita)			X			X
Stomach cancer	Male	Sociodemographic Status						X
Stomach cancer	Male	Cumulative Cigarettes (20 Years)	X					
Stomach cancer	Male	Education (years per capita)			X			
Stomach cancer	Female	Alcohol (litres per capita)		X		X		
Stomach cancer	Female	Cumulative Cigarettes (10 Years)	X			X		
Stomach cancer	Female	Log-transformed SEV scalar: Stomach C				X		
Stomach cancer	Female	Smoking Prevalence	X			X		
Stomach cancer	Female	Tobacco (cigarettes per capita)	X			X		
Stomach cancer	Female	Fruits (kcal per capita)		X			X	
Stomach cancer	Female	Improved Water Source (proportion with access)		X			X	
Stomach cancer	Female	Indoor Air Pollution (All Cooking Fuels)		X			X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Stomach cancer	Female	Indoor Air Pollution (Biomass Cooking)		X			X	
Stomach cancer	Female	Indoor Air Pollution (Coal Cooking)		X			X	
Stomach cancer	Female	Mean BMI		X			X	
Stomach cancer	Female	Outdoor Air Pollution (PM2.5)		X			X	
Stomach cancer	Female	Sanitation (proportion with access)		X			X	
Stomach cancer	Female	Vegetables (kcal per capita)		X			X	
Stomach cancer	Female	Education (years per capita)			X			X
Stomach cancer	Female	LDI (I\$ per capita)			X			X
Stomach cancer	Female	Sociodemographic Status						X
Stomach cancer	Female	Cumulative Cigarettes (15 Years)	X					
Stomach cancer	Female	Cumulative Cigarettes (20 Years)	X					
Colon and rectum cancer	Male	Alcohol (litres per capita)	X			X		
Colon and rectum cancer	Male	Fruits (kcal per capita)	X			X		
Colon and rectum cancer	Male	Log-transformed SEV scalar: Colorect C				X		
Colon and rectum cancer	Male	Mean BMI	X			X		
Colon and rectum cancer	Male	Smoking Prevalence	X			X		
Colon and rectum cancer	Male	Tobacco (cigarettes per capita)	X			X		
Colon and rectum cancer	Male	Vegetables (kcal per capita)	X			X		
Colon and rectum cancer	Male	Whole Grains (kcal per capita)	X			X		
Colon and rectum cancer	Male	In-Milk (kcal per capita)	X			X		
Colon and rectum cancer	Male	Diabetes Age-Standardised Prevalence (proportion)		X			X	
Colon and rectum cancer	Male	Health System Access 2 (unitless)		X			X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Colon and rectum cancer	Male	Nuts & Seeds (kcal per capita)		X			X	
Colon and rectum cancer	Male	PUFA Omega 3 - Seafood (kcal per capita)		X			X	
Colon and rectum cancer	Male	Red Meat (kcal per capita)		X			X	
Colon and rectum cancer	Male	Education (years per capita)			X			X
Colon and rectum cancer	Male	LDI (I\$ per capita)			X			X
Colon and rectum cancer	Male	Sociodemographic Status						X
Colon and rectum cancer	Female	Alcohol (litres per capita)	X			X		
Colon and rectum cancer	Female	Fruits (kcal per capita)	X			X		
Colon and rectum cancer	Female	Log-transformed SEV scalar: Colorect C				X		
Colon and rectum cancer	Female	Mean BMI	X			X		
Colon and rectum cancer	Female	Vegetables (kcal per capita)	X			X		
Colon and rectum cancer	Female	Whole Grains (kcal per capita)	X			X		
Colon and rectum cancer	Female	Diabetes Age-Standardised Prevalence (proportion)		X			X	
Colon and rectum cancer	Female	Health System Access 2 (unitless)		X			X	
Colon and rectum cancer	Female	Nuts & Seeds (kcal per capita)		X			X	
Colon and rectum cancer	Female	PUFA Omega 3 - Seafood (kcal per capita)		X			X	
Colon and rectum cancer	Female	Red Meat (kcal per capita)		X			X	
Colon and rectum cancer	Female	Smoking Prevalence	X				X	
Colon and rectum cancer	Female	Tobacco (cigarettes per capita)	X				X	
Colon and rectum cancer	Female	In-Milk (kcal per capita)	X				X	
Colon and rectum cancer	Female	Education (years per capita)			X			X
Colon and rectum cancer	Female	LDI (I\$ per capita)			X			X

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Colon and rectum cancer	Female	Sociodemographic Status						X
Liver cancer	Male	Alcohol (litres per capita)	X			X		
Liver cancer	Male	Cumulative Cigarettes (15 Years)	X			X		
Liver cancer	Male	Cumulative Cigarettes (20 Years)	X			X		
Liver cancer	Male	Hepatitis B Prevalence (proportion)	X			X		
Liver cancer	Male	Hepatitis C Prevalence (proportion)	X			X		
Liver cancer	Male	Log-transformed SEV scalar: Liver C				X		
Liver cancer	Male	Tobacco (cigarettes per capita)	X			X		
Liver cancer	Male	Animal Fats (kcal per capita)		X			X	
Liver cancer	Male	Diabetes Age-Standardised Prevalence (proportion)		X			X	
Liver cancer	Male	Health System Access 2 (unitless)		X			X	
Liver cancer	Male	Mean BMI		X			X	
Liver cancer	Male	Red Meat (kcal per capita)		X			X	
Liver cancer	Male	Education (years per capita)			X			X
Liver cancer	Male	LDI (I\$ per capita)			X			X
Liver cancer	Male	Sociodemographic Status						X
Liver cancer	Female	Alcohol (litres per capita)	X			X		
Liver cancer	Female	Cumulative Cigarettes (15 Years)	X			X		
Liver cancer	Female	Cumulative Cigarettes (20 Years)	X			X		
Liver cancer	Female	Hepatitis B Prevalence (proportion)	X			X		
Liver cancer	Female	Hepatitis C Prevalence (proportion)	X			X		
Liver cancer	Female	Log-transformed SEV scalar: Liver C				X		
Liver cancer	Female	Tobacco (cigarettes per capita)	X			X		
Liver cancer	Female	Animal Fats (kcal per capita)		X			X	
Liver cancer	Female	Diabetes Age-Standardised Prevalence (proportion)		X			X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Liver cancer	Female	Health System Access 2 (unitless)		X			X	
Liver cancer	Female	Mean BMI		X			X	
Liver cancer	Female	Red Meat (kcal per capita)		X			X	
Liver cancer	Female	Education (years per capita)			X			X
Liver cancer	Female	LDI (I\$ per capita)			X			X
Liver cancer	Female	Sociodemographic Status						X
Gallbladder and biliary tract cancer	Male	Log-transformed SEV scalar: Gallblad C				X		
Gallbladder and biliary tract cancer	Male	Mean BMI	X			X		
Gallbladder and biliary tract cancer	Male	Total Calories (kcal per capita)	X			X		
Gallbladder and biliary tract cancer	Male	Alcohol (litres per capita)		X			X	
Gallbladder and biliary tract cancer	Male	Cumulative Cigarettes (10 Years)		X			X	
Gallbladder and biliary tract cancer	Male	Cumulative Cigarettes (5 Years)		X			X	
Gallbladder and biliary tract cancer	Male	Diabetes Age-Standardised Prevalence (proportion)		X			X	
Gallbladder and biliary tract cancer	Male	Fruits (kcal per capita)		X			X	
Gallbladder and biliary tract cancer	Male	Health System Access (capped)		X			X	
Gallbladder and biliary tract cancer	Male	Smoking Prevalence		X			X	
Gallbladder and biliary tract cancer	Male	Tobacco (cigarettes per capita)		X			X	
Gallbladder and biliary tract cancer	Male	Vegetables (kcal per capita)		X			X	
Gallbladder and biliary tract cancer	Male	Education (years per capita)			X			X
Gallbladder and biliary tract cancer	Male	LDI (I\$ per capita)			X			X
Gallbladder and biliary tract cancer	Male	Sociodemographic Status						X
Gallbladder and biliary tract cancer	Female	Log-transformed SEV scalar: Gallblad C				X		

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Gallbladder and biliary tract cancer	Female	Mean BMI	X			X		
Gallbladder and biliary tract cancer	Female	Total Calories (kcal per capita)	X			X		
Gallbladder and biliary tract cancer	Female	Alcohol (litres per capita)		X			X	
Gallbladder and biliary tract cancer	Female	Cumulative Cigarettes (10 Years)		X			X	
Gallbladder and biliary tract cancer	Female	Cumulative Cigarettes (5 Years)		X			X	
Gallbladder and biliary tract cancer	Female	Diabetes Age-Standardised Prevalence (proportion)		X			X	
Gallbladder and biliary tract cancer	Female	Fruits (kcal per capita)		X			X	
Gallbladder and biliary tract cancer	Female	Health System Access (capped)		X			X	
Gallbladder and biliary tract cancer	Female	Smoking Prevalence		X			X	
Gallbladder and biliary tract cancer	Female	Tobacco (cigarettes per capita)		X			X	
Gallbladder and biliary tract cancer	Female	Vegetables (kcal per capita)		X			X	
Gallbladder and biliary tract cancer	Female	Education (years per capita)			X			X
Gallbladder and biliary tract cancer	Female	LDI (I\$ per capita)			X			X
Gallbladder and biliary tract cancer	Female	Sociodemographic Status						X
Pancreatic cancer	Male	Alcohol (litres per capita)		X		X		
Pancreatic cancer	Male	Cumulative Cigarettes (10 Years)	X			X		
Pancreatic cancer	Male	Cumulative Cigarettes (20 Years)	X			X		
Pancreatic cancer	Male	Log-transformed SEV scalar: Pancreas C				X		
Pancreatic cancer	Male	Mean BMI	X			X		
Pancreatic cancer	Male	Smoking Prevalence	X			X		
Pancreatic cancer	Male	Tobacco (cigarettes per capita)	X			X		
Pancreatic cancer	Male	Animal Fats (kcal per capita)		X			X	
Pancreatic cancer	Male	Cumulative Cigarettes (5 Years)	X				X	
Pancreatic cancer	Male	Diabetes Age-Standardised Prevalence (proportion)		X			X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Pancreatic cancer	Male	Fruits (kcal per capita)		X			X	
Pancreatic cancer	Male	Red Meat (kcal per capita)		X			X	
Pancreatic cancer	Male	Total Calories (kcal per capita)	X				X	
Pancreatic cancer	Male	Vegetables (kcal per capita)		X			X	
Pancreatic cancer	Male	Education (years per capita)			X			X
Pancreatic cancer	Male	Health System Access (unitless)			X			X
Pancreatic cancer	Male	LDI (I\$ per capita)			X			X
Pancreatic cancer	Male	Sociodemographic Status						X
Pancreatic cancer	Female	Cumulative Cigarettes (10 Years)	X			X		
Pancreatic cancer	Female	Cumulative Cigarettes (20 Years)	X			X		
Pancreatic cancer	Female	Cumulative Cigarettes (5 Years)	X			X		
Pancreatic cancer	Female	Log-transformed SEV scalar: Pancreas C				X		
Pancreatic cancer	Female	Mean BMI	X			X		
Pancreatic cancer	Female	Smoking Prevalence	X			X		
Pancreatic cancer	Female	Tobacco (cigarettes per capita)	X			X		
Pancreatic cancer	Female	Total Calories (kcal per capita)	X			X		
Pancreatic cancer	Female	Alcohol (litres per capita)		X			X	
Pancreatic cancer	Female	Animal Fats (kcal per capita)		X			X	
Pancreatic cancer	Female	Diabetes Age-Standardised Prevalence (proportion)		X			X	
Pancreatic cancer	Female	Fruits (kcal per capita)		X			X	
Pancreatic cancer	Female	Red Meat (kcal per capita)		X			X	
Pancreatic cancer	Female	Vegetables (kcal per capita)		X			X	
Pancreatic cancer	Female	Education (years per capita)			X			X
Pancreatic cancer	Female	Health System Access (unitless)			X			X
Pancreatic cancer	Female	LDI (I\$ per capita)			X			X

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Pancreatic cancer	Female	Sociodemographic Status						X
Larynx cancer	Male	Alcohol (litres per capita)	X			X		
Larynx cancer	Male	Fruits (kcal per capita)	X			X		
Larynx cancer	Male	Log-transformed SEV scalar: Larynx C				X		
Larynx cancer	Male	Vegetables (kcal per capita)	X			X		
Larynx cancer	Male	Cumulative Cigarettes (10 Years)		X			X	
Larynx cancer	Male	Cumulative Cigarettes (15 Years)		X			X	
Larynx cancer	Male	Cumulative Cigarettes (20 Years)		X			X	
Larynx cancer	Male	Cumulative Cigarettes (5 Years)		X			X	
Larynx cancer	Male	Population Density (over 1000 ppl/sqkm, proportion)		X			X	
Larynx cancer	Male	Population Density (under 150 ppl/sqkm, proportion)		X			X	
Larynx cancer	Male	Smoking Prevalence		X			X	
Larynx cancer	Male	Tobacco (cigarettes per capita)		X			X	
Larynx cancer	Male	Education (years per capita)			X			X
Larynx cancer	Male	LDI (I\$ per capita)			X			X
Larynx cancer	Male	Sociodemographic Status						X
Larynx cancer	Male	Indoor Air Pollution (All Cooking Fuels)		X				
Larynx cancer	Male	Outdoor Air Pollution (PM2.5)		X				
Larynx cancer	Female	Alcohol (litres per capita)	X			X		
Larynx cancer	Female	Fruits (kcal per capita)	X			X		
Larynx cancer	Female	Log-transformed SEV scalar: Larynx C				X		
Larynx cancer	Female	Vegetables (kcal per capita)	X			X		
Larynx cancer	Female	Cumulative Cigarettes (10 Years)		X			X	
Larynx cancer	Female	Cumulative Cigarettes (15 Years)		X			X	
Larynx cancer	Female	Cumulative Cigarettes (20 Years)		X			X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Larynx cancer	Female	Cumulative Cigarettes (5 Years)		X			X	
Larynx cancer	Female	Population Density (over 1000 ppl/sqkm, proportion)		X			X	
Larynx cancer	Female	Population Density (under 150 ppl/sqkm, proportion)		X			X	
Larynx cancer	Female	Smoking Prevalence		X			X	
Larynx cancer	Female	Tobacco (cigarettes per capita)		X			X	
Larynx cancer	Female	Education (years per capita)			X			X
Larynx cancer	Female	LDI (I\$ per capita)			X			X
Larynx cancer	Female	Sociodemographic Status						X
Larynx cancer	Female	Indoor Air Pollution (All Cooking Fuels)		X				
Larynx cancer	Female	Outdoor Air Pollution (PM2.5)		X				
Tracheal, bronchus, and lung cancer	Male	Cumulative Cigarettes (10 Years)	X			X		
Tracheal, bronchus, and lung cancer	Male	Cumulative Cigarettes (15 Years)	X			X		
Tracheal, bronchus, and lung cancer	Male	Cumulative Cigarettes (20 Years)	X			X		
Tracheal, bronchus, and lung cancer	Male	Cumulative Cigarettes (5 Years)	X			X		
Tracheal, bronchus, and lung cancer	Male	Smoking Prevalence	X			X		
Tracheal, bronchus, and lung cancer	Male	Tobacco (cigarettes per capita)	X			X		
Tracheal, bronchus, and lung cancer	Male	Indoor Air Pollution (All Cooking Fuels)	X				X	
Tracheal, bronchus, and lung cancer	Male	Outdoor Air Pollution (PM2.5)	X				X	
Tracheal, bronchus, and lung cancer	Male	Education (years per capita)			X			X
Tracheal, bronchus, and lung cancer	Male	LDI (I\$ per capita)			X			X
Tracheal, bronchus, and lung cancer	Male	Sociodemographic Status						X
Tracheal, bronchus, and lung cancer	Male	Fruits (kcal per capita)	X					

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Tracheal, bronchus, and lung cancer	Male	Population Density (over 1000 ppl/sqkm, proportion)		X				
Tracheal, bronchus, and lung cancer	Male	Population Density (under 150 ppl/sqkm, proportion)		X				
Tracheal, bronchus, and lung cancer	Male	Vegetables (kcal per capita)		X				
Tracheal, bronchus, and lung cancer	Female	Cumulative Cigarettes (10 Years)	X			X		
Tracheal, bronchus, and lung cancer	Female	Cumulative Cigarettes (15 Years)	X			X		
Tracheal, bronchus, and lung cancer	Female	Cumulative Cigarettes (20 Years)	X			X		
Tracheal, bronchus, and lung cancer	Female	Cumulative Cigarettes (5 Years)	X			X		
Tracheal, bronchus, and lung cancer	Female	Smoking Prevalence	X			X		
Tracheal, bronchus, and lung cancer	Female	Tobacco (cigarettes per capita)	X			X		
Tracheal, bronchus, and lung cancer	Female	Indoor Air Pollution (All Cooking Fuels)	X				X	
Tracheal, bronchus, and lung cancer	Female	Outdoor Air Pollution (PM2.5)	X				X	
Tracheal, bronchus, and lung cancer	Female	Education (years per capita)			X			X
Tracheal, bronchus, and lung cancer	Female	LDI (I\$ per capita)			X			X
Tracheal, bronchus, and lung cancer	Female	Sociodemographic Status						X
Tracheal, bronchus, and lung cancer	Female	Fruits (kcal per capita)	X					
Tracheal, bronchus, and lung cancer	Female	Population Density (over 1000 ppl/sqkm, proportion)		X				
Tracheal, bronchus, and lung cancer	Female	Population Density (under 150 ppl/sqkm, proportion)		X				
Tracheal, bronchus, and lung cancer	Female	Vegetables (kcal per capita)		X				
Malignant skin melanoma	Male	Alcohol (litres per capita)	X			X		
Malignant skin melanoma	Male	Cumulative Cigarettes (20 Years)	X			X		
Malignant skin melanoma	Male	Smoking Prevalence	X			X		
Malignant skin melanoma	Male	Tobacco (cigarettes per capita)	X			X		

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Malignant skin melanoma	Male	Animal Fats (kcal per capita)		X			X	
Malignant skin melanoma	Male	Fruits (kcal per capita)	X				X	
Malignant skin melanoma	Male	Latitude 15 to 30 (proportion)		X			X	
Malignant skin melanoma	Male	Latitude 30 to 45 (proportion)		X			X	
Malignant skin melanoma	Male	Latitude Over 45 (proportion)		X			X	
Malignant skin melanoma	Male	Mean BMI		X			X	
Malignant skin melanoma	Male	Vegetables (kcal per capita)	X				X	
Malignant skin melanoma	Male	Education (years per capita)			X			X
Malignant skin melanoma	Male	LDI (I\$ per capita)			X			X
Malignant skin melanoma	Male	Sociodemographic Status						X
Malignant skin melanoma	Male	Diabetes Age-Standardised Prevalence (proportion)		X				
Malignant skin melanoma	Female	Alcohol (litres per capita)	X			X		
Malignant skin melanoma	Female	Cumulative Cigarettes (20 Years)	X			X		
Malignant skin melanoma	Female	Smoking Prevalence	X			X		
Malignant skin melanoma	Female	Tobacco (cigarettes per capita)	X			X		
Malignant skin melanoma	Female	Animal Fats (kcal per capita)		X			X	
Malignant skin melanoma	Female	Fruits (kcal per capita)	X				X	
Malignant skin melanoma	Female	Latitude 15 to 30 (proportion)		X			X	
Malignant skin melanoma	Female	Latitude 30 to 45 (proportion)		X			X	
Malignant skin melanoma	Female	Latitude Over 45 (proportion)		X			X	
Malignant skin melanoma	Female	Mean BMI		X			X	
Malignant skin melanoma	Female	Vegetables (kcal per capita)	X				X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Malignant skin melanoma	Female	Education (years per capita)			X			X
Malignant skin melanoma	Female	LDI (I\$ per capita)			X			X
Malignant skin melanoma	Female	Sociodemographic Status						X
Malignant skin melanoma	Female	Diabetes Age-Standardised Prevalence (proportion)		X				
Breast cancer	Male	Alcohol (litres per capita)	X			X		
Breast cancer	Male	Log-transformed SEV scalar: Breast C				X		
Breast cancer	Male	Mean BMI	X			X		
Breast cancer	Male	Animal Fats (kcal per capita)		X			X	
Breast cancer	Male	Cumulative Cigarettes (10 Years)		X			X	
Breast cancer	Male	Fertility (15-19 year olds)		X			X	
Breast cancer	Male	Fruits (kcal per capita)		X			X	
Breast cancer	Male	Health System Access 2 (unitless)		X			X	
Breast cancer	Male	Latitude 15 to 30 (proportion)		X			X	
Breast cancer	Male	Latitude 30 to 45 (proportion)		X			X	
Breast cancer	Male	Latitude Over 45 (proportion)		X			X	
Breast cancer	Male	Total Fertility Rate		X			X	
Breast cancer	Male	Vegetables (kcal per capita)		X			X	
Breast cancer	Male	Education (years per capita)			X			X
Breast cancer	Male	LDI (I\$ per capita)			X			X
Breast cancer	Male	Sociodemographic Status						X
Breast cancer	Female	Alcohol (litres per capita)	X			X		
Breast cancer	Female	Log-transformed SEV scalar: Breast C				X		
Breast cancer	Female	Mean BMI	X			X		
Breast cancer	Female	Animal Fats (kcal per capita)		X			X	
Breast cancer	Female	Cumulative Cigarettes (10 Years)		X			X	
Breast cancer	Female	Fertility (15-19 year olds)		X			X	
Breast cancer	Female	Fruits (kcal per capita)		X			X	
Breast cancer	Female	Health System Access 2 (unitless)		X			X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Breast cancer	Female	Latitude 15 to 30 (proportion)		X			X	
Breast cancer	Female	Latitude 30 to 45 (proportion)		X			X	
Breast cancer	Female	Latitude Over 45 (proportion)		X			X	
Breast cancer	Female	Total Fertility Rate		X			X	
Breast cancer	Female	Vegetables (kcal per capita)		X			X	
Breast cancer	Female	Education (years per capita)			X			X
Breast cancer	Female	LDI (I\$ per capita)			X			X
Breast cancer	Female	Sociodemographic Status						X
Cervical cancer	Female	Abortion On-Demand Illegal (binary)	X			X		
Cervical cancer	Female	Cumulative Cigarettes (10 Years)	X			X		
Cervical cancer	Female	Cumulative Cigarettes (15 Years)	X			X		
Cervical cancer	Female	Cumulative Cigarettes (5 Years)	X			X		
Cervical cancer	Female	HIV age-standardized prevalence				X		
Cervical cancer	Female	Fertility (15-19 year olds)		X			X	
Cervical cancer	Female	Fruits (kcal per capita)		X			X	
Cervical cancer	Female	Health System Access 2 (unitless)		X			X	
Cervical cancer	Female	Smoking Prevalence	X				X	
Cervical cancer	Female	Total Fertility Rate		X			X	
Cervical cancer	Female	Vegetables (kcal per capita)		X			X	
Cervical cancer	Female	Education (years per capita)			X			X
Cervical cancer	Female	LDI (I\$ per capita)			X			X
Cervical cancer	Female	Sociodemographic Status						X

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Cervical cancer	Female	HIV Prevalence, ARV-Adjusted (Custom Lag, %)	X					
Uterine cancer	Female	Log-transformed SEV scalar: Uterus C				X		
Uterine cancer	Female	Mean BMI	X			X		
Uterine cancer	Female	Cumulative Cigarettes (10 Years)		X			X	
Uterine cancer	Female	Cumulative Cigarettes (5 Years)		X			X	
Uterine cancer	Female	Diabetes Age-Standardised Prevalence (proportion)		X			X	
Uterine cancer	Female	Fruits (kcal per capita)		X			X	
Uterine cancer	Female	Health System Access (unitless)		X			X	
Uterine cancer	Female	Smoking Prevalence		X			X	
Uterine cancer	Female	Tobacco (cigarettes per capita)		X			X	
Uterine cancer	Female	Total Fertility Rate		X			X	
Uterine cancer	Female	Vegetables (kcal per capita)		X			X	
Uterine cancer	Female	Education (years per capita)			X			X
Uterine cancer	Female	LDI (I\$ per capita)			X			X
Uterine cancer	Female	Sociodemographic Status						X
Ovarian cancer	Female	Alcohol (litres per capita)	X			X		
Ovarian cancer	Female	Contraception (Modern) Prevalence (proportion)	X			X		
Ovarian cancer	Female	Cumulative Cigarettes (20 Years)	X			X		
Ovarian cancer	Female	Log-transformed SEV scalar: Ovary C				X		
Ovarian cancer	Female	Tobacco (cigarettes per capita)	X			X		
Ovarian cancer	Female	Animal Fats (kcal per capita)		X			X	
Ovarian cancer	Female	Diabetes Age-Standardised Prevalence (proportion)		X			X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Ovarian cancer	Female	Fruits (kcal per capita)		X			X	
Ovarian cancer	Female	Latitude 15 to 30 (proportion)		X			X	
Ovarian cancer	Female	Latitude 30 to 45 (proportion)		X			X	
Ovarian cancer	Female	Latitude Over 45 (proportion)		X			X	
Ovarian cancer	Female	Mean BMI		X			X	
Ovarian cancer	Female	Smoking Prevalence		X			X	
Ovarian cancer	Female	Total Calories (kcal per capita)		X			X	
Ovarian cancer	Female	Total Fertility Rate		X			X	
Ovarian cancer	Female	Vegetables (kcal per capita)		X			X	
Ovarian cancer	Female	Education (years per capita)			X			X
Ovarian cancer	Female	LDI (I\$ per capita)			X			X
Ovarian cancer	Female	Sociodemographic Status						X
Prostate cancer	Male	Health System Access 2 (unitless)	X			X		
Prostate cancer	Male	Log-transformed SEV scalar: Prostate C				X		
Prostate cancer	Male	Animal Fats (kcal per capita)		X			X	
Prostate cancer	Male	Education (years per capita)			X			X
Prostate cancer	Male	LDI (I\$ per capita)			X			X
Prostate cancer	Male	Sociodemographic Status						X
Testicular cancer	Male	Cumulative Cigarettes (10 Years)		X			X	
Testicular cancer	Male	Cumulative Cigarettes (15 Years)		X			X	
Testicular cancer	Male	Cumulative Cigarettes (5 Years)		X			X	
Testicular cancer	Male	Fruits (kcal per capita)		X			X	
Testicular cancer	Male	Health System Access 2 (unitless)		X			X	
Testicular cancer	Male	Vegetables (kcal per capita)		X			X	
Testicular cancer	Male	Education (years per capita)			X			X

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Testicular cancer	Male	LDI (I\$ per capita)			X			X
Testicular cancer	Male	Sociodemographic Status						X
Kidney cancer	Male	Cumulative Cigarettes (10 Years)	X			X		
Kidney cancer	Male	Cumulative Cigarettes (15 Years)	X			X		
Kidney cancer	Male	Cumulative Cigarettes (5 Years)	X			X		
Kidney cancer	Male	Log-transformed SEV scalar: Kidney C				X		
Kidney cancer	Male	Mean BMI	X			X		
Kidney cancer	Male	Alcohol (litres per capita)		X			X	
Kidney cancer	Male	Diabetes Age-Standardised Prevalence (proportion)		X			X	
Kidney cancer	Male	Health System Access 2 (unitless)		X			X	
Kidney cancer	Male	Smoking Prevalence	X				X	
Kidney cancer	Male	Systolic Blood Pressure (mmHg)		X			X	
Kidney cancer	Male	Total Calories (kcal per capita)	X				X	
Kidney cancer	Male	Education (years per capita)			X			X
Kidney cancer	Male	LDI (I\$ per capita)			X			X
Kidney cancer	Male	Sociodemographic Status						X
Kidney cancer	Male	Total Fertility Rate			X			X
Kidney cancer	Female	Cumulative Cigarettes (10 Years)	X			X		
Kidney cancer	Female	Cumulative Cigarettes (15 Years)	X			X		
Kidney cancer	Female	Cumulative Cigarettes (5 Years)	X			X		
Kidney cancer	Female	Log-transformed SEV scalar: Kidney C				X		
Kidney cancer	Female	Mean BMI	X			X		
Kidney cancer	Female	Alcohol (litres per capita)		X			X	
Kidney cancer	Female	Diabetes Age-Standardised Prevalence (proportion)		X			X	
Kidney cancer	Female	Health System Access 2 (unitless)		X			X	
Kidney cancer	Female	Smoking Prevalence	X				X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Kidney cancer	Female	Systolic Blood Pressure (mmHg)		X			X	
Kidney cancer	Female	Total Calories (kcal per capita)	X				X	
Kidney cancer	Female	Education (years per capita)			X			X
Kidney cancer	Female	LDI (I\$ per capita)			X			X
Kidney cancer	Female	Sociodemographic Status						X
Kidney cancer	Female	Total Fertility Rate			X			X
Bladder cancer	Male	Cumulative Cigarettes (10 Years)	X			X		
Bladder cancer	Male	Cumulative Cigarettes (15 Years)	X			X		
Bladder cancer	Male	Cumulative Cigarettes (5 Years)	X			X		
Bladder cancer	Male	Log-transformed SEV scalar: Bladder C				X		
Bladder cancer	Male	Smoking Prevalence	X			X		
Bladder cancer	Male	Alcohol (litres per capita)		X			X	
Bladder cancer	Male	Fruits (kcal per capita)		X			X	
Bladder cancer	Male	Health System Access 2 (unitless)		X			X	
Bladder cancer	Male	Population Density (over 1000 ppl/sqkm, proportion)		X			X	
Bladder cancer	Male	Population Density (under 150 ppl/sqkm, proportion)		X			X	
Bladder cancer	Male	Vegetables (kcal per capita)		X			X	
Bladder cancer	Male	Education (years per capita)			X			X
Bladder cancer	Male	LDI (I\$ per capita)			X			X
Bladder cancer	Male	Sociodemographic Status						X
Bladder cancer	Female	Cumulative Cigarettes (10 Years)	X			X		
Bladder cancer	Female	Cumulative Cigarettes (15 Years)	X			X		
Bladder cancer	Female	Cumulative Cigarettes (5 Years)	X			X		
Bladder cancer	Female	Log-transformed SEV scalar: Bladder C				X		
Bladder cancer	Female	Smoking Prevalence	X			X		

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Bladder cancer	Female	Alcohol (litres per capita)		X			X	
Bladder cancer	Female	Fruits (kcal per capita)		X			X	
Bladder cancer	Female	Health System Access 2 (unitless)		X			X	
Bladder cancer	Female	Population Density (over 1000 ppl/sqkm, proportion)		X			X	
Bladder cancer	Female	Population Density (under 150 ppl/sqkm, proportion)		X			X	
Bladder cancer	Female	Vegetables (kcal per capita)		X			X	
Bladder cancer	Female	Education (years per capita)			X			X
Bladder cancer	Female	LDI (I\$ per capita)			X			X
Bladder cancer	Female	Sociodemographic Status						X
Brain and nervous system cancer	Male	Alcohol (litres per capita)	X			X		
Brain and nervous system cancer	Male	Cumulative Cigarettes (10 Years)	X			X		
Brain and nervous system cancer	Male	Cumulative Cigarettes (15 Years)	X			X		
Brain and nervous system cancer	Male	Smoking Prevalence	X			X		
Brain and nervous system cancer	Male	Animal Fats (kcal per capita)		X			X	
Brain and nervous system cancer	Male	Cholesterol (total, mean per capita)		X			X	
Brain and nervous system cancer	Male	Fruits (kcal per capita)		X			X	
Brain and nervous system cancer	Male	Health System Access 2 (unitless)		X			X	
Brain and nervous system cancer	Male	Red Meat (kcal per capita)		X			X	
Brain and nervous system cancer	Male	Systolic Blood Pressure (mmHg)		X			X	
Brain and nervous system cancer	Male	Vegetables (kcal per capita)		X			X	
Brain and nervous system cancer	Male	Education (years per capita)			X			X
Brain and nervous system cancer	Male	LDI (I\$ per capita)			X			X

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Brain and nervous system cancer	Male	Sociodemographic Status						X
Brain and nervous system cancer	Female	Alcohol (litres per capita)	X			X		
Brain and nervous system cancer	Female	Cumulative Cigarettes (10 Years)	X			X		
Brain and nervous system cancer	Female	Cumulative Cigarettes (15 Years)	X			X		
Brain and nervous system cancer	Female	Smoking Prevalence	X			X		
Brain and nervous system cancer	Female	Animal Fats (kcal per capita)		X			X	
Brain and nervous system cancer	Female	Cholesterol (total, mean per capita)		X			X	
Brain and nervous system cancer	Female	Fruits (kcal per capita)		X			X	
Brain and nervous system cancer	Female	Health System Access 2 (unitless)		X			X	
Brain and nervous system cancer	Female	Red Meat (kcal per capita)		X			X	
Brain and nervous system cancer	Female	Systolic Blood Pressure (mmHg)		X			X	
Brain and nervous system cancer	Female	Vegetables (kcal per capita)		X			X	
Brain and nervous system cancer	Female	Education (years per capita)			X			X
Brain and nervous system cancer	Female	LDI (I\$ per capita)			X			X
Brain and nervous system cancer	Female	Sociodemographic Status						X
Thyroid cancer	Male	Alcohol (litres per capita)	X			X		
Thyroid cancer	Male	Log-transformed SEV scalar: Thyroid C				X		
Thyroid cancer	Male	Smoking Prevalence	X			X		
Thyroid cancer	Male	Tobacco (cigarettes per capita)	X			X		
Thyroid cancer	Male	Fruits (kcal per capita)		X			X	
Thyroid cancer	Male	Improved Water Source (proportion with access)		X			X	
Thyroid cancer	Male	Mean BMI		X			X	
Thyroid cancer	Male	Red Meat (kcal per capita)		X			X	
Thyroid cancer	Male	Sanitation (proportion with access)		X			X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Thyroid cancer	Male	Vegetables (kcal per capita)		X			X	
Thyroid cancer	Male	Education (years per capita)			X			X
Thyroid cancer	Male	LDI (I\$ per capita)			X			X
Thyroid cancer	Male	Sociodemographic Status						X
Thyroid cancer	Female	Alcohol (litres per capita)	X			X		
Thyroid cancer	Female	Log-transformed SEV scalar: Thyroid C				X		
Thyroid cancer	Female	Smoking Prevalence	X			X		
Thyroid cancer	Female	Tobacco (cigarettes per capita)	X			X		
Thyroid cancer	Female	Fruits (kcal per capita)		X			X	
Thyroid cancer	Female	Improved Water Source (proportion with access)		X			X	
Thyroid cancer	Female	Mean BMI		X			X	
Thyroid cancer	Female	Red Meat (kcal per capita)		X			X	
Thyroid cancer	Female	Sanitation (proportion with access)		X			X	
Thyroid cancer	Female	Vegetables (kcal per capita)		X			X	
Thyroid cancer	Female	Education (years per capita)			X			X
Thyroid cancer	Female	LDI (I\$ per capita)			X			X
Thyroid cancer	Female	Sociodemographic Status						X
Mesothelioma	Male	Asbestos production (binary)	X			X		
Mesothelioma	Male	Cumulative Cigarettes (5 Years)	X			X		
Mesothelioma	Male	Health System Access 2 (unitless)	X			X		
Mesothelioma	Male	Indoor Air Pollution (Coal Cooking)	X			X		
Mesothelioma	Male	Log-transformed SEV scalar: Mesothel				X		
Mesothelioma	Male	Smoking Prevalence	X			X		
Mesothelioma	Male	Asbestos production (kg) per capita		X			X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Mesothelioma	Male	Elevation 500 to 1500m (proportion)		X			X	
Mesothelioma	Male	Elevation Over 1500m (proportion)		X			X	
Mesothelioma	Male	Gold production (binary)		X			X	
Mesothelioma	Male	Gold production (kg) per capita		X			X	
Mesothelioma	Male	Population Density (over 1000 ppl/sqkm, proportion)		X			X	
Mesothelioma	Male	Population Over 65 (proportion)		X			X	
Mesothelioma	Male	Education (years per capita)			X			X
Mesothelioma	Male	LDI (I\$ per capita)			X			X
Mesothelioma	Male	Sociodemographic Status						X
Mesothelioma	Female	Asbestos production (binary)	X			X		
Mesothelioma	Female	Cumulative Cigarettes (5 Years)	X			X		
Mesothelioma	Female	Health System Access 2 (unitless)	X			X		
Mesothelioma	Female	Indoor Air Pollution (Coal Cooking)	X			X		
Mesothelioma	Female	Log-transformed SEV scalar: Mesothel				X		
Mesothelioma	Female	Smoking Prevalence	X			X		
Mesothelioma	Female	Asbestos production (kg) per capita		X			X	
Mesothelioma	Female	Elevation 500 to 1500m (proportion)		X			X	
Mesothelioma	Female	Elevation Over 1500m (proportion)		X			X	
Mesothelioma	Female	Gold production (binary)		X			X	
Mesothelioma	Female	Gold production (kg) per capita		X			X	
Mesothelioma	Female	Population Density (over 1000 ppl/sqkm, proportion)		X			X	
Mesothelioma	Female	Population Over 65 (proportion)		X			X	
Mesothelioma	Female	Education (years per capita)			X			X
Mesothelioma	Female	LDI (I\$ per capita)			X			X

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Mesothelioma	Female	Sociodemographic Status						X
Hodgkin lymphoma	Male	Health System Access 2 (unitless)	X			X		
Hodgkin lymphoma	Male	Latitude 15 to 30 (proportion)			X		X	
Hodgkin lymphoma	Male	Latitude 30 to 45 (proportion)			X		X	
Hodgkin lymphoma	Male	Latitude Over 45 (proportion)			X		X	
Hodgkin lymphoma	Male	Latitude Under 15 (proportion)			X		X	
Hodgkin lymphoma	Male	Education (years per capita)		X				X
Hodgkin lymphoma	Male	LDI (I\$ per capita)		X				X
Hodgkin lymphoma	Male	Sociodemographic Status						X
Hodgkin lymphoma	Female	Health System Access 2 (unitless)	X			X		
Hodgkin lymphoma	Female	Latitude 15 to 30 (proportion)			X		X	
Hodgkin lymphoma	Female	Latitude 30 to 45 (proportion)			X		X	
Hodgkin lymphoma	Female	Latitude Over 45 (proportion)			X		X	
Hodgkin lymphoma	Female	Latitude Under 15 (proportion)			X		X	
Hodgkin lymphoma	Female	Education (years per capita)		X				X
Hodgkin lymphoma	Female	LDI (I\$ per capita)		X				X
Hodgkin lymphoma	Female	Sociodemographic Status						X
Non-Hodgkin lymphoma	Male	Health System Access 2 (unitless)	X			X		
Non-Hodgkin lymphoma	Male	Alcohol (litres per capita)		X			X	
Non-Hodgkin lymphoma	Male	Cumulative Cigarettes (10 Years)		X			X	
Non-Hodgkin lymphoma	Male	Smoking Prevalence		X			X	
Non-Hodgkin lymphoma	Male	LDI (I\$ per capita)			X			X
Non-Hodgkin lymphoma	Male	Sociodemographic Status						X
Non-Hodgkin lymphoma	Male	Total Fertility Rate			X			X

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Non-Hodgkin lymphoma	Female	Health System Access 2 (unitless)	X			X		
Non-Hodgkin lymphoma	Female	Alcohol (litres per capita)		X			X	
Non-Hodgkin lymphoma	Female	Cumulative Cigarettes (10 Years)		X			X	
Non-Hodgkin lymphoma	Female	Smoking Prevalence		X			X	
Non-Hodgkin lymphoma	Female	LDI (I\$ per capita)			X			X
Non-Hodgkin lymphoma	Female	Sociodemographic Status						X
Non-Hodgkin lymphoma	Female	Total Fertility Rate			X			X
Multiple myeloma	Male	Alcohol (litres per capita)	X			X		
Multiple myeloma	Male	Red Meat (kcal per capita)	X			X		
Multiple myeloma	Male	Smoking Prevalence	X			X		
Multiple myeloma	Male	Tobacco (cigarettes per capita)	X			X		
Multiple myeloma	Male	Fruits (kcal per capita)		X			X	
Multiple myeloma	Male	Improved Water Source (proportion with access)		X			X	
Multiple myeloma	Male	Mean BMI		X			X	
Multiple myeloma	Male	Sanitation (proportion with access)		X			X	
Multiple myeloma	Male	Vegetables (kcal per capita)		X			X	
Multiple myeloma	Male	Education (years per capita)			X			X
Multiple myeloma	Male	LDI (I\$ per capita)			X			X
Multiple myeloma	Male	Sociodemographic Status						X
Multiple myeloma	Female	Alcohol (litres per capita)	X			X		
Multiple myeloma	Female	Red Meat (kcal per capita)	X			X		
Multiple myeloma	Female	Smoking Prevalence	X			X		
Multiple myeloma	Female	Tobacco (cigarettes per capita)	X			X		
Multiple myeloma	Female	Fruits (kcal per capita)		X			X	
Multiple myeloma	Female	Improved Water Source (proportion with access)		X			X	
Multiple myeloma	Female	Mean BMI		X			X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Multiple myeloma	Female	Sanitation (proportion with access)		X			X	
Multiple myeloma	Female	Vegetables (kcal per capita)		X			X	
Multiple myeloma	Female	Education (years per capita)			X			X
Multiple myeloma	Female	LDI (I\$ per capita)			X			X
Multiple myeloma	Female	Sociodemographic Status						X
Leukemia	Male	Cumulative Cigarettes (10 Years)	X			X		
Leukemia	Male	Cumulative Cigarettes (15 Years)	X			X		
Leukemia	Male	Cumulative Cigarettes (5 Years)	X			X		
Leukemia	Male	Health System Access 2 (unitless)	X			X		
Leukemia	Male	Log-transformed SEV scalar: Leukemia				X		
Leukemia	Male	Smoking Prevalence	X			X		
Leukemia	Male	Alcohol (litres per capita)		X			X	
Leukemia	Male	Education (years per capita)			X			X
Leukemia	Male	LDI (I\$ per capita)			X			X
Leukemia	Male	Sociodemographic Status						X
Leukemia	Male	Total Fertility Rate		X				
Leukemia	Female	Cumulative Cigarettes (10 Years)	X			X		
Leukemia	Female	Cumulative Cigarettes (15 Years)	X			X		
Leukemia	Female	Health System Access 2 (unitless)	X			X		
Leukemia	Female	Log-transformed SEV scalar: Leukemia				X		
Leukemia	Female	Smoking Prevalence	X			X		
Leukemia	Female	Alcohol (litres per capita)		X			X	
Leukemia	Female	Total Fertility Rate		X			X	
Leukemia	Female	Education (years per capita)			X			X

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Leukemia	Female	LDI (I\$ per capita)			X			X
Leukemia	Female	Sociodemographic Status						X
Leukemia	Female	Cumulative Cigarettes (5 Years)	X					
Acute lymphoid leukemia	Male	Cumulative Cigarettes (10 Years)				X		
Acute lymphoid leukemia	Male	Cumulative Cigarettes (5 Years)				X		
Acute lymphoid leukemia	Male	Health System Access 2 (unitless)				X		
Acute lymphoid leukemia	Male	Log-transformed SEV scalar: Leukemia				X		
Acute lymphoid leukemia	Male	Smoking Prevalence				X		
Acute lymphoid leukemia	Male	Alcohol (litres per capita)					X	
Acute lymphoid leukemia	Male	Education (years per capita)						X
Acute lymphoid leukemia	Male	LDI (I\$ per capita)						X
Acute lymphoid leukemia	Male	Sociodemographic Status						X
Acute lymphoid leukemia	Female	Cumulative Cigarettes (10 Years)				X		
Acute lymphoid leukemia	Female	Cumulative Cigarettes (5 Years)				X		
Acute lymphoid leukemia	Female	Health System Access 2 (unitless)				X		
Acute lymphoid leukemia	Female	Log-transformed SEV scalar: Leukemia				X		
Acute lymphoid leukemia	Female	Smoking Prevalence				X		
Acute lymphoid leukemia	Female	Alcohol (litres per capita)					X	
Acute lymphoid leukemia	Female	Education (years per capita)						X
Acute lymphoid leukemia	Female	LDI (I\$ per capita)						X
Acute lymphoid leukemia	Female	Sociodemographic Status						X
Chronic lymphoid leukemia	Male	Cumulative Cigarettes (10 Years)				X		

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Chronic lymphoid leukemia	Male	Cumulative Cigarettes (5 Years)				X		
Chronic lymphoid leukemia	Male	Health System Access 2 (unitless)				X		
Chronic lymphoid leukemia	Male	Log-transformed SEV scalar: Leukemia				X		
Chronic lymphoid leukemia	Male	Smoking Prevalence				X		
Chronic lymphoid leukemia	Male	Alcohol (litres per capita)					X	
Chronic lymphoid leukemia	Male	Education (years per capita)						X
Chronic lymphoid leukemia	Male	LDI (I\$ per capita)						X
Chronic lymphoid leukemia	Male	Sociodemographic Status						X
Chronic lymphoid leukemia	Female	Cumulative Cigarettes (10 Years)				X		
Chronic lymphoid leukemia	Female	Cumulative Cigarettes (5 Years)				X		
Chronic lymphoid leukemia	Female	Health System Access 2 (unitless)				X		
Chronic lymphoid leukemia	Female	Log-transformed SEV scalar: Leukemia				X		
Chronic lymphoid leukemia	Female	Smoking Prevalence				X		
Chronic lymphoid leukemia	Female	Alcohol (litres per capita)					X	
Chronic lymphoid leukemia	Female	Education (years per capita)						X
Chronic lymphoid leukemia	Female	LDI (I\$ per capita)						X
Chronic lymphoid leukemia	Female	Sociodemographic Status						X
Acute myeloid leukemia	Male	Cumulative Cigarettes (10 Years)				X		
Acute myeloid leukemia	Male	Cumulative Cigarettes (5 Years)				X		
Acute myeloid leukemia	Male	Health System Access 2 (unitless)				X		
Acute myeloid leukemia	Male	Log-transformed SEV scalar: Leukemia				X		
Acute myeloid leukemia	Male	Smoking Prevalence				X		

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Acute myeloid leukemia	Male	Tobacco (cigarettes per capita)				X		
Acute myeloid leukemia	Male	Alcohol (litres per capita)					X	
Acute myeloid leukemia	Male	Education (years per capita)						X
Acute myeloid leukemia	Male	LDI (I\$ per capita)						X
Acute myeloid leukemia	Male	Sociodemographic Status						X
Acute myeloid leukemia	Female	Cumulative Cigarettes (10 Years)				X		
Acute myeloid leukemia	Female	Cumulative Cigarettes (5 Years)				X		
Acute myeloid leukemia	Female	Health System Access 2 (unitless)				X		
Acute myeloid leukemia	Female	Log-transformed SEV scalar: Leukemia				X		
Acute myeloid leukemia	Female	Smoking Prevalence				X		
Acute myeloid leukemia	Female	Tobacco (cigarettes per capita)				X		
Acute myeloid leukemia	Female	Alcohol (litres per capita)					X	
Acute myeloid leukemia	Female	Education (years per capita)						X
Acute myeloid leukemia	Female	LDI (I\$ per capita)						X
Acute myeloid leukemia	Female	Sociodemographic Status						X
Chronic myeloid leukemia	Male	Cumulative Cigarettes (10 Years)				X		
Chronic myeloid leukemia	Male	Cumulative Cigarettes (5 Years)				X		
Chronic myeloid leukemia	Male	Health System Access 2 (unitless)				X		
Chronic myeloid leukemia	Male	Log-transformed SEV scalar: Leukemia				X		
Chronic myeloid leukemia	Male	Smoking Prevalence				X		
Chronic myeloid leukemia	Male	Alcohol (litres per capita)					X	
Chronic myeloid leukemia	Male	Education (years per capita)						X

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Chronic myeloid leukemia	Male	LDI (I\$ per capita)						X
Chronic myeloid leukemia	Male	Sociodemographic Status						X
Chronic myeloid leukemia	Female	Cumulative Cigarettes (10 Years)				X		
Chronic myeloid leukemia	Female	Cumulative Cigarettes (5 Years)				X		
Chronic myeloid leukemia	Female	Health System Access 2 (unitless)				X		
Chronic myeloid leukemia	Female	Log-transformed SEV scalar: Leukemia				X		
Chronic myeloid leukemia	Female	Smoking Prevalence				X		
Chronic myeloid leukemia	Female	Alcohol (litres per capita)					X	
Chronic myeloid leukemia	Female	Education (years per capita)						X
Chronic myeloid leukemia	Female	LDI (I\$ per capita)						X
Chronic myeloid leukemia	Female	Sociodemographic Status						X
Other neoplasms	Male	Smoking Prevalence	X			X		
Other neoplasms	Male	Tobacco (cigarettes per capita)	X			X		
Other neoplasms	Male	Fruits (kcal per capita)		X			X	
Other neoplasms	Male	Health System Access 2 (unitless)		X			X	
Other neoplasms	Male	Nuts & Seeds (kcal per capita)		X			X	
Other neoplasms	Male	PUFA Omega 3 - Seafood (kcal per capita)		X			X	
Other neoplasms	Male	Vegetables (kcal per capita)		X			X	
Other neoplasms	Male	Education (years per capita)			X			X
Other neoplasms	Male	LDI (I\$ per capita)			X			X
Other neoplasms	Male	Sociodemographic Status						X
Other neoplasms	Female	Smoking Prevalence	X			X		
Other neoplasms	Female	Tobacco (cigarettes per capita)	X			X		
Other neoplasms	Female	Fruits (kcal per capita)		X			X	
Other neoplasms	Female	Health System Access 2 (unitless)		X			X	

Cause	Sex	Covariate	GBD 2013			GBD 2015		
			Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Other neoplasms	Female	Nuts & Seeds (kcal per capita)		X			X	
Other neoplasms	Female	PUFA Omega 3 - Seafood (kcal per capita)		X			X	
Other neoplasms	Female	Vegetables (kcal per capita)		X			X	
Other neoplasms	Female	Education (years per capita)			X			X
Other neoplasms	Female	LDI (I\$ per capita)			X			X
Other neoplasms	Female	Sociodemographic Status						X

eTable 11: Results for CODEm model testing

Cause	Sex	Age start	Age end	Predictive validity					
				RMSE in	RMSE out	Trend in	Trend out	Coverage in	Coverage out
Acute lymphoid leukemia [Data Rich]	Female	28-364 days	80+ years	0.224	0.307	0.188	0.183	1.000	0.999
Acute lymphoid leukemia [Data Rich]	Male	28-364 days	80+ years	0.232	0.295	0.194	0.165	1.000	0.998
Acute lymphoid leukemia [Global]	Male	28-364 days	80+ years	0.292	0.422	0.234	0.233	0.998	0.994
Acute lymphoid leukemia [Global]	Female	28-364 days	80+ years	0.285	0.435	0.231	0.234	0.999	0.995
Acute myeloid leukemia [Data Rich]	Female	28-364 days	80+ years	0.220	0.298	0.182	0.172	0.999	0.998
Acute myeloid leukemia [Data Rich]	Male	28-364 days	80+ years	0.223	0.298	0.179	0.170	0.999	0.998
Acute myeloid leukemia [Global]	Male	28-364 days	80+ years	0.301	0.424	0.209	0.207	0.999	0.990
Acute myeloid leukemia [Global]	Female	28-364 days	80+ years	0.266	0.436	0.214	0.212	0.999	0.989
Bladder cancer [Data Rich]	Male	15-19 years	80+ years	0.231	0.274	0.193	0.214	0.997	0.996
Bladder cancer [Data Rich]	Female	15-19 years	80+ years	0.254	0.304	0.214	0.241	0.992	0.990
Bladder cancer [Global]	Male	15-19 years	80+ years	0.303	0.433	0.244	0.244	0.998	0.991
Bladder cancer [Global]	Female	15-19 years	80+ years	0.332	0.482	0.267	0.278	0.995	0.990

Cause	Sex	Age start	Age end	Predictive validity					
				RMSE in	RMSE out	Trend in	Trend out	Coverage in	Coverage out
Brain and nervous system cancer [Data Rich]	Male	1-4 years	80+ years	0.210	0.259	0.174	0.192	0.995	0.992
Brain and nervous system cancer [Data Rich]	Female	1-4 years	80+ years	0.209	0.260	0.176	0.189	0.996	0.994
Brain and nervous system cancer [Global]	Female	1-4 years	80+ years	0.258	0.366	0.204	0.206	0.998	0.992
Brain and nervous system cancer [Global]	Male	1-4 years	80+ years	0.277	0.360	0.202	0.198	0.997	0.991
Breast cancer [Data Rich]	Male	15-19 years	80+ years	0.392	0.472	0.318	0.365	0.961	0.957
Breast cancer [Data Rich]	Female	15-19 years	80+ years	0.174	0.204	0.142	0.158	0.998	0.996
Breast cancer [Global]	Male	15-19 years	80+ years	0.504	0.724	0.400	0.409	0.959	0.952
Breast cancer [Global]	Female	15-19 years	80+ years	0.197	0.287	0.155	0.157	0.998	0.988
Cervical cancer [Data Rich]	Female	15-19 years	80+ years	0.212	0.251	0.174	0.192	0.997	0.995
Cervical cancer [Global]	Female	15-19 years	80+ years	0.279	0.411	0.222	0.223	0.998	0.986
Chronic lymphoid leukemia [Data Rich]	Female	15-19 years	80+ years	0.208	0.284	0.170	0.151	0.998	0.997
Chronic lymphoid leukemia [Data Rich]	Male	15-19 years	80+ years	0.252	0.376	0.203	0.165	0.996	0.993
Chronic lymphoid leukemia [Global]	Female	15-19 years	80+ years	0.274	0.448	0.209	0.209	0.998	0.988
Chronic lymphoid leukemia [Global]	Male	15-19 years	80+ years	0.325	0.565	0.246	0.231	0.993	0.979
Chronic myeloid leukemia [Data Rich]	Male	28-364 days	80+ years	0.226	0.318	0.182	0.177	1.000	0.999
Chronic myeloid leukemia [Data Rich]	Female	28-364 days	80+ years	0.239	0.339	0.189	0.171	1.000	0.999
Chronic myeloid leukemia [Global]	Male	28-364 days	80+ years	0.291	0.470	0.232	0.240	0.999	0.994
Chronic myeloid leukemia [Global]	Female	28-364 days	80+ years	0.311	0.512	0.242	0.238	0.999	0.993
Colon and rectum cancer [Data Rich]	Male	15-19 years	80+ years	0.193	0.228	0.162	0.181	0.991	0.987

Cause	Sex	Age start	Age end	Predictive validity					
				RMSE in	RMSE out	Trend in	Trend out	Coverage in	Coverage out
Colon and rectum cancer [Data Rich]	Female	15-19 years	80+ years	0.197	0.233	0.167	0.190	0.991	0.987
Colon and rectum cancer [Global]	Male	15-19 years	80+ years	0.232	0.319	0.189	0.191	0.995	0.983
Colon and rectum cancer [Global]	Female	15-19 years	80+ years	0.231	0.319	0.189	0.190	0.996	0.984
Esophageal cancer [Data Rich]	Male	15-19 years	80+ years	0.216	0.260	0.180	0.208	0.997	0.995
Esophageal cancer [Data Rich]	Female	15-19 years	80+ years	0.234	0.280	0.195	0.223	0.998	0.996
Esophageal cancer [Global]	Male	15-19 years	80+ years	0.264	0.472	0.209	0.215	0.996	0.967
Esophageal cancer [Global]	Female	15-19 years	80+ years	0.304	0.522	0.239	0.239	0.995	0.971
Gallbladder and biliary tract cancer [Data Rich]	Female	15-19 years	80+ years	0.239	0.291	0.201	0.221	0.994	0.992
Gallbladder and biliary tract cancer [Data Rich]	Male	15-19 years	80+ years	0.222	0.267	0.185	0.202	0.996	0.994
Gallbladder and biliary tract cancer [Global]	Female	15-19 years	80+ years	0.278	0.431	0.225	0.220	0.996	0.978
Gallbladder and biliary tract cancer [Global]	Male	15-19 years	80+ years	0.268	0.402	0.214	0.207	0.998	0.988
Hodgkin lymphoma [Data Rich]	Female	28-364 days	80+ years	0.361	0.459	0.295	0.329	0.974	0.974
Hodgkin lymphoma [Data Rich]	Male	28-364 days	80+ years	0.291	0.374	0.239	0.263	0.997	0.995
Hodgkin lymphoma [Global]	Male	28-364 days	80+ years	0.370	0.537	0.276	0.277	0.999	0.991
Hodgkin lymphoma [Global]	Female	28-364 days	80+ years	0.511	0.710	0.345	0.347	0.983	0.977
Kidney cancer [Data Rich]	Male	28-364 days	80+ years	0.261	0.311	0.220	0.247	0.998	0.997
Kidney cancer [Data Rich]	Female	28-364 days	80+ years	0.278	0.334	0.235	0.259	0.999	0.997
Kidney cancer [Global]	Male	28-364 days	80+ years	0.315	0.431	0.260	0.268	0.999	0.993
Kidney cancer [Global]	Female	28-364 days	80+ years	0.325	0.463	0.268	0.283	0.999	0.992

Cause	Sex	Age start	Age end	Predictive validity					
				RMSE in	RMSE out	Trend in	Trend out	Coverage in	Coverage out
Larynx cancer [Data Rich]	Male	15-19 years	80+ years	0.225	0.269	0.189	0.213	0.998	0.997
Larynx cancer [Data Rich]	Female	15-19 years	80+ years	0.329	0.399	0.278	0.315	0.984	0.983
Larynx cancer [Global]	Male	15-19 years	80+ years	0.303	0.456	0.240	0.243	0.999	0.987
Larynx cancer [Global]	Female	15-19 years	80+ years	0.403	0.615	0.322	0.332	0.989	0.983
Leukemia [Data Rich]	Male	28-364 days	80+ years	0.228	0.270	0.193	0.219	0.997	0.995
Leukemia [Data Rich]	Female	28-364 days	80+ years	0.219	0.261	0.184	0.210	0.998	0.996
Leukemia [Global]	Male	28-364 days	80+ years	0.296	0.390	0.256	0.258	0.998	0.991
Leukemia [Global]	Female	28-364 days	80+ years	0.301	0.385	0.256	0.252	0.998	0.993
Lip and oral cavity cancer [Data Rich]	Male	15-19 years	80+ years	0.218	0.259	0.183	0.203	0.998	0.997
Lip and oral cavity cancer [Data Rich]	Female	15-19 years	80+ years	0.242	0.288	0.206	0.232	0.999	0.997
Lip and oral cavity cancer [Global]	Male	15-19 years	80+ years	0.264	0.425	0.211	0.214	0.998	0.987
Lip and oral cavity cancer [Global]	Female	15-19 years	80+ years	0.279	0.425	0.226	0.230	0.999	0.992
Liver cancer [Data Rich]	Male	5-9 years	80+ years	0.258	0.315	0.212	0.231	0.996	0.994
Liver cancer [Data Rich]	Female	5-9 years	80+ years	0.263	0.320	0.219	0.248	0.995	0.993
Liver cancer [Global]	Male	5-9 years	80+ years	0.290	0.477	0.225	0.222	0.997	0.976
Liver cancer [Global]	Female	5-9 years	80+ years	0.311	0.452	0.237	0.228	0.997	0.982
Malignant skin melanoma [Data Rich]	Male	15-19 years	80+ years	0.263	0.302	0.202	0.226	0.999	0.998
Malignant skin melanoma [Data Rich]	Female	15-19 years	80+ years	0.232	0.271	0.192	0.213	0.998	0.997
Malignant skin melanoma [Global]	Male	15-19 years	80+ years	0.313	0.457	0.238	0.243	0.999	0.991
Malignant skin melanoma [Global]	Female	15-19 years	80+ years	0.291	0.426	0.230	0.220	0.998	0.991

Cause	Sex	Age start	Age end	Predictive validity					
				RMSE in	RMSE out	Trend in	Trend out	Coverage in	Coverage out
Mesothelioma [Data Rich]	Male	15-19 years	80+ years	0.302	0.417	0.260	0.267	0.999	0.998
Mesothelioma [Data Rich]	Female	15-19 years	80+ years	0.296	0.409	0.249	0.216	0.998	0.996
Mesothelioma [Global]	Male	15-19 years	80+ years	0.333	0.542	0.267	0.269	0.999	0.994
Mesothelioma [Global]	Female	15-19 years	80+ years	0.335	0.527	0.264	0.264	0.998	0.994
Multiple myeloma [Data Rich]	Female	15-19 years	80+ years	0.240	0.286	0.199	0.222	0.998	0.998
Multiple myeloma [Data Rich]	Male	15-19 years	80+ years	0.234	0.277	0.194	0.215	0.998	0.996
Multiple myeloma [Global]	Female	15-19 years	80+ years	0.292	0.438	0.233	0.238	0.998	0.994
Multiple myeloma [Global]	Male	15-19 years	80+ years	0.291	0.434	0.233	0.233	0.998	0.994
Nasopharynx cancer [Data Rich]	Male	5-9 years	80+ years	0.295	0.355	0.255	0.285	0.997	0.995
Nasopharynx cancer [Data Rich]	Female	5-9 years	80+ years	0.398	0.489	0.344	0.394	0.979	0.976
Nasopharynx cancer [Global]	Male	5-9 years	80+ years	0.345	0.593	0.279	0.293	0.998	0.988
Nasopharynx cancer [Global]	Female	5-9 years	80+ years	0.430	0.668	0.359	0.352	0.984	0.973
Non-Hodgkin lymphoma [Data Rich]	Female	28-364 days	80+ years	0.246	0.287	0.190	0.212	0.999	0.998
Non-Hodgkin lymphoma [Data Rich]	Male	28-364 days	80+ years	0.242	0.280	0.181	0.201	0.999	0.998
Non-Hodgkin lymphoma [Global]	Female	28-364 days	80+ years	0.292	0.407	0.219	0.223	0.999	0.994
Non-Hodgkin lymphoma [Global]	Male	28-364 days	80+ years	0.281	0.392	0.207	0.210	0.999	0.992
Other neoplasms [Data Rich]	Male	0-6 days	80+ years	0.288	0.344	0.245	0.282	0.997	0.994
Other neoplasms [Data Rich]	Female	0-6 days	80+ years	0.275	0.328	0.235	0.268	0.998	0.996
Other neoplasms [Global]	Male	0-6 days	80+ years	0.313	0.394	0.250	0.248	0.997	0.993
Other neoplasms [Global]	Female	0-6 days	80+ years	0.295	0.397	0.243	0.252	0.999	0.996

Cause	Sex	Age start	Age end	Predictive validity					
				RMSE in	RMSE out	Trend in	Trend out	Coverage in	Coverage out
Other pharynx cancer [Data Rich]	Male	15-19 years	80+ years	0.253	0.313	0.203	0.220	0.995	0.993
Other pharynx cancer [Data Rich]	Female	15-19 years	80+ years	0.312	0.374	0.268	0.297	0.986	0.985
Other pharynx cancer [Global]	Male	15-19 years	80+ years	0.297	0.521	0.232	0.232	0.996	0.977
Other pharynx cancer [Global]	Female	15-19 years	80+ years	0.352	0.539	0.284	0.289	0.991	0.984
Ovarian cancer [Data Rich]	Female	15-19 years	80+ years	0.205	0.249	0.165	0.175	0.997	0.995
Ovarian cancer [Global]	Female	15-19 years	80+ years	0.242	0.356	0.191	0.189	0.998	0.990
Pancreatic cancer [Data Rich]	Male	15-19 years	80+ years	0.192	0.229	0.157	0.161	0.997	0.995
Pancreatic cancer [Data Rich]	Female	15-19 years	80+ years	0.204	0.244	0.170	0.177	0.997	0.995
Pancreatic cancer [Global]	Male	15-19 years	80+ years	0.215	0.317	0.167	0.169	0.998	0.993
Pancreatic cancer [Global]	Female	15-19 years	80+ years	0.223	0.332	0.178	0.189	0.998	0.993
Prostate cancer [Global]	Male	15-19 years	80+ years	0.359	0.438	0.275	0.270	0.996	0.986
Stomach cancer [Data Rich]	Male	15-19 years	80+ years	0.174	0.205	0.142	0.156	0.997	0.995
Stomach cancer [Data Rich]	Female	15-19 years	80+ years	0.185	0.217	0.153	0.168	0.997	0.995
Stomach cancer [Global]	Male	15-19 years	80+ years	0.207	0.379	0.164	0.167	0.998	0.973
Stomach cancer [Global]	Female	15-19 years	80+ years	0.218	0.363	0.171	0.169	0.998	0.979
Testicular cancer [Data Rich]	Male	15-19 years	80+ years	0.291	0.357	0.246	0.265	0.999	0.998
Testicular cancer [Global]	Male	15-19 years	80+ years	0.350	0.517	0.282	0.275	0.999	0.993
Thyroid cancer [Data Rich]	Male	10-14 years	80+ years	0.318	0.384	0.272	0.294	0.993	0.990
Thyroid cancer [Data Rich]	Female	10-14 years	80+ years	0.391	0.469	0.331	0.344	0.983	0.979
Thyroid cancer [Global]	Male	10-14 years	80+ years	0.387	0.491	0.305	0.299	0.993	0.990
Thyroid cancer [Global]	Female	10-14 years	80+ years	0.442	0.618	0.354	0.363	0.985	0.979

Cause	Sex	Age start	Age end	Predictive validity					
				RMSE in	RMSE out	Trend in	Trend out	Coverage in	Coverage out
Tracheal, bronchus, and lung cancer [Data Rich]	Male	15-19 years	80+ years	0.191	0.229	0.156	0.176	0.995	0.992
Tracheal, bronchus, and lung cancer [Data Rich]	Female	15-19 years	80+ years	0.194	0.231	0.158	0.174	0.995	0.992
Tracheal, bronchus, and lung cancer [Global]	Male	15-19 years	80+ years	0.228	0.381	0.182	0.189	0.997	0.966
Tracheal, bronchus, and lung cancer [Global]	Female	15-19 years	80+ years	0.242	0.390	0.190	0.197	0.997	0.980
Uterine cancer [Data Rich]	Female	15-19 years	80+ years	0.259	0.310	0.211	0.240	0.998	0.997
Uterine cancer [Global]	Female	15-19 years	80+ years	0.338	0.489	0.266	0.268	0.999	0.990

eTable 12: Percent change before and after CoDCorrect by cancer for all ages, both sexes combined, 2015

Cause	CoDCorrect level	Percent change
Lip and oral cavity cancer	1	2.73 (1.66, 4.54)
Nasopharynx cancer	1	1.84 (-0.05, 4.73)
Other pharynx cancer	1	2.98 (2.02, 4.73)
Esophageal cancer	1	1.45 (-0.09, 3.29)
Stomach cancer	1	0.4 (-0.94, 1.86)
Colon and rectum cancer	1	-0.02 (-1.13, 1.51)
Liver cancer	1	1.06 (-0.91, 3.23)
Liver cancer due to hepatitis B	2	1.59 (-1.01, 4.27)
Liver cancer due to hepatitis C	2	0.21 (-1.18, 1.8)
Liver cancer due to alcohol use	2	1.06 (-0.85, 3.32)
Liver cancer due to other causes	2	1.08 (-1.08, 3.12)
Gallbladder and biliary tract cancer	1	0.03 (-1.3, 1.34)
Pancreatic cancer	1	0.11 (-0.88, 1.39)
Larynx cancer	1	2.32 (1.36, 4.06)
Tracheal, bronchus, and lung cancer	1	-0.94 (-2.14, 0.59)
Malignant skin melanoma	1	-0.36 (-1.46, 1.18)
Breast cancer	1	2.05 (0.45, 3.6)
Cervical cancer	1	6.45 (3.11, 8.85)
Uterine cancer	1	2.75 (0.98, 4.45)

Cause	CoDCorrect level	Percent change
Ovarian cancer	1	1.75 (0.25, 3.37)
Prostate cancer	1	0.16 (-1.22, 1.59)
Testicular cancer	1	5.65 (3.66, 9.66)
Kidney cancer	1	0.15 (-0.95, 1.82)
Bladder cancer	1	0.28 (-0.67, 1.59)
Brain and nervous system cancer	1	1.24 (-0.63, 3.67)
Thyroid cancer	1	1.22 (0.08, 3.06)
Mesothelioma	1	-0.42 (-1.53, 1.27)
Hodgkin lymphoma	1	3.62 (1.59, 6.21)
Non-Hodgkin lymphoma	1	1.69 (0.36, 3.8)
Multiple myeloma	1	1.06 (0.14, 2.36)
Leukemia	1	1.59 (-0.36, 4.48)
Acute lymphoid leukemia	2	132.46 (119.34, 151.88)
Chronic lymphoid leukemia	2	68.12 (61.45, 78.94)
Acute myeloid leukemia	2	82.71 (76.34, 96.73)
Chronic myeloid leukemia	2	96.43 (87.6, 109.99)
Other neoplasms	1	3.45 (1.5, 5.81)

eTable 13: Duration of four prevalence phases by cancer

	Diagnosis/ Treatment (months)	Remission	Disseminated/metastatic (months)	Note	Terminal (months)
Esophageal cancer	5 ³³	Calculated based on remainder of time after attributing other sequelae.	4.6 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	1 months
Stomach cancer	5.2 ³³		3.88 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Liver cancer	4		2.51 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Larynx cancer	5.3 ³³		8.84 ³⁴	SEER Stage IVc	
Lung cancer	3.3 ³⁵		4.51 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Breast cancer	3 ³⁵		17.7 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Cervical cancer	4.8 ³³		9.21 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Uterine cancer	4.6 ³³		11.6 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Prostate cancer	4 ³⁵		30.35 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Colorectal cancer	4 ³⁵		9.69 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Oral cancer	5.3 ³³		9.33 ³⁴	SEER Stage IVc	
Nasopharyngeal cancer	5.3 ³³		13.19 ³⁴	SEER Stage IVc	
Cancer of other part of pharynx	5.3 ³³		7.91 ³⁴	SEER Stage IVc	
Gallbladder cancer	4		3.47 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Pancreas cancer	4.1 ³³	2.54 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000		

	Diagnosis/ Treatment (months)	Remission	Disseminated/metastatic (months)	Note	Terminal (months)
Melanoma	2.9 ³⁶		7.18 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
NMSC (squamous cell carcinoma)	2.9 ³⁶		17 ³⁷		
Ovarian cancer	3.2 ³⁵		25.6 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Testicular cancer	3.7 ³³		19.47 ³⁴	SEER Stage III	
Kidney cancer	5.3 ³³		5.38 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Bladder cancer	5.1 ³³		5.8 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Brain cancer	5		6.93 ³⁴	SEER Median age standardized survival all patients, all years	
Thyroid cancer	3		19.39 ³⁴	SEER Stage IVc	
Mesothelioma	4		7.75 ³⁴	SEER Summary Stage 1997 (Distant site/node involved) 1995-2000	
Hodgkin lymphoma	3.7 ³⁵		26 ³⁸		
Non Hodgkin lymphoma	3.7 ³⁵		7.7 ³⁸		
Multiple myeloma	7 ³³		36.82 ³⁴	SEER Median age standardized survival all patients, all years	
Leukemia ³³	5		43.67 ³⁴	SEER Median age standardized survival all patients, all years	
ALL	12		7.02 ³⁴	SEER Median age standardized survival all patients, all years	
AML	6		4.6 ³⁴	SEER Median age standardized survival all patients, all years	
CLL	6		48 ³⁹		
CML	6		4.6 ³⁴	SEER Median age standardized survival for AML (patients with CML die in blast	

	Diagnosis/ Treatment (months)	Remission	Disseminated/metastatic (months)	Note	Terminal (months)
				crisis, which is treated like AML) all patients, all years	
Other	4.4 (mean of other cancer durations)		15.81 ³⁴	SEER Median age standardized survival all patients, all years	

eTable 14: Disability weights

Health state	Lay description	Estimate	Uncertainty interval	
Cancer, diagnosis and primary therapy	Has pain, nausea, fatigue, weight loss and high anxiety.	0.288	0.193	0.399
Cancer, controlled phase	Has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049	0.031	0.072
Cancer, metastatic	Has severe pain, extreme fatigue, weight loss and high anxiety.	0.451	0.307	0.600
Terminal phase, with medication	Has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.540	0.377	0.687
Mastectomy	Had one of the breasts removed and sometimes has pain or swelling in the arms.	0.036	0.020	0.057
Stoma	Has a pouch attached to an opening in the belly to collect and empty stools.	0.095	0.063	0.131
Laryngectomy	Has difficulty speaking, and others find it difficult to understand.	0.051	0.032	0.078
Urinary incontinence	Cannot control urinating.	0.139	0.094	0.198
Impotence	Has difficulty in obtaining or maintaining an erection.	0.017	0.009	0.030

eTable 15: Decomposition of trends in incidence by SDI quintile, both sexes, 2005 to 2015

SDI quintile	Cancer	Incident cases, No.		Expected incident cases, 2015, No.		Change in incidence cases, 2005 to 2015, %			Overall change
		2005	2015	Given population growth alone	Given population growth and aging	Due to population growth	Due to change in age structure	Due to change in incidence rates	
Low	All Cancers	305,384	456,573	404,743	417,291	33%	4%	13%	50%
Low-middle		1,290,583	1,810,511	1,501,511	1,680,747	16%	14%	10%	40%
Middle		2,766,899	3,518,971	3,017,262	3,604,481	9%	21%	-3%	27%
High-Middle		3,080,615	3,928,657	3,419,997	4,069,577	11%	21%	-5%	28%
High		5,665,743	7,727,012	6,121,856	6,916,652	8%	14%	14%	36%
Low	Lip and Oral Cavity Cancer	7,090	10,608	9,396	9,736	33%	5%	12%	50%
Low-middle		79,436	113,256	92,418	104,581	16%	15%	11%	43%
Middle		66,105	97,275	72,086	87,336	9%	23%	15%	47%
High-Middle		60,576	82,955	67,249	80,935	11%	23%	3%	37%
High		87,215	106,268	94,236	105,787	8%	13%	1%	22%
Low	Nasopharynx Cancer	1,983	2,896	2,629	2,717	33%	4%	9%	46%
Low-middle		16,234	20,875	18,888	21,076	16%	13%	-1%	29%
Middle		42,373	50,210	46,207	54,202	9%	19%	-9%	18%
High-Middle		29,809	32,348	33,093	38,410	11%	18%	-20%	9%
High		15,279	16,931	16,509	17,891	8%	9%	-6%	11%
Low	Other Pharynx Cancer	2,723	3,872	3,609	3,707	33%	4%	6%	42%
Low-middle		28,248	35,675	32,865	37,448	16%	16%	-6%	26%
Middle		24,878	32,758	27,129	33,342	9%	25%	-2%	32%

SDI quintile	Cancer	Incident cases, No.		Expected incident cases, 2015, No.		Change in incidence cases, 2005 to 2015, %			Overall change
		2005	2015	Given population growth alone	Given population growth and aging	Due to population growth	Due to change in age structure	Due to change in incidence rates	
High-Middle		22,518	29,603	24,999	30,498	11%	24%	-4%	31%
High		45,784	59,401	49,470	55,613	8%	13%	8%	30%
Low		11,940	16,140	15,824	16,305	33%	4%	-1%	35%
Low-middle	Esophageal Cancer	40,808	55,356	47,477	53,999	16%	16%	3%	36%
Middle		179,487	162,499	195,728	243,055	9%	26%	-45%	-9%
High-Middle		138,921	134,033	154,225	188,030	11%	24%	-39%	-4%
High		89,436	115,328	96,636	110,814	8%	16%	5%	29%
Low		26,965	37,716	35,739	36,938	33%	4%	3%	40%
Low-middle	Stomach Cancer	106,375	127,806	123,761	141,539	16%	17%	-13%	20%
Middle		375,119	379,808	409,061	503,983	9%	25%	-33%	1%
High-Middle		343,697	349,486	381,561	462,113	11%	23%	-33%	2%
High		343,258	417,886	370,891	423,580	8%	15%	-2%	22%
Low		10,740	16,866	14,234	14,779	33%	5%	19%	57%
Low-middle	Colon and Rectum Cancer	59,201	92,841	68,876	78,090	16%	16%	25%	57%
Middle		153,700	231,042	167,608	202,979	9%	23%	18%	50%
High-Middle		244,998	341,488	271,988	329,179	11%	23%	5%	39%
High		738,093	964,949	797,513	915,152	8%	16%	7%	31%
Low		24,331	33,337	32,247	33,384	33%	5%	0%	37%
Low-middle	Liver Cancer	58,859	71,159	68,479	77,430	16%	15%	-11%	21%

SDI quintile	Cancer	Incident cases, No.		Expected incident cases, 2015, No.		Change in incidence cases, 2005 to 2015, %			Overall change
		2005	2015	Given population growth alone	Given population growth and aging	Due to population growth	Due to change in age structure	Due to change in incidence rates	
Middle		258,238	282,749	281,604	338,784	9%	22%	-22%	9%
High-Middle		212,973	235,309	236,435	282,470	11%	22%	-22%	10%
High		155,141	232,762	167,630	190,210	8%	15%	27%	50%
Low	Gallbladder and Biliary Tract Cancer	2,781	3,645	3,685	3,803	33%	4%	-6%	31%
Low-middle		15,044	18,166	17,503	20,011	16%	17%	-12%	21%
Middle		26,617	32,206	29,025	35,922	9%	26%	-14%	21%
High-Middle		41,547	48,547	46,124	56,511	11%	25%	-19%	17%
High		72,059	84,892	77,860	90,751	8%	18%	-8%	18%
Low	Pancreatic Cancer	5,359	8,202	7,102	7,340	33%	4%	16%	53%
Low-middle		23,997	34,134	27,919	32,017	16%	17%	9%	42%
Middle		44,569	63,350	48,602	60,139	9%	26%	7%	42%
High-Middle		69,975	94,926	77,684	94,822	11%	24%	0%	36%
High		165,605	223,398	178,937	206,575	8%	17%	10%	35%
Low	Larynx Cancer	4,622	6,405	6,126	6,330	33%	4%	2%	39%
Low-middle		34,391	46,236	40,011	45,396	16%	16%	2%	34%
Middle		42,934	58,816	46,819	57,152	9%	24%	4%	37%
High-Middle		52,366	63,715	58,135	70,483	11%	24%	-13%	22%
High		58,397	62,324	63,098	71,293	8%	14%	-15%	7%
Low		9,056	13,923	12,002	12,385	33%	4%	17%	54%

SDI quintile	Cancer	Incident cases, No.		Expected incident cases, 2015, No.		Change in incidence cases, 2005 to 2015, %			Overall change
		2005	2015	Given population growth alone	Given population growth and aging	Due to population growth	Due to change in age structure	Due to change in incidence rates	
Low-middle	Tracheal, Bronchus, and Lung Cancer	90,572	137,110	105,375	119,952	16%	16%	19%	51%
Middle		321,549	443,338	350,644	430,659	9%	25%	4%	38%
High-Middle		418,355	523,405	464,444	562,479	11%	23%	-9%	25%
High		721,798	894,955	779,905	890,680	8%	15%	1%	24%
Low	Malignant Skin Melanoma	2,489	4,666	3,299	3,413	33%	5%	50%	87%
Low-middle		9,143	15,502	10,637	11,859	16%	13%	40%	70%
Middle		17,793	29,649	19,403	22,367	9%	17%	41%	67%
High-Middle		35,769	55,679	39,710	46,303	11%	18%	26%	56%
High		159,183	244,993	171,997	188,701	8%	10%	35%	54%
Low	Breast Cancer	51,722	87,035	68,550	70,914	33%	5%	31%	68%
Low-middle		232,290	356,400	270,255	303,719	16%	14%	23%	53%
Middle		337,748	479,337	368,309	436,276	9%	20%	13%	42%
High-Middle		357,197	502,535	396,549	470,436	11%	21%	9%	41%
High		711,777	992,055	769,077	850,492	8%	11%	20%	39%
Low	Cervical Cancer	47,232	56,849	62,600	64,871	33%	5%	-17%	20%
Low-middle		116,491	117,408	135,530	151,758	16%	14%	-29%	1%
Middle		158,953	150,404	173,336	200,475	9%	17%	-31%	-5%
High-Middle		128,635	122,358	142,806	163,268	11%	16%	-32%	-5%
High		81,025	79,109	87,548	92,761	8%	6%	-17%	-2%

SDI quintile	Cancer	Incident cases, No.		Expected incident cases, 2015, No.		Change in incidence cases, 2005 to 2015, %			Overall change
		2005	2015	Given population growth alone	Given population growth and aging	Due to population growth	Due to change in age structure	Due to change in incidence rates	
Low	Uterine Cancer	3,843	5,176	5,093	5,231	33%	4%	-1%	35%
Low-middle		23,577	33,255	27,431	30,904	16%	15%	10%	41%
Middle		63,812	88,169	69,587	81,396	9%	19%	11%	38%
High-Middle		74,822	99,496	83,065	99,129	11%	21%	0%	33%
High		164,416	227,229	177,652	200,374	8%	14%	16%	38%
Low	Ovarian Cancer	4,012	6,393	5,317	5,495	33%	4%	22%	59%
Low-middle		19,449	28,554	22,628	25,148	16%	13%	18%	47%
Middle		34,560	47,015	37,687	43,831	9%	18%	9%	36%
High-Middle		45,252	57,413	50,237	58,770	11%	19%	-3%	27%
High		96,366	111,283	104,124	115,815	8%	12%	-5%	15%
Low	Prostate Cancer	10,761	19,046	14,262	14,796	33%	5%	39%	77%
Low-middle		38,452	70,327	44,737	51,957	16%	19%	48%	83%
Middle		76,357	138,751	83,267	105,325	9%	29%	44%	82%
High-Middle		166,217	280,936	184,528	227,326	11%	26%	32%	69%
High		677,441	1,100,626	731,978	842,582	8%	16%	38%	62%
Low	Testicular Cancer	423	748	560	586	33%	6%	38%	77%
Low-middle		3,499	6,620	4,071	4,348	16%	8%	65%	89%
Middle		5,614	8,347	6,123	6,369	9%	4%	35%	49%
High-Middle		11,370	16,201	12,622	12,985	11%	3%	28%	42%

SDI quintile	Cancer	Incident cases, No.		Expected incident cases, 2015, No.		Change in incidence cases, 2005 to 2015, %			Overall change
		2005	2015	Given population growth alone	Given population growth and aging	Due to population growth	Due to change in age structure	Due to change in incidence rates	
High		30,508	40,115	32,964	32,290	8%	-2%	26%	31%
Low	Kidney Cancer	2,242	3,648	2,971	2,973	33%	0%	30%	63%
Low-middle		10,771	18,386	12,531	13,413	16%	8%	46%	71%
Middle		22,986	39,228	25,066	29,224	9%	18%	44%	71%
High-Middle		49,676	80,131	55,149	65,544	11%	21%	29%	61%
High		191,477	281,517	206,892	233,105	8%	14%	25%	47%
Low	Bladder Cancer	6,067	9,349	8,041	8,316	33%	5%	17%	54%
Low-middle		32,445	47,793	37,747	42,966	16%	16%	15%	47%
Middle		64,517	92,335	70,355	86,094	9%	24%	10%	43%
High-Middle		95,179	125,839	105,664	128,409	11%	24%	-3%	32%
High		213,051	263,596	230,202	265,223	8%	16%	-1%	24%
Low	Brain and Nervous System Cancer	5,136	7,900	6,807	6,885	33%	2%	20%	54%
Low-middle		27,635	38,196	32,151	34,185	16%	7%	15%	38%
Middle		66,382	79,857	72,388	79,966	9%	11%	0%	20%
High-Middle		71,743	86,326	79,647	88,480	11%	12%	-3%	20%
High		85,585	107,801	92,475	99,487	8%	8%	10%	26%
Low	Thyroid Cancer	3,409	5,908	4,518	4,644	33%	4%	37%	73%
Low-middle		15,179	24,893	17,660	19,934	16%	15%	33%	64%
Middle		32,378	54,039	35,308	42,642	9%	23%	35%	67%

SDI quintile	Cancer	Incident cases, No.		Expected incident cases, 2015, No.		Change in incidence cases, 2005 to 2015, %			Overall change
		2005	2015	Given population growth alone	Given population growth and aging	Due to population growth	Due to change in age structure	Due to change in incidence rates	
High-Middle		34,896	58,867	38,740	46,198	11%	21%	36%	69%
High		81,912	190,200	88,506	96,103	8%	9%	115%	132%
Low		378	468	501	518	33%	4%	-13%	24%
Low-middle	Mesothelioma	1,530	1,788	1,780	2,011	16%	15%	-15%	17%
Middle		3,165	4,739	3,452	4,117	9%	21%	20%	50%
High-Middle		5,131	7,442	5,696	6,803	11%	22%	12%	45%
High		16,062	22,337	17,355	19,972	8%	16%	15%	39%
Low	Hodgkin Lymphoma	1,384	1,996	1,835	1,882	33%	3%	8%	44%
Low-middle		11,569	13,729	13,460	14,191	16%	6%	-4%	19%
Middle		14,522	16,406	15,836	16,950	9%	8%	-4%	13%
High-Middle		17,032	19,275	18,908	20,283	11%	8%	-6%	13%
High		24,077	26,057	26,015	26,990	8%	4%	-4%	8%
Low	Non-Hodgkin Lymphoma	13,664	23,164	18,109	18,396	33%	2%	35%	70%
Low-middle		52,914	84,742	61,563	65,513	16%	7%	36%	60%
Middle		72,789	121,061	79,376	90,026	9%	15%	43%	66%
High-Middle		82,858	129,844	91,986	105,198	11%	16%	30%	57%
High		206,895	305,998	223,551	250,232	8%	13%	27%	48%
Low	Multiple Myeloma	2,008	3,182	2,661	2,743	33%	4%	22%	58%
Low-middle		8,869	13,535	10,318	11,662	16%	15%	21%	53%

SDI quintile	Cancer	Incident cases, No.		Expected incident cases, 2015, No.		Change in incidence cases, 2005 to 2015, %			Overall change
		2005	2015	Given population growth alone	Given population growth and aging	Due to population growth	Due to change in age structure	Due to change in incidence rates	
Middle		12,666	19,411	13,812	16,615	9%	22%	22%	53%
High-Middle		19,333	27,340	21,462	25,845	11%	23%	8%	41%
High		64,689	89,600	69,897	79,919	8%	15%	15%	39%
Low	Leukemia	13,873	22,608	18,387	18,600	33%	2%	29%	63%
Low-middle		68,600	93,597	79,812	84,673	16%	7%	13%	36%
Middle		122,805	146,811	133,917	143,789	9%	8%	2%	20%
High-Middle		121,468	145,045	134,850	148,531	11%	11%	-3%	19%
High		153,332	196,791	165,676	186,526	8%	14%	7%	28%
Low	Acute Lymphoid Leukemia	5,894	9,501	7,811	7,785	33%	0%	29%	61%
Low-middle		26,144	34,194	30,417	31,004	16%	2%	12%	31%
Middle		44,891	52,238	48,953	50,759	9%	4%	3%	16%
High-Middle		38,365	45,309	42,592	44,758	11%	6%	1%	18%
High		15,454	19,449	16,698	17,046	8%	2%	16%	26%
Low	Chronic Lymphoid Leukemia	1,691	2,699	2,241	2,325	33%	5%	22%	60%
Low-middle		12,800	17,764	14,892	16,451	16%	12%	10%	39%
Middle		34,674	42,559	37,812	41,319	9%	10%	4%	23%
High-Middle		35,727	43,669	39,663	44,874	11%	15%	-3%	22%
High		66,772	83,824	72,148	83,064	8%	16%	1%	26%
Low		4,820	8,307	6,389	6,471	33%	2%	38%	72%

SDI quintile	Cancer	Incident cases, No.		Expected incident cases, 2015, No.		Change in incidence cases, 2005 to 2015, %			Overall change
		2005	2015	Given population growth alone	Given population growth and aging	Due to population growth	Due to change in age structure	Due to change in incidence rates	
Low-middle	Acute Myeloid Leukemia	21,211	30,671	24,678	26,273	16%	8%	21%	45%
Middle		32,306	39,352	35,229	38,097	9%	9%	4%	22%
High-Middle		32,931	40,508	36,559	40,323	11%	11%	1%	23%
High		50,188	70,953	54,228	60,964	8%	13%	20%	41%
Low	Chronic Myeloid Leukemia	1,467	2,100	1,945	2,019	33%	5%	5%	43%
Low-middle		8,444	10,969	9,824	10,946	16%	13%	0%	30%
Middle		10,933	12,663	11,922	13,614	9%	15%	-9%	16%
High-Middle		14,445	15,559	16,036	18,576	11%	18%	-21%	8%
High		20,918	22,565	22,602	25,451	8%	14%	-14%	8%
Low	Other Neoplasms	29,153	44,829	38,638	39,603	33%	3%	18%	54%
Low-middle		65,003	93,171	75,627	80,966	16%	8%	19%	43%
Middle		124,283	169,359	135,528	151,465	9%	13%	14%	36%
High-Middle		128,303	178,116	142,437	160,142	11%	14%	14%	39%
High		215,880	268,611	233,260	257,734	8%	11%	5%	24%

eTable 16: Probability of developing cancer within selected age intervals, global, and by SDI quintile, by sex, 2010-2015 in % (odds)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Global	Lip and Oral Cavity Cancer	0.11 (1 in 882)	0.07 (1 in 1491)	0.19 (1 in 538)	0.08 (1 in 1196)	0.30 (1 in 338)	0.14 (1 in 730)	0.35 (1 in 288)	0.17 (1 in 580)	0.94 (1 in 106)	0.46 (1 in 218)
Global	Nasopharynx Cancer	0.06 (1 in 1613)	0.03 (1 in 3995)	0.06 (1 in 1605)	0.02 (1 in 4016)	0.08 (1 in 1207)	0.02 (1 in 4041)	0.08 (1 in 1327)	0.03 (1 in 3848)	0.28 (1 in 354)	0.10 (1 in 994)
Global	Other Pharynx Cancer	0.04 (1 in 2779)	0.01 (1 in 6714)	0.10 (1 in 1000)	0.03 (1 in 3493)	0.16 (1 in 638)	0.05 (1 in 2036)	0.15 (1 in 652)	0.05 (1 in 1959)	0.45 (1 in 224)	0.14 (1 in 696)
Global	Esophageal Cancer	0.07 (1 in 1471)	0.02 (1 in 4100)	0.20 (1 in 507)	0.05 (1 in 1836)	0.48 (1 in 207)	0.15 (1 in 686)	0.71 (1 in 140)	0.24 (1 in 425)	1.46 (1 in 69)	0.46 (1 in 218)
Global	Stomach Cancer	0.17 (1 in 605)	0.11 (1 in 943)	0.42 (1 in 239)	0.18 (1 in 571)	1.15 (1 in 87)	0.44 (1 in 229)	1.95 (1 in 51)	0.76 (1 in 131)	3.64 (1 in 27)	1.47 (1 in 68)
Global	Colon and Rectum Cancer	0.22 (1 in 448)	0.16 (1 in 609)	0.44 (1 in 229)	0.31 (1 in 319)	1.06 (1 in 94)	0.64 (1 in 157)	1.93 (1 in 52)	1.23 (1 in 82)	3.61 (1 in 28)	2.32 (1 in 43)
Global	Liver Cancer	0.25 (1 in 399)	0.06 (1 in 1539)	0.36 (1 in 280)	0.11 (1 in 916)	0.67 (1 in 150)	0.25 (1 in 399)	0.97 (1 in 103)	0.46 (1 in 216)	2.23 (1 in 45)	0.89 (1 in 113)
Global	Gallbladder and Biliary Tract Cancer	0.01 (1 in 8028)	0.02 (1 in 6393)	0.03 (1 in 3131)	0.04 (1 in 2616)	0.09 (1 in 1092)	0.10 (1 in 1004)	0.20 (1 in 501)	0.19 (1 in 514)	0.34 (1 in 298)	0.35 (1 in 288)
Global	Pancreatic Cancer	0.04 (1 in 2458)	0.03 (1 in 3835)	0.11 (1 in 919)	0.07 (1 in 1375)	0.27 (1 in 367)	0.20 (1 in 502)	0.49 (1 in 206)	0.40 (1 in 249)	0.90 (1 in 111)	0.70 (1 in 143)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Global	Larynx Cancer	0.06 (1 in 1756)	0.02 (1 in 4039)	0.14 (1 in 722)	0.03 (1 in 3197)	0.25 (1 in 400)	0.04 (1 in 2227)	0.29 (1 in 343)	0.05 (1 in 1969)	0.73 (1 in 136)	0.15 (1 in 660)
Global	Tracheal, Bronchus, and Lung Cancer	0.23 (1 in 431)	0.13 (1 in 758)	0.70 (1 in 143)	0.29 (1 in 344)	1.82 (1 in 55)	0.70 (1 in 144)	3.04 (1 in 33)	1.12 (1 in 89)	5.69 (1 in 18)	2.22 (1 in 45)
Global	Malignant Skin Melanoma	0.09 (1 in 1088)	0.08 (1 in 1210)	0.11 (1 in 909)	0.09 (1 in 1129)	0.18 (1 in 546)	0.14 (1 in 715)	0.28 (1 in 351)	0.19 (1 in 531)	0.67 (1 in 150)	0.50 (1 in 201)
Global	Breast Cancer	0.02 (1 in 6489)	1.38 (1 in 72)	0.03 (1 in 3423)	1.70 (1 in 59)	0.06 (1 in 1651)	2.10 (1 in 48)	0.06 (1 in 1650)	2.13 (1 in 47)	0.17 (1 in 603)	7.11 (1 in 14)
Global	Cervical Cancer		0.48 (1 in 208)		0.32 (1 in 310)		0.34 (1 in 292)		0.32 (1 in 309)		1.46 (1 in 68)
Global	Uterine Cancer		0.19 (1 in 532)		0.33 (1 in 299)		0.48 (1 in 208)		0.49 (1 in 204)		1.49 (1 in 67)
Global	Ovarian Cancer		0.15 (1 in 662)		0.16 (1 in 636)		0.21 (1 in 473)		0.25 (1 in 393)		0.77 (1 in 130)
Global	Prostate Cancer	0.06 (1 in 1774)		0.56 (1 in 179)		2.37 (1 in 42)		4.31 (1 in 23)		7.15 (1 in 14)	
Global	Testicular Cancer	0.11 (1 in 948)		0.02 (1 in 5503)		0.01 (1 in 6873)		0.02 (1 in 5742)		0.16 (1 in 643)	
Global	Kidney Cancer	0.09 (1 in 1175)	0.04 (1 in 2301)	0.17 (1 in 599)	0.07 (1 in 1341)	0.31 (1 in 327)	0.15 (1 in 664)	0.47 (1 in 212)	0.26 (1 in 385)	1.03 (1 in 98)	0.53 (1 in 190)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Global	Bladder Cancer	0.07 (1 in 1362)	0.03 (1 in 3653)	0.18 (1 in 563)	0.05 (1 in 1880)	0.50 (1 in 200)	0.12 (1 in 866)	0.94 (1 in 106)	0.22 (1 in 450)	1.68 (1 in 59)	0.42 (1 in 239)
Global	Brain and Nervous System Cancer	0.14 (1 in 721)	0.11 (1 in 914)	0.09 (1 in 1166)	0.07 (1 in 1483)	0.14 (1 in 708)	0.11 (1 in 924)	0.18 (1 in 550)	0.14 (1 in 705)	0.55 (1 in 183)	0.43 (1 in 235)
Global	Thyroid Cancer	0.05 (1 in 1847)	0.06 (1 in 1797)	0.12 (1 in 815)	0.12 (1 in 812)	0.14 (1 in 692)	0.27 (1 in 376)	0.21 (1 in 472)	0.24 (1 in 414)	0.53 (1 in 188)	0.68 (1 in 146)
Global	Mesothelioma	0.01 (1 in 19228)	0.00 (1 in 36866)	0.01 (1 in 8915)	0.00 (1 in 27007)	0.03 (1 in 3572)	0.01 (1 in 10636)	0.07 (1 in 1483)	0.02 (1 in 5991)	0.11 (1 in 894)	0.03 (1 in 3077)
Global	Hodgkin Lymphoma	0.05 (1 in 2096)	0.03 (1 in 3418)	0.02 (1 in 4359)	0.01 (1 in 9645)	0.03 (1 in 3177)	0.01 (1 in 6837)	0.04 (1 in 2583)	0.02 (1 in 4849)	0.14 (1 in 710)	0.07 (1 in 1336)
Global	Non-Hodgkin Lymphoma	0.23 (1 in 434)	0.14 (1 in 695)	0.19 (1 in 535)	0.14 (1 in 733)	0.35 (1 in 285)	0.26 (1 in 378)	0.53 (1 in 190)	0.37 (1 in 272)	1.29 (1 in 78)	0.91 (1 in 110)
Global	Multiple Myeloma	0.02 (1 in 4253)	0.02 (1 in 6024)	0.04 (1 in 2313)	0.04 (1 in 2850)	0.09 (1 in 1093)	0.08 (1 in 1332)	0.16 (1 in 607)	0.12 (1 in 840)	0.32 (1 in 310)	0.25 (1 in 407)
Global	Leukemia	0.24 (1 in 410)	0.18 (1 in 555)	0.14 (1 in 722)	0.10 (1 in 1029)	0.28 (1 in 357)	0.17 (1 in 584)	0.49 (1 in 204)	0.28 (1 in 355)	1.15 (1 in 87)	0.73 (1 in 137)
Global	Acute Lymphoid Leukemia	0.10 (1 in 1024)	0.07 (1 in 1468)	0.03 (1 in 3385)	0.02 (1 in 4905)	0.06 (1 in 1802)	0.03 (1 in 3099)	0.07 (1 in 1370)	0.05 (1 in 2118)	0.26 (1 in 391)	0.17 (1 in 596)
Global	Chronic Lymphoid Leukemia	0.05 (1 in 2072)	0.05 (1 in 2106)	0.05 (1 in 2214)	0.04 (1 in 2800)	0.10 (1 in 954)	0.07 (1 in 1491)	0.18 (1 in 547)	0.11 (1 in 932)	0.38 (1 in 263)	0.26 (1 in 389)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Global	Acute Myeloid Leukemia	0.07 (1 in 1361)	0.05 (1 in 1954)	0.05 (1 in 2164)	0.03 (1 in 3360)	0.09 (1 in 1069)	0.05 (1 in 1870)	0.17 (1 in 579)	0.10 (1 in 1023)	0.39 (1 in 260)	0.23 (1 in 431)
Global	Chronic Myeloid Leukemia	0.02 (1 in 4014)	0.01 (1 in 7431)	0.02 (1 in 5691)	0.01 (1 in 8801)	0.03 (1 in 3765)	0.02 (1 in 5358)	0.06 (1 in 1627)	0.03 (1 in 3336)	0.13 (1 in 767)	0.07 (1 in 1362)
Global	Other Neoplasms	0.25 (1 in 399)	0.25 (1 in 402)	0.16 (1 in 623)	0.15 (1 in 680)	0.32 (1 in 313)	0.25 (1 in 394)	0.55 (1 in 183)	0.41 (1 in 244)	1.27 (1 in 79)	1.05 (1 in 95)
Global	All Cancers	2.65 (1 in 38)	3.75 (1 in 27)	4.48 (1 in 22)	4.49 (1 in 22)	10.61 (1 in 9)	7.18 (1 in 14)	17.03 (1 in 6)	9.71 (1 in 10)	31.03 (1 in 3)	22.96 (1 in 4)
High SDI	Lip and Oral Cavity Cancer	0.10 (1 in 1035)	0.05 (1 in 1885)	0.22 (1 in 448)	0.07 (1 in 1440)	0.30 (1 in 330)	0.11 (1 in 945)	0.33 (1 in 304)	0.15 (1 in 687)	0.95 (1 in 105)	0.37 (1 in 268)
High SDI	Nasopharynx Cancer	0.03 (1 in 2900)	0.01 (1 in 8931)	0.04 (1 in 2427)	0.01 (1 in 8205)	0.05 (1 in 2205)	0.01 (1 in 10767)	0.05 (1 in 1985)	0.01 (1 in 11410)	0.17 (1 in 584)	0.04 (1 in 2414)
High SDI	Other Pharynx Cancer	0.05 (1 in 1880)	0.01 (1 in 8151)	0.17 (1 in 588)	0.03 (1 in 3239)	0.24 (1 in 410)	0.05 (1 in 2137)	0.21 (1 in 483)	0.04 (1 in 2303)	0.67 (1 in 149)	0.13 (1 in 750)
High SDI	Esophageal Cancer	0.05 (1 in 1975)	0.01 (1 in 10695)	0.19 (1 in 517)	0.03 (1 in 3327)	0.45 (1 in 224)	0.07 (1 in 1407)	0.63 (1 in 159)	0.12 (1 in 819)	1.31 (1 in 76)	0.23 (1 in 430)
High SDI	Stomach Cancer	0.17 (1 in 593)	0.12 (1 in 811)	0.43 (1 in 232)	0.17 (1 in 575)	1.13 (1 in 88)	0.39 (1 in 253)	2.15 (1 in 46)	0.77 (1 in 129)	3.84 (1 in 26)	1.46 (1 in 68)
High SDI	Colon and Rectum Cancer	0.37 (1 in 270)	0.33 (1 in 305)	0.93 (1 in 107)	0.64 (1 in 156)	2.27 (1 in 44)	1.30 (1 in 77)	3.79 (1 in 26)	2.17 (1 in 46)	7.19 (1 in 14)	4.38 (1 in 23)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
High SDI	Liver Cancer	0.15 (1 in 683)	0.04 (1 in 2303)	0.36 (1 in 276)	0.09 (1 in 1090)	0.68 (1 in 146)	0.21 (1 in 483)	1.06 (1 in 95)	0.44 (1 in 225)	2.23 (1 in 45)	0.78 (1 in 127)
High SDI	Gallbladder and Biliary Tract Cancer	0.02 (1 in 6539)	0.01 (1 in 7507)	0.05 (1 in 2204)	0.04 (1 in 2562)	0.15 (1 in 677)	0.11 (1 in 889)	0.33 (1 in 304)	0.24 (1 in 414)	0.54 (1 in 186)	0.41 (1 in 246)
High SDI	Pancreatic Cancer	0.07 (1 in 1465)	0.04 (1 in 2314)	0.20 (1 in 493)	0.13 (1 in 794)	0.49 (1 in 205)	0.34 (1 in 298)	0.81 (1 in 123)	0.63 (1 in 158)	1.56 (1 in 64)	1.14 (1 in 88)
High SDI	Larynx Cancer	0.05 (1 in 2194)	0.01 (1 in 10089)	0.15 (1 in 689)	0.02 (1 in 4058)	0.26 (1 in 380)	0.04 (1 in 2806)	0.31 (1 in 327)	0.03 (1 in 3166)	0.76 (1 in 132)	0.10 (1 in 983)
High SDI	Tracheal, Bronchus, and Lung Cancer	0.23 (1 in 438)	0.18 (1 in 544)	0.99 (1 in 102)	0.52 (1 in 191)	2.62 (1 in 38)	1.26 (1 in 80)	4.36 (1 in 23)	1.75 (1 in 57)	7.99 (1 in 13)	3.67 (1 in 27)
High SDI	Malignant Skin Melanoma	0.29 (1 in 342)	0.28 (1 in 363)	0.31 (1 in 322)	0.24 (1 in 416)	0.52 (1 in 192)	0.34 (1 in 291)	0.69 (1 in 144)	0.37 (1 in 272)	1.80 (1 in 55)	1.22 (1 in 82)
High SDI	Breast Cancer	0.02 (1 in 6104)	2.26 (1 in 44)	0.02 (1 in 4230)	2.50 (1 in 40)	0.05 (1 in 1952)	3.35 (1 in 30)	0.07 (1 in 1448)	3.11 (1 in 32)	0.16 (1 in 624)	10.76 (1 in 9)
High SDI	Cervical Cancer		0.35 (1 in 288)		0.18 (1 in 564)		0.17 (1 in 577)		0.17 (1 in 580)		0.87 (1 in 115)
High SDI	Uterine Cancer		0.22 (1 in 454)		0.63 (1 in 158)		0.98 (1 in 102)		0.91 (1 in 110)		2.72 (1 in 37)
High SDI	Ovarian Cancer		0.24 (1 in 423)		0.27 (1 in 375)		0.36 (1 in 275)		0.41 (1 in 245)		1.27 (1 in 79)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
High SDI	Prostate Cancer	0.15 (1 in 663)		1.60 (1 in 62)		5.92 (1 in 17)		8.59 (1 in 12)		15.50 (1 in 6)	
High SDI	Testicular Cancer	0.35 (1 in 282)		0.05 (1 in 2049)		0.03 (1 in 3870)		0.02 (1 in 4793)		0.45 (1 in 222)	
High SDI	Kidney Cancer	0.19 (1 in 513)	0.10 (1 in 1046)	0.44 (1 in 230)	0.19 (1 in 517)	0.78 (1 in 128)	0.37 (1 in 271)	1.05 (1 in 95)	0.57 (1 in 176)	2.45 (1 in 41)	1.22 (1 in 82)
High SDI	Bladder Cancer	0.08 (1 in 1278)	0.03 (1 in 3250)	0.28 (1 in 352)	0.07 (1 in 1443)	0.85 (1 in 118)	0.18 (1 in 565)	1.57 (1 in 64)	0.33 (1 in 301)	2.76 (1 in 36)	0.61 (1 in 165)
High SDI	Brain and Nervous System Cancer	0.22 (1 in 448)	0.17 (1 in 580)	0.13 (1 in 794)	0.09 (1 in 1084)	0.20 (1 in 494)	0.15 (1 in 674)	0.25 (1 in 404)	0.17 (1 in 585)	0.80 (1 in 126)	0.58 (1 in 172)
High SDI	Thyroid Cancer	0.15 (1 in 688)	0.14 (1 in 702)	0.30 (1 in 330)	0.28 (1 in 361)	0.30 (1 in 334)	0.56 (1 in 178)	0.41 (1 in 247)	0.38 (1 in 262)	1.15 (1 in 87)	1.36 (1 in 74)
High SDI	Mesothelioma	0.01 (1 in 18106)	0.00 (1 in 37530)	0.02 (1 in 5410)	0.01 (1 in 19647)	0.07 (1 in 1348)	0.01 (1 in 7976)	0.16 (1 in 608)	0.02 (1 in 4232)	0.26 (1 in 381)	0.04 (1 in 2277)
High SDI	Hodgkin Lymphoma	0.07 (1 in 1346)	0.05 (1 in 1841)	0.03 (1 in 2940)	0.02 (1 in 6277)	0.04 (1 in 2246)	0.02 (1 in 4585)	0.05 (1 in 1965)	0.03 (1 in 3905)	0.20 (1 in 491)	0.12 (1 in 850)
High SDI	Non-Hodgkin Lymphoma	0.31 (1 in 326)	0.20 (1 in 513)	0.33 (1 in 301)	0.26 (1 in 387)	0.66 (1 in 152)	0.48 (1 in 207)	1.01 (1 in 99)	0.66 (1 in 152)	2.29 (1 in 44)	1.58 (1 in 63)
High SDI	Multiple Myeloma	0.04 (1 in 2468)	0.03 (1 in 3846)	0.09 (1 in 1081)	0.07 (1 in 1486)	0.20 (1 in 498)	0.15 (1 in 672)	0.35 (1 in 290)	0.22 (1 in 452)	0.68 (1 in 148)	0.46 (1 in 216)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
High SDI	Leukemia	0.19 (1 in 519)	0.14 (1 in 735)	0.18 (1 in 541)	0.11 (1 in 879)	0.42 (1 in 237)	0.23 (1 in 437)	0.77 (1 in 131)	0.39 (1 in 258)	1.56 (1 in 64)	0.86 (1 in 116)
High SDI	Acute Lymphoid Leukemia	0.07 (1 in 1475)	0.05 (1 in 1830)	0.01 (1 in 7350)	0.01 (1 in 7954)	0.02 (1 in 4511)	0.02 (1 in 6320)	0.03 (1 in 3071)	0.03 (1 in 3974)	0.14 (1 in 735)	0.11 (1 in 924)
High SDI	Chronic Lymphoid Leukemia	0.03 (1 in 2882)	0.02 (1 in 4684)	0.09 (1 in 1143)	0.04 (1 in 2286)	0.22 (1 in 464)	0.10 (1 in 988)	0.36 (1 in 276)	0.17 (1 in 588)	0.70 (1 in 143)	0.34 (1 in 297)
High SDI	Acute Myeloid Leukemia	0.07 (1 in 1536)	0.05 (1 in 2079)	0.06 (1 in 1553)	0.05 (1 in 2212)	0.15 (1 in 660)	0.09 (1 in 1107)	0.28 (1 in 353)	0.15 (1 in 654)	0.56 (1 in 177)	0.34 (1 in 297)
High SDI	Chronic Myeloid Leukemia	0.03 (1 in 3970)	0.01 (1 in 8374)	0.02 (1 in 5102)	0.01 (1 in 8138)	0.03 (1 in 3018)	0.02 (1 in 4636)	0.09 (1 in 1120)	0.04 (1 in 2537)	0.17 (1 in 598)	0.09 (1 in 1174)
High SDI	Other Neoplasms	0.32 (1 in 311)	0.33 (1 in 300)	0.21 (1 in 465)	0.22 (1 in 452)	0.41 (1 in 241)	0.37 (1 in 274)	0.75 (1 in 133)	0.60 (1 in 167)	1.70 (1 in 59)	1.51 (1 in 66)
High SDI	All Cancers	3.61 (1 in 28)	5.24 (1 in 19)	7.48 (1 in 13)	6.69 (1 in 15)	17.61 (1 in 6)	11.03 (1 in 9)	26.21 (1 in 4)	13.78 (1 in 7)	45.78 (1 in 2)	32.18 (1 in 3)
High-middle SDI	Lip and Oral Cavity Cancer	0.08 (1 in 1250)	0.04 (1 in 2488)	0.15 (1 in 668)	0.06 (1 in 1782)	0.26 (1 in 382)	0.09 (1 in 1098)	0.33 (1 in 305)	0.14 (1 in 718)	0.82 (1 in 122)	0.33 (1 in 306)
High-middle SDI	Nasopharynx Cancer	0.06 (1 in 1549)	0.02 (1 in 4742)	0.07 (1 in 1524)	0.02 (1 in 4686)	0.09 (1 in 1119)	0.02 (1 in 4454)	0.08 (1 in 1210)	0.03 (1 in 3896)	0.30 (1 in 331)	0.09 (1 in 1105)
High-middle SDI	Other Pharynx Cancer	0.03 (1 in 3397)	0.01 (1 in 11863)	0.08 (1 in 1287)	0.02 (1 in 6055)	0.11 (1 in 897)	0.03 (1 in 3427)	0.11 (1 in 911)	0.03 (1 in 3163)	0.33 (1 in 305)	0.09 (1 in 1167)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
High-middle SDI	Esophageal Cancer	0.07 (1 in 1509)	0.02 (1 in 5534)	0.22 (1 in 465)	0.05 (1 in 1983)	0.53 (1 in 190)	0.15 (1 in 662)	0.80 (1 in 125)	0.27 (1 in 377)	1.60 (1 in 62)	0.48 (1 in 206)
High-middle SDI	Stomach Cancer	0.17 (1 in 595)	0.10 (1 in 1031)	0.46 (1 in 215)	0.17 (1 in 576)	1.28 (1 in 78)	0.44 (1 in 227)	2.05 (1 in 49)	0.78 (1 in 129)	3.91 (1 in 26)	1.48 (1 in 68)
High-middle SDI	Colon and Rectum Cancer	0.21 (1 in 472)	0.15 (1 in 669)	0.38 (1 in 266)	0.26 (1 in 383)	0.87 (1 in 115)	0.50 (1 in 201)	1.55 (1 in 64)	0.96 (1 in 104)	2.98 (1 in 34)	1.86 (1 in 54)
High-middle SDI	Liver Cancer	0.27 (1 in 376)	0.06 (1 in 1726)	0.40 (1 in 251)	0.11 (1 in 925)	0.73 (1 in 138)	0.25 (1 in 393)	1.02 (1 in 98)	0.47 (1 in 211)	2.40 (1 in 42)	0.89 (1 in 112)
High-middle SDI	Gallbladder and Biliary Tract Cancer	0.01 (1 in 7658)	0.02 (1 in 6585)	0.03 (1 in 2860)	0.04 (1 in 2402)	0.10 (1 in 1028)	0.11 (1 in 907)	0.19 (1 in 525)	0.21 (1 in 467)	0.34 (1 in 298)	0.38 (1 in 263)
High-middle SDI	Pancreatic Cancer	0.04 (1 in 2430)	0.03 (1 in 3945)	0.10 (1 in 988)	0.07 (1 in 1518)	0.25 (1 in 398)	0.18 (1 in 565)	0.43 (1 in 235)	0.34 (1 in 291)	0.82 (1 in 122)	0.61 (1 in 164)
High-middle SDI	Larynx Cancer	0.06 (1 in 1710)	0.02 (1 in 5013)	0.15 (1 in 645)	0.03 (1 in 3434)	0.27 (1 in 370)	0.04 (1 in 2455)	0.31 (1 in 325)	0.04 (1 in 2296)	0.79 (1 in 127)	0.13 (1 in 750)
High-middle SDI	Tracheal, Bronchus, and Lung Cancer	0.28 (1 in 363)	0.15 (1 in 670)	0.80 (1 in 125)	0.28 (1 in 352)	1.97 (1 in 51)	0.61 (1 in 163)	3.07 (1 in 33)	0.97 (1 in 103)	6.00 (1 in 17)	2.00 (1 in 50)
High-middle SDI	Malignant Skin Melanoma	0.07 (1 in 1483)	0.06 (1 in 1659)	0.07 (1 in 1509)	0.06 (1 in 1803)	0.09 (1 in 1139)	0.08 (1 in 1246)	0.15 (1 in 675)	0.13 (1 in 794)	0.37 (1 in 271)	0.32 (1 in 311)
High-middle SDI	Breast Cancer	0.01 (1 in 6748)	1.09 (1 in 92)	0.03 (1 in 3206)	1.37 (1 in 73)	0.07 (1 in 1470)	1.61 (1 in 62)	0.06 (1 in 1651)	1.68 (1 in 59)	0.17 (1 in 573)	5.63 (1 in 18)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
High-middle SDI	Cervical Cancer		0.43 (1 in 232)		0.27 (1 in 372)		0.29 (1 in 342)		0.31 (1 in 318)		1.30 (1 in 77)
High-middle SDI	Uterine Cancer		0.19 (1 in 523)		0.29 (1 in 341)		0.36 (1 in 275)		0.36 (1 in 275)		1.21 (1 in 83)
High-middle SDI	Ovarian Cancer		0.15 (1 in 682)		0.14 (1 in 707)		0.18 (1 in 557)		0.21 (1 in 482)		0.67 (1 in 148)
High-middle SDI	Prostate Cancer	0.04 (1 in 2483)		0.31 (1 in 320)		1.52 (1 in 66)		3.30 (1 in 30)		5.11 (1 in 20)	
High-middle SDI	Testicular Cancer	0.09 (1 in 1094)		0.01 (1 in 8381)		0.01 (1 in 7296)		0.02 (1 in 4671)		0.14 (1 in 723)	
High-middle SDI	Kidney Cancer	0.08 (1 in 1220)	0.04 (1 in 2250)	0.13 (1 in 750)	0.05 (1 in 1863)	0.21 (1 in 470)	0.10 (1 in 964)	0.32 (1 in 309)	0.16 (1 in 615)	0.75 (1 in 133)	0.36 (1 in 275)
High-middle SDI	Bladder Cancer	0.07 (1 in 1422)	0.02 (1 in 4272)	0.18 (1 in 558)	0.05 (1 in 2085)	0.48 (1 in 207)	0.10 (1 in 1013)	0.88 (1 in 114)	0.19 (1 in 532)	1.60 (1 in 62)	0.36 (1 in 280)
High-middle SDI	Brain and Nervous System Cancer	0.16 (1 in 640)	0.12 (1 in 815)	0.09 (1 in 1102)	0.07 (1 in 1407)	0.15 (1 in 681)	0.11 (1 in 878)	0.18 (1 in 547)	0.15 (1 in 663)	0.58 (1 in 174)	0.46 (1 in 219)
High-middle SDI	Thyroid Cancer	0.04 (1 in 2298)	0.04 (1 in 2235)	0.08 (1 in 1294)	0.08 (1 in 1277)	0.09 (1 in 1072)	0.15 (1 in 647)	0.13 (1 in 746)	0.18 (1 in 559)	0.35 (1 in 288)	0.46 (1 in 219)
High-middle SDI	Mesothelioma	0.01 (1 in 15368)	0.00 (1 in 30756)	0.01 (1 in 8195)	0.00 (1 in 22121)	0.02 (1 in 5936)	0.01 (1 in 8876)	0.03 (1 in 3063)	0.02 (1 in 5530)	0.07 (1 in 1466)	0.04 (1 in 2694)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
High-middle SDI	Hodgkin Lymphoma	0.05 (1 in 2076)	0.03 (1 in 3544)	0.02 (1 in 4136)	0.01 (1 in 11027)	0.03 (1 in 2995)	0.01 (1 in 8074)	0.04 (1 in 2633)	0.02 (1 in 5321)	0.14 (1 in 696)	0.07 (1 in 1461)
High-middle SDI	Non-Hodgkin Lymphoma	0.20 (1 in 495)	0.12 (1 in 853)	0.16 (1 in 628)	0.11 (1 in 931)	0.27 (1 in 365)	0.21 (1 in 481)	0.36 (1 in 279)	0.26 (1 in 386)	0.99 (1 in 101)	0.69 (1 in 145)
High-middle SDI	Multiple Myeloma	0.02 (1 in 4479)	0.01 (1 in 7136)	0.03 (1 in 2965)	0.03 (1 in 3917)	0.06 (1 in 1618)	0.05 (1 in 1993)	0.10 (1 in 975)	0.08 (1 in 1284)	0.22 (1 in 454)	0.17 (1 in 597)
High-middle SDI	Leukemia	0.27 (1 in 377)	0.19 (1 in 518)	0.13 (1 in 749)	0.09 (1 in 1107)	0.27 (1 in 369)	0.16 (1 in 622)	0.46 (1 in 220)	0.26 (1 in 386)	1.12 (1 in 89)	0.70 (1 in 143)
High-middle SDI	Acute Lymphoid Leukemia	0.11 (1 in 934)	0.08 (1 in 1318)	0.04 (1 in 2844)	0.02 (1 in 4143)	0.08 (1 in 1243)	0.04 (1 in 2294)	0.11 (1 in 898)	0.07 (1 in 1477)	0.33 (1 in 300)	0.21 (1 in 474)
High-middle SDI	Chronic Lymphoid Leukemia	0.06 (1 in 1650)	0.05 (1 in 1892)	0.04 (1 in 2513)	0.03 (1 in 3069)	0.08 (1 in 1210)	0.06 (1 in 1753)	0.14 (1 in 719)	0.09 (1 in 1174)	0.32 (1 in 311)	0.23 (1 in 440)
High-middle SDI	Acute Myeloid Leukemia	0.07 (1 in 1390)	0.05 (1 in 1913)	0.04 (1 in 2482)	0.02 (1 in 4117)	0.08 (1 in 1243)	0.04 (1 in 2271)	0.14 (1 in 701)	0.08 (1 in 1263)	0.34 (1 in 298)	0.20 (1 in 501)
High-middle SDI	Chronic Myeloid Leukemia	0.03 (1 in 3855)	0.01 (1 in 8168)	0.02 (1 in 5483)	0.01 (1 in 10678)	0.03 (1 in 3645)	0.02 (1 in 6200)	0.06 (1 in 1592)	0.03 (1 in 3647)	0.13 (1 in 744)	0.07 (1 in 1535)
High-middle SDI	Other Neoplasms	0.26 (1 in 381)	0.23 (1 in 431)	0.17 (1 in 598)	0.13 (1 in 772)	0.33 (1 in 301)	0.22 (1 in 455)	0.52 (1 in 191)	0.35 (1 in 287)	1.28 (1 in 78)	0.93 (1 in 108)
High-middle SDI	All Cancers	2.61 (1 in 38)	3.29 (1 in 30)	4.19 (1 in 24)	3.80 (1 in 26)	9.62 (1 in 10)	5.92 (1 in 17)	15.34 (1 in 7)	8.27 (1 in 12)	28.61 (1 in 3)	19.72 (1 in 5)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Middle SDI	Lip and Oral Cavity Cancer	0.10 (1 in 1049)	0.05 (1 in 2077)	0.15 (1 in 652)	0.07 (1 in 1427)	0.27 (1 in 367)	0.12 (1 in 814)	0.34 (1 in 298)	0.16 (1 in 631)	0.85 (1 in 117)	0.40 (1 in 251)
Middle SDI	Nasopharynx Cancer	0.09 (1 in 1155)	0.03 (1 in 2930)	0.09 (1 in 1152)	0.04 (1 in 2831)	0.12 (1 in 807)	0.04 (1 in 2640)	0.11 (1 in 885)	0.05 (1 in 2104)	0.41 (1 in 244)	0.15 (1 in 646)
Middle SDI	Other Pharynx Cancer	0.03 (1 in 3318)	0.01 (1 in 8792)	0.07 (1 in 1419)	0.02 (1 in 4675)	0.10 (1 in 998)	0.04 (1 in 2724)	0.11 (1 in 890)	0.04 (1 in 2368)	0.31 (1 in 320)	0.11 (1 in 896)
Middle SDI	Esophageal Cancer	0.07 (1 in 1382)	0.02 (1 in 4037)	0.22 (1 in 459)	0.07 (1 in 1518)	0.61 (1 in 163)	0.21 (1 in 482)	0.92 (1 in 109)	0.36 (1 in 278)	1.81 (1 in 55)	0.66 (1 in 152)
Middle SDI	Stomach Cancer	0.18 (1 in 549)	0.11 (1 in 948)	0.47 (1 in 214)	0.18 (1 in 544)	1.38 (1 in 72)	0.51 (1 in 196)	2.09 (1 in 48)	0.81 (1 in 123)	4.07 (1 in 25)	1.60 (1 in 62)
Middle SDI	Colon and Rectum Cancer	0.21 (1 in 483)	0.13 (1 in 777)	0.27 (1 in 374)	0.19 (1 in 521)	0.53 (1 in 189)	0.32 (1 in 310)	0.80 (1 in 125)	0.56 (1 in 178)	1.79 (1 in 56)	1.20 (1 in 83)
Middle SDI	Liver Cancer	0.36 (1 in 276)	0.08 (1 in 1235)	0.44 (1 in 228)	0.13 (1 in 762)	0.81 (1 in 123)	0.31 (1 in 324)	1.07 (1 in 93)	0.53 (1 in 190)	2.66 (1 in 38)	1.04 (1 in 96)
Middle SDI	Gallbladder and Biliary Tract Cancer	0.01 (1 in 9009)	0.01 (1 in 7402)	0.02 (1 in 4063)	0.03 (1 in 3190)	0.06 (1 in 1676)	0.08 (1 in 1270)	0.12 (1 in 869)	0.14 (1 in 720)	0.21 (1 in 476)	0.26 (1 in 381)
Middle SDI	Pancreatic Cancer	0.03 (1 in 3138)	0.02 (1 in 4871)	0.07 (1 in 1482)	0.05 (1 in 2153)	0.16 (1 in 624)	0.12 (1 in 839)	0.27 (1 in 374)	0.21 (1 in 469)	0.53 (1 in 190)	0.40 (1 in 251)
Middle SDI	Larynx Cancer	0.05 (1 in 1950)	0.02 (1 in 4430)	0.12 (1 in 847)	0.03 (1 in 3272)	0.22 (1 in 457)	0.04 (1 in 2266)	0.25 (1 in 393)	0.06 (1 in 1798)	0.64 (1 in 156)	0.15 (1 in 654)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Middle SDI	Tracheal, Bronchus, and Lung Cancer	0.26 (1 in 381)	0.13 (1 in 760)	0.61 (1 in 164)	0.22 (1 in 461)	1.57 (1 in 64)	0.49 (1 in 203)	2.42 (1 in 41)	0.81 (1 in 124)	4.79 (1 in 21)	1.64 (1 in 61)
Middle SDI	Malignant Skin Melanoma	0.04 (1 in 2430)	0.03 (1 in 3141)	0.04 (1 in 2672)	0.03 (1 in 3669)	0.04 (1 in 2763)	0.04 (1 in 2586)	0.05 (1 in 1995)	0.06 (1 in 1651)	0.16 (1 in 607)	0.16 (1 in 632)
Middle SDI	Breast Cancer	0.02 (1 in 5373)	1.10 (1 in 91)	0.04 (1 in 2679)	1.30 (1 in 77)	0.07 (1 in 1344)	1.37 (1 in 73)	0.06 (1 in 1708)	1.28 (1 in 78)	0.19 (1 in 530)	4.96 (1 in 20)
Middle SDI	Cervical Cancer		0.47 (1 in 211)		0.33 (1 in 302)		0.35 (1 in 283)		0.34 (1 in 291)		1.49 (1 in 67)
Middle SDI	Uterine Cancer		0.23 (1 in 434)		0.24 (1 in 412)		0.24 (1 in 410)		0.20 (1 in 502)		0.91 (1 in 110)
Middle SDI	Ovarian Cancer		0.13 (1 in 784)		0.11 (1 in 897)		0.13 (1 in 776)		0.13 (1 in 758)		0.50 (1 in 200)
Middle SDI	Prostate Cancer	0.03 (1 in 3794)		0.16 (1 in 619)		0.70 (1 in 143)		1.45 (1 in 69)		2.32 (1 in 43)	
Middle SDI	Testicular Cancer	0.04 (1 in 2619)		0.01 (1 in 13767)		0.01 (1 in 11679)		0.01 (1 in 7387)		0.07 (1 in 1481)	
Middle SDI	Kidney Cancer	0.05 (1 in 1940)	0.03 (1 in 3328)	0.06 (1 in 1619)	0.02 (1 in 4004)	0.08 (1 in 1213)	0.04 (1 in 2297)	0.13 (1 in 798)	0.06 (1 in 1779)	0.32 (1 in 312)	0.15 (1 in 647)
Middle SDI	Bladder Cancer	0.07 (1 in 1416)	0.03 (1 in 3948)	0.13 (1 in 748)	0.04 (1 in 2364)	0.33 (1 in 302)	0.08 (1 in 1247)	0.52 (1 in 192)	0.14 (1 in 694)	1.05 (1 in 95)	0.29 (1 in 343)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Middle SDI	Brain and Nervous System Cancer	0.13 (1 in 762)	0.11 (1 in 916)	0.07 (1 in 1388)	0.06 (1 in 1693)	0.12 (1 in 849)	0.09 (1 in 1073)	0.15 (1 in 676)	0.12 (1 in 819)	0.47 (1 in 213)	0.38 (1 in 261)
Middle SDI	Thyroid Cancer	0.04 (1 in 2781)	0.04 (1 in 2835)	0.07 (1 in 1385)	0.07 (1 in 1468)	0.09 (1 in 1121)	0.14 (1 in 703)	0.13 (1 in 767)	0.14 (1 in 697)	0.33 (1 in 305)	0.39 (1 in 257)
Middle SDI	Mesothelioma	0.01 (1 in 19046)	0.00 (1 in 39548)	0.01 (1 in 12201)	0.00 (1 in 39447)	0.01 (1 in 12490)	0.01 (1 in 13351)	0.02 (1 in 6499)	0.01 (1 in 9209)	0.04 (1 in 2715)	0.02 (1 in 4272)
Middle SDI	Hodgkin Lymphoma	0.04 (1 in 2660)	0.02 (1 in 4870)	0.02 (1 in 5840)	0.01 (1 in 13038)	0.02 (1 in 4216)	0.01 (1 in 9556)	0.03 (1 in 3471)	0.01 (1 in 6676)	0.11 (1 in 933)	0.05 (1 in 1864)
Middle SDI	Non-Hodgkin Lymphoma	0.19 (1 in 525)	0.11 (1 in 872)	0.14 (1 in 692)	0.09 (1 in 1097)	0.23 (1 in 427)	0.16 (1 in 631)	0.27 (1 in 365)	0.18 (1 in 564)	0.84 (1 in 119)	0.54 (1 in 185)
Middle SDI	Multiple Myeloma	0.02 (1 in 5469)	0.01 (1 in 8254)	0.02 (1 in 4047)	0.02 (1 in 5339)	0.04 (1 in 2434)	0.03 (1 in 2915)	0.06 (1 in 1757)	0.05 (1 in 2151)	0.14 (1 in 710)	0.11 (1 in 896)
Middle SDI	Leukemia	0.28 (1 in 358)	0.21 (1 in 467)	0.12 (1 in 829)	0.09 (1 in 1107)	0.20 (1 in 493)	0.14 (1 in 739)	0.28 (1 in 356)	0.19 (1 in 538)	0.88 (1 in 114)	0.62 (1 in 160)
Middle SDI	Acute Lymphoid Leukemia	0.11 (1 in 879)	0.08 (1 in 1241)	0.04 (1 in 2796)	0.02 (1 in 4115)	0.06 (1 in 1540)	0.04 (1 in 2570)	0.09 (1 in 1157)	0.06 (1 in 1741)	0.30 (1 in 333)	0.20 (1 in 497)
Middle SDI	Chronic Lymphoid Leukemia	0.07 (1 in 1462)	0.07 (1 in 1506)	0.03 (1 in 2965)	0.03 (1 in 2884)	0.06 (1 in 1621)	0.05 (1 in 2021)	0.08 (1 in 1324)	0.06 (1 in 1721)	0.24 (1 in 418)	0.21 (1 in 480)
Middle SDI	Acute Myeloid Leukemia	0.07 (1 in 1361)	0.05 (1 in 1820)	0.04 (1 in 2752)	0.02 (1 in 4409)	0.06 (1 in 1730)	0.03 (1 in 2956)	0.09 (1 in 1141)	0.05 (1 in 1885)	0.25 (1 in 392)	0.16 (1 in 608)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Middle SDI	Chronic Myeloid Leukemia	0.02 (1 in 4175)	0.01 (1 in 8144)	0.01 (1 in 6736)	0.01 (1 in 11476)	0.02 (1 in 5409)	0.01 (1 in 7571)	0.03 (1 in 3176)	0.02 (1 in 5734)	0.09 (1 in 1127)	0.05 (1 in 1937)
Middle SDI	Other Neoplasms	0.23 (1 in 428)	0.21 (1 in 479)	0.15 (1 in 669)	0.12 (1 in 857)	0.29 (1 in 340)	0.19 (1 in 531)	0.45 (1 in 221)	0.28 (1 in 356)	1.12 (1 in 89)	0.79 (1 in 126)
Middle SDI	All Cancers	2.54 (1 in 39)	3.31 (1 in 30)	3.51 (1 in 28)	3.50 (1 in 29)	7.80 (1 in 13)	5.19 (1 in 19)	11.47 (1 in 9)	6.71 (1 in 15)	23.24 (1 in 4)	17.48 (1 in 6)
Low-middle SDI	Lip and Oral Cavity Cancer	0.21 (1 in 472)	0.14 (1 in 695)	0.27 (1 in 374)	0.17 (1 in 575)	0.41 (1 in 243)	0.30 (1 in 335)	0.47 (1 in 212)	0.33 (1 in 300)	1.36 (1 in 74)	0.95 (1 in 106)
Low-middle SDI	Nasopharynx Cancer	0.05 (1 in 1912)	0.03 (1 in 3336)	0.05 (1 in 1918)	0.03 (1 in 2910)	0.08 (1 in 1328)	0.04 (1 in 2727)	0.06 (1 in 1552)	0.04 (1 in 2635)	0.24 (1 in 410)	0.14 (1 in 720)
Low-middle SDI	Other Pharynx Cancer	0.04 (1 in 2445)	0.03 (1 in 3273)	0.10 (1 in 1032)	0.06 (1 in 1806)	0.19 (1 in 515)	0.11 (1 in 940)	0.19 (1 in 516)	0.12 (1 in 853)	0.52 (1 in 191)	0.31 (1 in 323)
Low-middle SDI	Esophageal Cancer	0.07 (1 in 1362)	0.04 (1 in 2260)	0.13 (1 in 755)	0.07 (1 in 1361)	0.26 (1 in 388)	0.15 (1 in 678)	0.40 (1 in 249)	0.24 (1 in 418)	0.86 (1 in 116)	0.50 (1 in 198)
Low-middle SDI	Stomach Cancer	0.12 (1 in 802)	0.09 (1 in 1068)	0.25 (1 in 405)	0.15 (1 in 664)	0.60 (1 in 166)	0.36 (1 in 281)	1.13 (1 in 89)	0.61 (1 in 164)	2.09 (1 in 48)	1.20 (1 in 83)
Low-middle SDI	Colon and Rectum Cancer	0.14 (1 in 704)	0.10 (1 in 984)	0.15 (1 in 665)	0.15 (1 in 689)	0.31 (1 in 318)	0.26 (1 in 384)	0.52 (1 in 191)	0.52 (1 in 194)	1.13 (1 in 89)	1.02 (1 in 98)
Low-middle SDI	Liver Cancer	0.12 (1 in 825)	0.06 (1 in 1759)	0.14 (1 in 707)	0.09 (1 in 1154)	0.28 (1 in 356)	0.19 (1 in 517)	0.48 (1 in 209)	0.36 (1 in 279)	1.02 (1 in 98)	0.69 (1 in 144)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Low-middle SDI	Gallbladder and Biliary Tract Cancer	0.01 (1 in 8532)	0.02 (1 in 4731)	0.02 (1 in 4583)	0.04 (1 in 2446)	0.05 (1 in 2054)	0.09 (1 in 1095)	0.09 (1 in 1157)	0.14 (1 in 733)	0.17 (1 in 593)	0.29 (1 in 345)
Low-middle SDI	Pancreatic Cancer	0.03 (1 in 3561)	0.02 (1 in 5017)	0.06 (1 in 1664)	0.05 (1 in 2052)	0.14 (1 in 719)	0.13 (1 in 775)	0.25 (1 in 399)	0.24 (1 in 412)	0.48 (1 in 209)	0.44 (1 in 227)
Low-middle SDI	Larynx Cancer	0.08 (1 in 1303)	0.04 (1 in 2533)	0.14 (1 in 691)	0.04 (1 in 2295)	0.27 (1 in 376)	0.07 (1 in 1378)	0.32 (1 in 317)	0.11 (1 in 897)	0.80 (1 in 125)	0.27 (1 in 375)
Low-middle SDI	Tracheal, Bronchus, and Lung Cancer	0.16 (1 in 638)	0.07 (1 in 1334)	0.36 (1 in 280)	0.11 (1 in 892)	0.82 (1 in 122)	0.24 (1 in 409)	1.41 (1 in 71)	0.45 (1 in 223)	2.72 (1 in 37)	0.88 (1 in 114)
Low-middle SDI	Malignant Skin Melanoma	0.03 (1 in 3058)	0.03 (1 in 3744)	0.03 (1 in 3459)	0.03 (1 in 3958)	0.03 (1 in 3207)	0.04 (1 in 2301)	0.04 (1 in 2397)	0.07 (1 in 1471)	0.13 (1 in 744)	0.16 (1 in 612)
Low-middle SDI	Breast Cancer	0.01 (1 in 8315)	1.34 (1 in 75)	0.02 (1 in 4763)	1.69 (1 in 59)	0.04 (1 in 2337)	1.84 (1 in 54)	0.04 (1 in 2235)	1.90 (1 in 53)	0.12 (1 in 830)	6.60 (1 in 15)
Low-middle SDI	Cervical Cancer		0.52 (1 in 191)		0.47 (1 in 214)		0.57 (1 in 177)		0.58 (1 in 174)		2.11 (1 in 47)
Low-middle SDI	Uterine Cancer		0.12 (1 in 865)		0.14 (1 in 698)		0.21 (1 in 486)		0.19 (1 in 524)		0.65 (1 in 153)
Low-middle SDI	Ovarian Cancer		0.12 (1 in 813)		0.10 (1 in 971)		0.13 (1 in 742)		0.16 (1 in 609)		0.52 (1 in 191)
Low-middle SDI	Prostate Cancer	0.03 (1 in 2986)		0.17 (1 in 599)		0.59 (1 in 169)		1.34 (1 in 75)		2.12 (1 in 47)	

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Low-middle SDI	Testicular Cancer	0.04 (1 in 2280)		0.01 (1 in 16834)		0.01 (1 in 13970)		0.01 (1 in 9826)		0.07 (1 in 1490)	
Low-middle SDI	Kidney Cancer	0.04 (1 in 2410)	0.02 (1 in 4325)	0.03 (1 in 2928)	0.02 (1 in 4838)	0.05 (1 in 1893)	0.03 (1 in 3222)	0.08 (1 in 1327)	0.04 (1 in 2741)	0.20 (1 in 491)	0.11 (1 in 899)
Low-middle SDI	Bladder Cancer	0.08 (1 in 1315)	0.03 (1 in 3149)	0.11 (1 in 927)	0.05 (1 in 1896)	0.25 (1 in 394)	0.10 (1 in 1042)	0.40 (1 in 251)	0.15 (1 in 654)	0.83 (1 in 120)	0.33 (1 in 300)
Low-middle SDI	Brain and Nervous System Cancer	0.09 (1 in 1083)	0.08 (1 in 1318)	0.05 (1 in 2028)	0.04 (1 in 2301)	0.08 (1 in 1305)	0.06 (1 in 1665)	0.11 (1 in 945)	0.09 (1 in 1057)	0.32 (1 in 309)	0.27 (1 in 365)
Low-middle SDI	Thyroid Cancer	0.02 (1 in 4704)	0.03 (1 in 3572)	0.04 (1 in 2607)	0.06 (1 in 1583)	0.07 (1 in 1512)	0.14 (1 in 732)	0.08 (1 in 1196)	0.18 (1 in 564)	0.21 (1 in 478)	0.40 (1 in 247)
Low-middle SDI	Mesothelioma	0.00 (1 in 29076)	0.00 (1 in 47806)	0.00 (1 in 20163)	0.00 (1 in 48989)	0.00 (1 in 20944)	0.00 (1 in 24882)	0.01 (1 in 11429)	0.01 (1 in 13893)	0.02 (1 in 4562)	0.02 (1 in 6515)
Low-middle SDI	Hodgkin Lymphoma	0.04 (1 in 2263)	0.03 (1 in 3745)	0.02 (1 in 5717)	0.01 (1 in 10021)	0.02 (1 in 4336)	0.01 (1 in 7043)	0.04 (1 in 2842)	0.02 (1 in 4343)	0.12 (1 in 834)	0.07 (1 in 1354)
Low-middle SDI	Non-Hodgkin Lymphoma	0.22 (1 in 451)	0.15 (1 in 673)	0.11 (1 in 896)	0.09 (1 in 1131)	0.18 (1 in 560)	0.16 (1 in 617)	0.22 (1 in 462)	0.19 (1 in 529)	0.73 (1 in 138)	0.59 (1 in 170)
Low-middle SDI	Multiple Myeloma	0.02 (1 in 5473)	0.02 (1 in 5551)	0.02 (1 in 4351)	0.03 (1 in 3428)	0.04 (1 in 2341)	0.05 (1 in 1945)	0.06 (1 in 1563)	0.06 (1 in 1604)	0.15 (1 in 676)	0.16 (1 in 622)
Low-middle SDI	Leukemia	0.23 (1 in 440)	0.17 (1 in 589)	0.12 (1 in 868)	0.10 (1 in 1042)	0.20 (1 in 503)	0.15 (1 in 662)	0.30 (1 in 334)	0.22 (1 in 450)	0.84 (1 in 119)	0.64 (1 in 157)

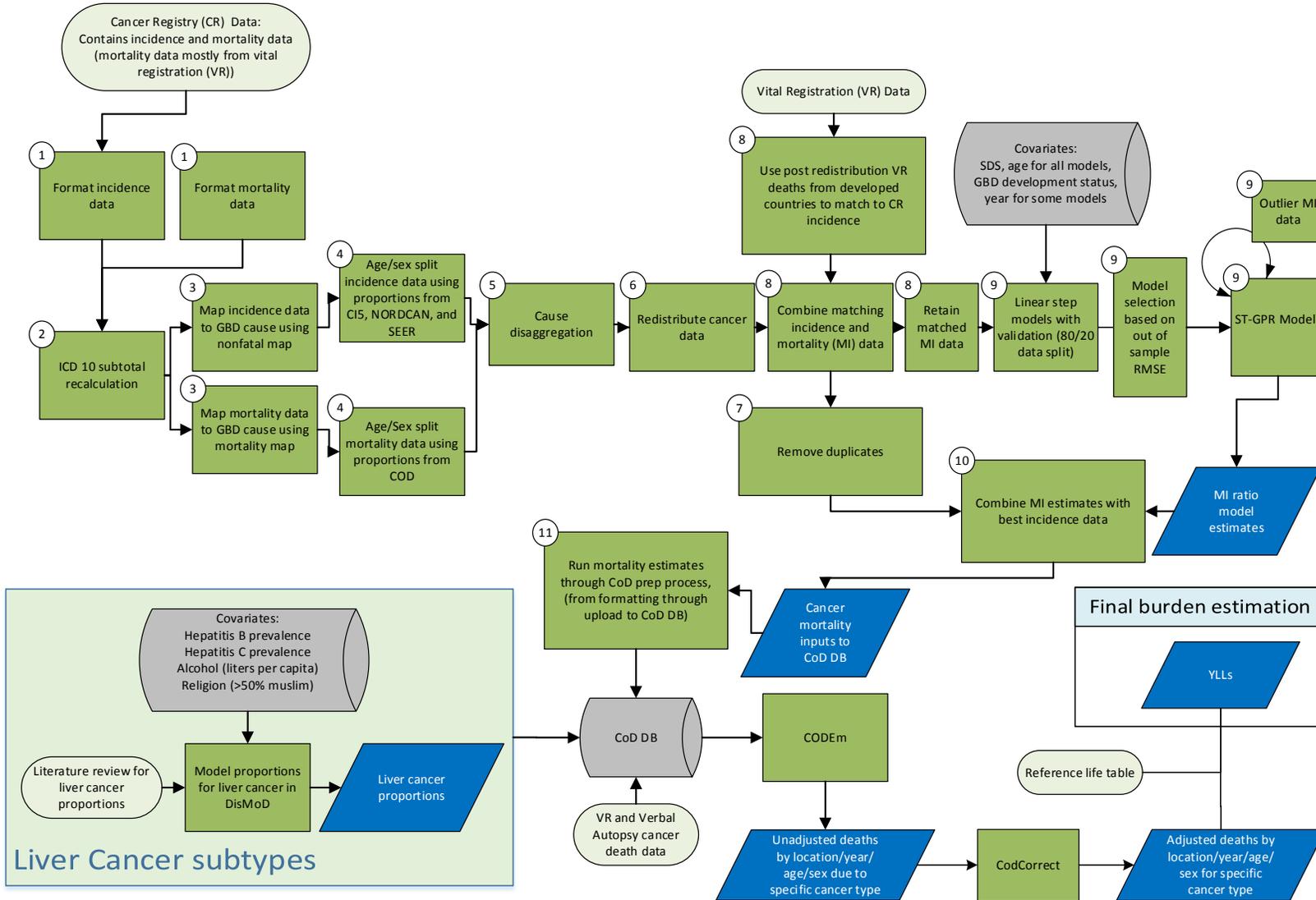
Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Low-middle SDI	Acute Lymphoid Leukemia	0.10 (1 in 1051)	0.06 (1 in 1660)	0.03 (1 in 3105)	0.02 (1 in 4920)	0.06 (1 in 1798)	0.03 (1 in 2982)	0.07 (1 in 1429)	0.05 (1 in 2029)	0.25 (1 in 396)	0.16 (1 in 612)
Low-middle SDI	Chronic Lymphoid Leukemia	0.02 (1 in 4032)	0.04 (1 in 2361)	0.02 (1 in 5363)	0.03 (1 in 3066)	0.04 (1 in 2606)	0.06 (1 in 1810)	0.06 (1 in 1650)	0.08 (1 in 1316)	0.14 (1 in 702)	0.21 (1 in 485)
Low-middle SDI	Acute Myeloid Leukemia	0.08 (1 in 1240)	0.05 (1 in 2020)	0.05 (1 in 2181)	0.03 (1 in 3726)	0.08 (1 in 1300)	0.04 (1 in 2703)	0.12 (1 in 830)	0.07 (1 in 1506)	0.32 (1 in 309)	0.18 (1 in 557)
Low-middle SDI	Chronic Myeloid Leukemia	0.03 (1 in 3731)	0.02 (1 in 5575)	0.02 (1 in 5407)	0.02 (1 in 6181)	0.03 (1 in 3568)	0.03 (1 in 3930)	0.05 (1 in 2051)	0.03 (1 in 3242)	0.12 (1 in 819)	0.09 (1 in 1106)
Low-middle SDI	Other Neoplasms	0.19 (1 in 523)	0.19 (1 in 517)	0.10 (1 in 1027)	0.10 (1 in 1015)	0.19 (1 in 531)	0.18 (1 in 552)	0.31 (1 in 320)	0.26 (1 in 384)	0.79 (1 in 127)	0.73 (1 in 137)
Low-middle SDI	All Cancers	2.08 (1 in 48)	3.45 (1 in 29)	2.46 (1 in 41)	3.84 (1 in 26)	5.05 (1 in 20)	5.48 (1 in 18)	8.06 (1 in 12)	7.04 (1 in 14)	16.62 (1 in 6)	18.42 (1 in 5)
Low SDI	Lip and Oral Cavity Cancer	0.07 (1 in 1532)	0.07 (1 in 1381)	0.09 (1 in 1150)	0.09 (1 in 1061)	0.14 (1 in 697)	0.17 (1 in 595)	0.23 (1 in 426)	0.20 (1 in 493)	0.53 (1 in 189)	0.54 (1 in 186)
Low SDI	Nasopharynx Cancer	0.04 (1 in 2705)	0.02 (1 in 4503)	0.03 (1 in 2957)	0.02 (1 in 4862)	0.04 (1 in 2829)	0.02 (1 in 5171)	0.02 (1 in 5282)	0.01 (1 in 11656)	0.13 (1 in 800)	0.07 (1 in 1415)
Low SDI	Other Pharynx Cancer	0.02 (1 in 6114)	0.02 (1 in 4870)	0.04 (1 in 2325)	0.04 (1 in 2365)	0.07 (1 in 1432)	0.07 (1 in 1381)	0.09 (1 in 1137)	0.10 (1 in 1020)	0.22 (1 in 461)	0.23 (1 in 429)
Low SDI	Esophageal Cancer	0.09 (1 in 1168)	0.04 (1 in 2850)	0.22 (1 in 451)	0.09 (1 in 1158)	0.42 (1 in 238)	0.24 (1 in 410)	0.69 (1 in 146)	0.31 (1 in 320)	1.41 (1 in 71)	0.68 (1 in 148)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Low SDI	Stomach Cancer	0.18 (1 in 555)	0.15 (1 in 679)	0.38 (1 in 262)	0.25 (1 in 407)	0.86 (1 in 116)	0.57 (1 in 174)	1.65 (1 in 61)	0.77 (1 in 130)	3.04 (1 in 33)	1.73 (1 in 58)
Low SDI	Colon and Rectum Cancer	0.09 (1 in 1055)	0.07 (1 in 1416)	0.12 (1 in 813)	0.13 (1 in 767)	0.31 (1 in 322)	0.23 (1 in 434)	0.54 (1 in 186)	0.46 (1 in 217)	1.06 (1 in 94)	0.89 (1 in 112)
Low SDI	Liver Cancer	0.33 (1 in 299)	0.12 (1 in 862)	0.36 (1 in 278)	0.18 (1 in 564)	0.64 (1 in 157)	0.38 (1 in 260)	0.95 (1 in 105)	0.56 (1 in 180)	2.27 (1 in 44)	1.23 (1 in 81)
Low SDI	Gallbladder and Biliary Tract Cancer	0.01 (1 in 13344)	0.02 (1 in 5355)	0.02 (1 in 5464)	0.04 (1 in 2236)	0.04 (1 in 2512)	0.11 (1 in 912)	0.07 (1 in 1339)	0.15 (1 in 680)	0.14 (1 in 713)	0.32 (1 in 313)
Low SDI	Pancreatic Cancer	0.03 (1 in 3565)	0.02 (1 in 5079)	0.07 (1 in 1414)	0.06 (1 in 1718)	0.18 (1 in 557)	0.16 (1 in 632)	0.33 (1 in 305)	0.29 (1 in 343)	0.60 (1 in 165)	0.53 (1 in 190)
Low SDI	Larynx Cancer	0.05 (1 in 2213)	0.06 (1 in 1586)	0.08 (1 in 1178)	0.04 (1 in 2263)	0.15 (1 in 649)	0.04 (1 in 2547)	0.16 (1 in 627)	0.04 (1 in 2618)	0.44 (1 in 226)	0.18 (1 in 542)
Low SDI	Tracheal, Bronchus, and Lung Cancer	0.07 (1 in 1465)	0.03 (1 in 2877)	0.16 (1 in 608)	0.07 (1 in 1445)	0.44 (1 in 227)	0.14 (1 in 692)	0.76 (1 in 132)	0.25 (1 in 394)	1.42 (1 in 70)	0.50 (1 in 199)
Low SDI	Malignant Skin Melanoma	0.03 (1 in 3363)	0.03 (1 in 3562)	0.03 (1 in 3007)	0.05 (1 in 2174)	0.04 (1 in 2270)	0.09 (1 in 1089)	0.07 (1 in 1408)	0.14 (1 in 729)	0.18 (1 in 562)	0.30 (1 in 330)
Low SDI	Breast Cancer	0.01 (1 in 9635)	1.53 (1 in 65)	0.03 (1 in 3778)	1.82 (1 in 55)	0.05 (1 in 2139)	2.01 (1 in 50)	0.06 (1 in 1646)	1.88 (1 in 53)	0.14 (1 in 693)	7.04 (1 in 14)
Low SDI	Cervical Cancer		1.18 (1 in 85)		1.04 (1 in 96)		1.17 (1 in 86)		0.94 (1 in 107)		4.25 (1 in 24)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Low SDI	Uterine Cancer		0.05 (1 in 2047)		0.11 (1 in 901)		0.18 (1 in 553)		0.21 (1 in 472)		0.55 (1 in 181)
Low SDI	Ovarian Cancer		0.10 (1 in 1003)		0.11 (1 in 892)		0.15 (1 in 678)		0.20 (1 in 494)		0.56 (1 in 178)
Low SDI	Prostate Cancer	0.04 (1 in 2383)		0.24 (1 in 420)		0.90 (1 in 112)		1.98 (1 in 50)		3.13 (1 in 32)	
Low SDI	Testicular Cancer	0.02 (1 in 6012)		0.00 (1 in 24925)		0.01 (1 in 10344)		0.01 (1 in 11331)		0.04 (1 in 2555)	
Low SDI	Kidney Cancer	0.02 (1 in 4389)	0.02 (1 in 5634)	0.03 (1 in 3725)	0.02 (1 in 4261)	0.05 (1 in 2097)	0.03 (1 in 3422)	0.06 (1 in 1668)	0.03 (1 in 3139)	0.16 (1 in 636)	0.10 (1 in 978)
Low SDI	Bladder Cancer	0.07 (1 in 1496)	0.03 (1 in 3322)	0.09 (1 in 1106)	0.06 (1 in 1539)	0.23 (1 in 433)	0.09 (1 in 1079)	0.43 (1 in 230)	0.14 (1 in 738)	0.82 (1 in 122)	0.32 (1 in 310)
Low SDI	Brain and Nervous System Cancer	0.07 (1 in 1431)	0.05 (1 in 2116)	0.04 (1 in 2263)	0.03 (1 in 2906)	0.07 (1 in 1401)	0.05 (1 in 2015)	0.09 (1 in 1140)	0.07 (1 in 1396)	0.27 (1 in 366)	0.20 (1 in 493)
Low SDI	Thyroid Cancer	0.02 (1 in 4759)	0.03 (1 in 3280)	0.04 (1 in 2642)	0.09 (1 in 1169)	0.07 (1 in 1365)	0.15 (1 in 648)	0.08 (1 in 1305)	0.19 (1 in 531)	0.21 (1 in 479)	0.46 (1 in 218)
Low SDI	Mesothelioma	0.00 (1 in 35629)	0.00 (1 in 28520)	0.01 (1 in 18903)	0.00 (1 in 26633)	0.01 (1 in 19773)	0.01 (1 in 14448)	0.01 (1 in 9415)	0.01 (1 in 11309)	0.02 (1 in 4206)	0.02 (1 in 4343)
Low SDI	Hodgkin Lymphoma	0.02 (1 in 4215)	0.02 (1 in 6565)	0.01 (1 in 14168)	0.00 (1 in 25430)	0.01 (1 in 12127)	0.01 (1 in 19853)	0.01 (1 in 10249)	0.01 (1 in 10304)	0.05 (1 in 2050)	0.03 (1 in 2950)

Location or SDI quintile	Cancer	Birth to age 49		Age 50 to 59		Age 60 to 69		Age 70 to 79		Birth to age 79	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Low SDI	Non-Hodgkin Lymphoma	0.24 (1 in 424)	0.16 (1 in 637)	0.09 (1 in 1061)	0.07 (1 in 1411)	0.15 (1 in 653)	0.15 (1 in 671)	0.19 (1 in 514)	0.15 (1 in 666)	0.68 (1 in 148)	0.53 (1 in 190)
Low SDI	Multiple Myeloma	0.02 (1 in 6560)	0.02 (1 in 6488)	0.02 (1 in 5057)	0.03 (1 in 2919)	0.06 (1 in 1781)	0.07 (1 in 1371)	0.09 (1 in 1171)	0.08 (1 in 1234)	0.18 (1 in 567)	0.20 (1 in 491)
Low SDI	Leukemia	0.19 (1 in 532)	0.14 (1 in 741)	0.10 (1 in 965)	0.09 (1 in 1100)	0.19 (1 in 524)	0.14 (1 in 699)	0.33 (1 in 305)	0.24 (1 in 413)	0.81 (1 in 124)	0.61 (1 in 164)
Low SDI	Acute Lymphoid Leukemia	0.08 (1 in 1214)	0.05 (1 in 1914)	0.03 (1 in 3118)	0.02 (1 in 6214)	0.06 (1 in 1766)	0.02 (1 in 4101)	0.08 (1 in 1258)	0.03 (1 in 2873)	0.25 (1 in 399)	0.13 (1 in 784)
Low SDI	Chronic Lymphoid Leukemia	0.01 (1 in 7935)	0.02 (1 in 4425)	0.01 (1 in 12343)	0.02 (1 in 4013)	0.02 (1 in 4591)	0.05 (1 in 2084)	0.05 (1 in 2219)	0.08 (1 in 1238)	0.09 (1 in 1143)	0.18 (1 in 568)
Low SDI	Acute Myeloid Leukemia	0.07 (1 in 1337)	0.04 (1 in 2245)	0.05 (1 in 2053)	0.03 (1 in 3182)	0.09 (1 in 1132)	0.04 (1 in 2301)	0.16 (1 in 630)	0.09 (1 in 1081)	0.37 (1 in 270)	0.21 (1 in 472)
Low SDI	Chronic Myeloid Leukemia	0.02 (1 in 5512)	0.02 (1 in 6367)	0.01 (1 in 6757)	0.02 (1 in 5400)	0.02 (1 in 4118)	0.03 (1 in 3655)	0.04 (1 in 2239)	0.03 (1 in 2916)	0.10 (1 in 982)	0.10 (1 in 1043)
Low SDI	Other Neoplasms	0.32 (1 in 313)	0.52 (1 in 194)	0.11 (1 in 927)	0.21 (1 in 467)	0.23 (1 in 441)	0.40 (1 in 248)	0.33 (1 in 299)	0.37 (1 in 274)	0.99 (1 in 102)	1.49 (1 in 67)
Low SDI	All Cancers	2.01 (1 in 50)	4.39 (1 in 23)	2.40 (1 in 42)	4.68 (1 in 21)	5.22 (1 in 19)	6.65 (1 in 15)	8.87 (1 in 11)	7.52 (1 in 13)	17.39 (1 in 6)	21.33 (1 in 5)

Cause of death estimation - cancer



Abbreviations: ICD: International classification of diseases; CI5: Cancer Incidence in Five Continents, DB: database

Figure 1: Flowchart GBD cancer mortality, YLL estimation

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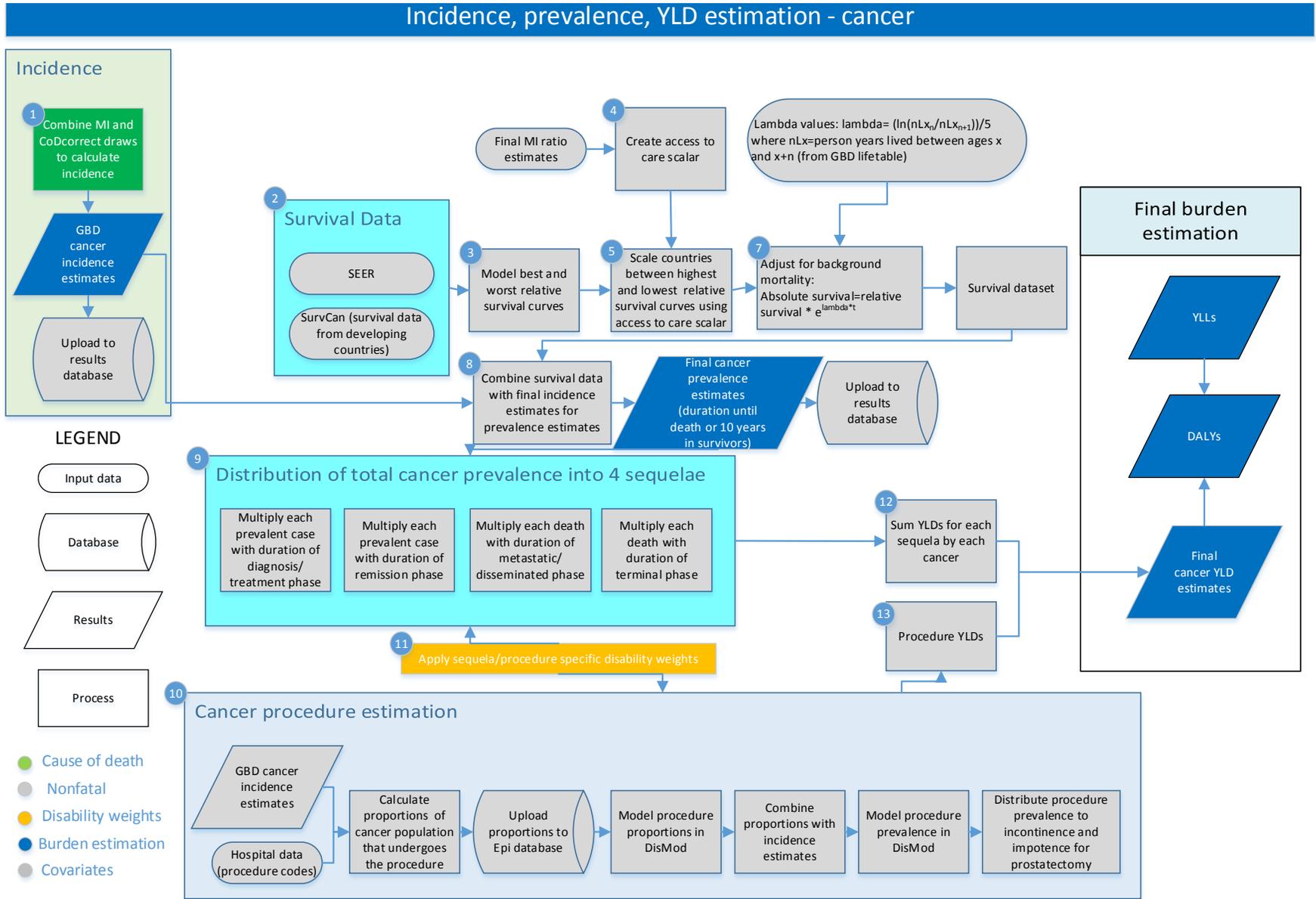
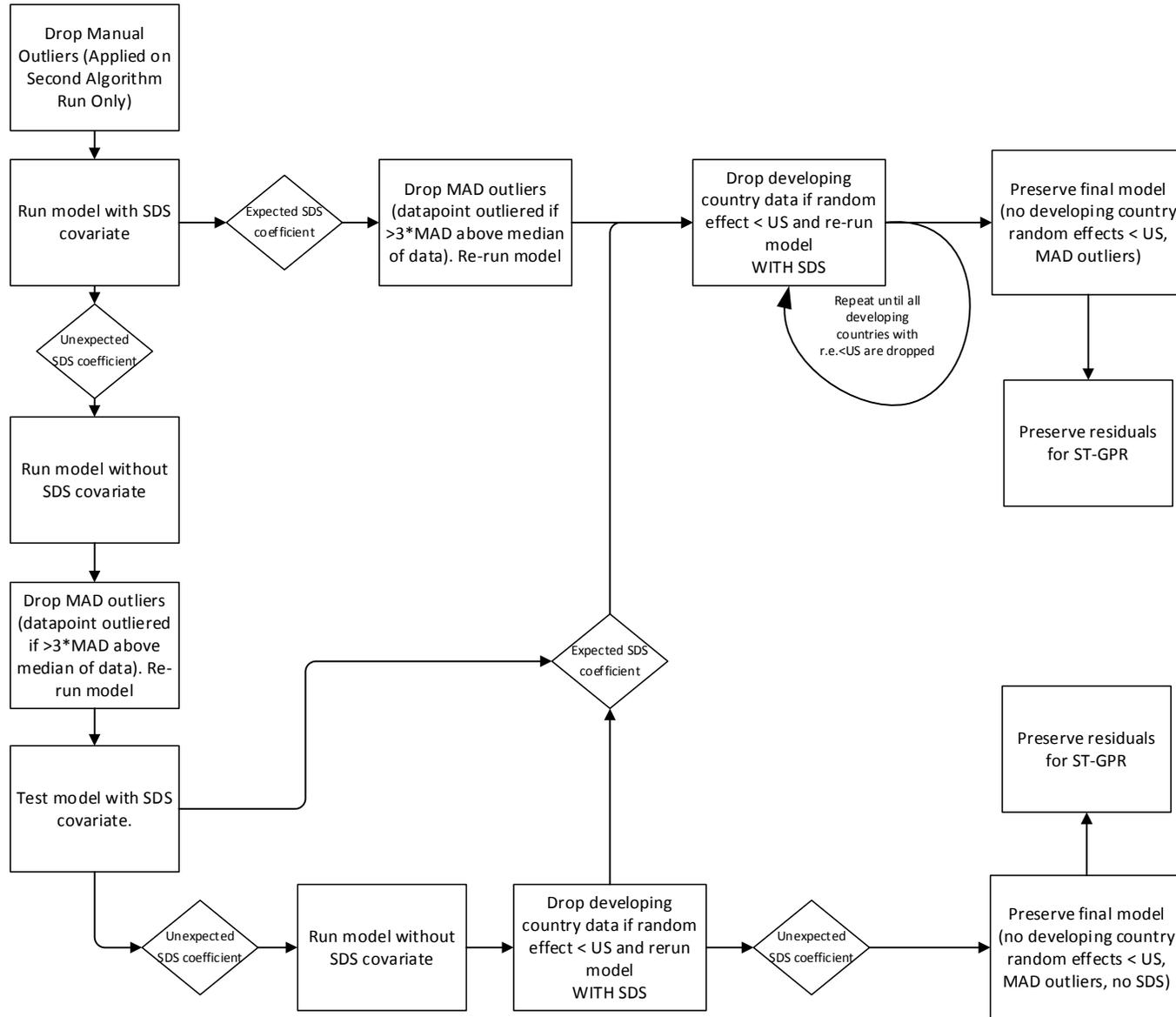
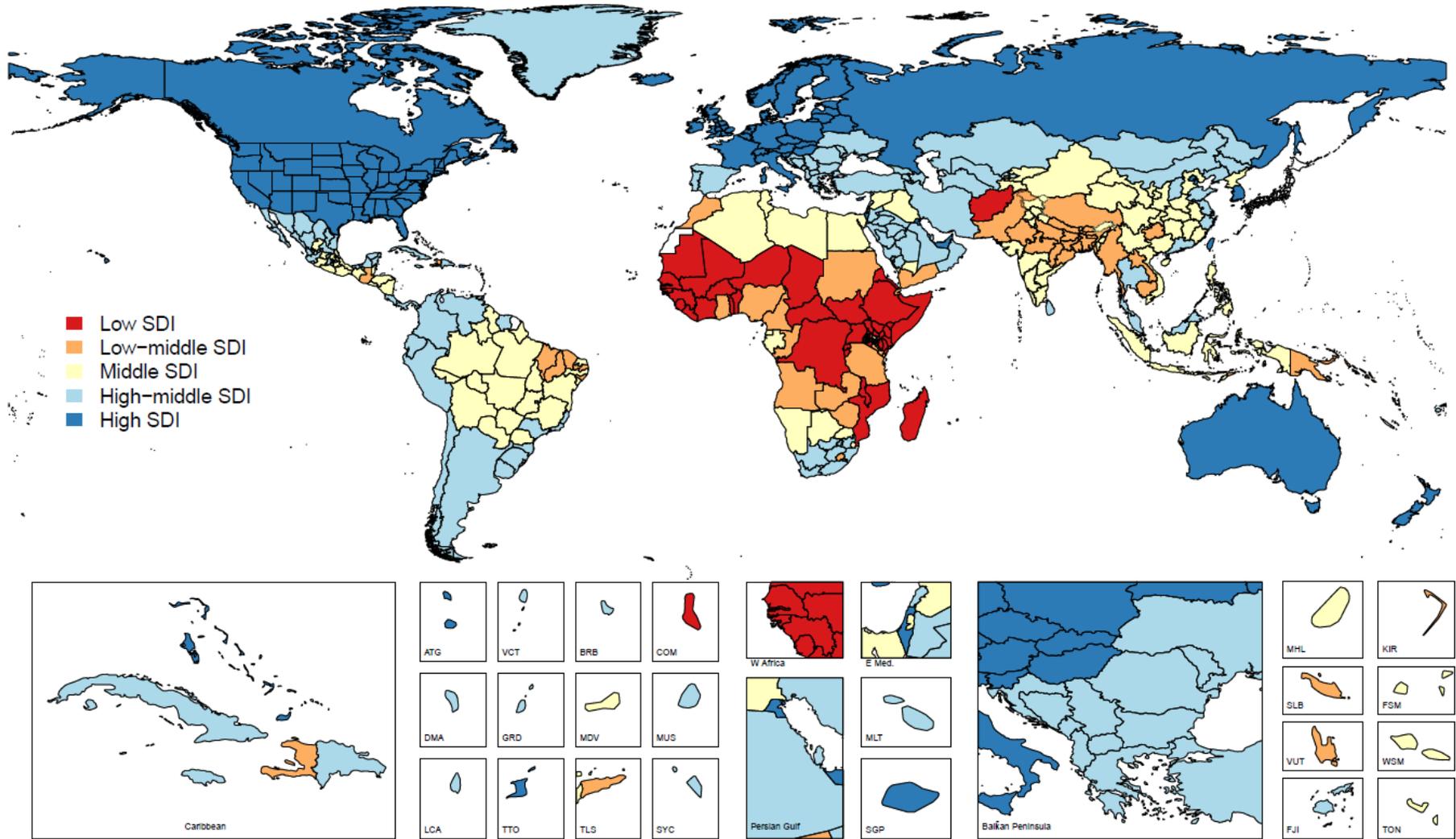


Figure 2: Flowchart GBD cancer incidence, prevalence, YLD estimation



eFigure 3: Flowchart of algorithm used to adjust MI ratios



eFigure 4: Sociodemographic Index quintiles, 2015

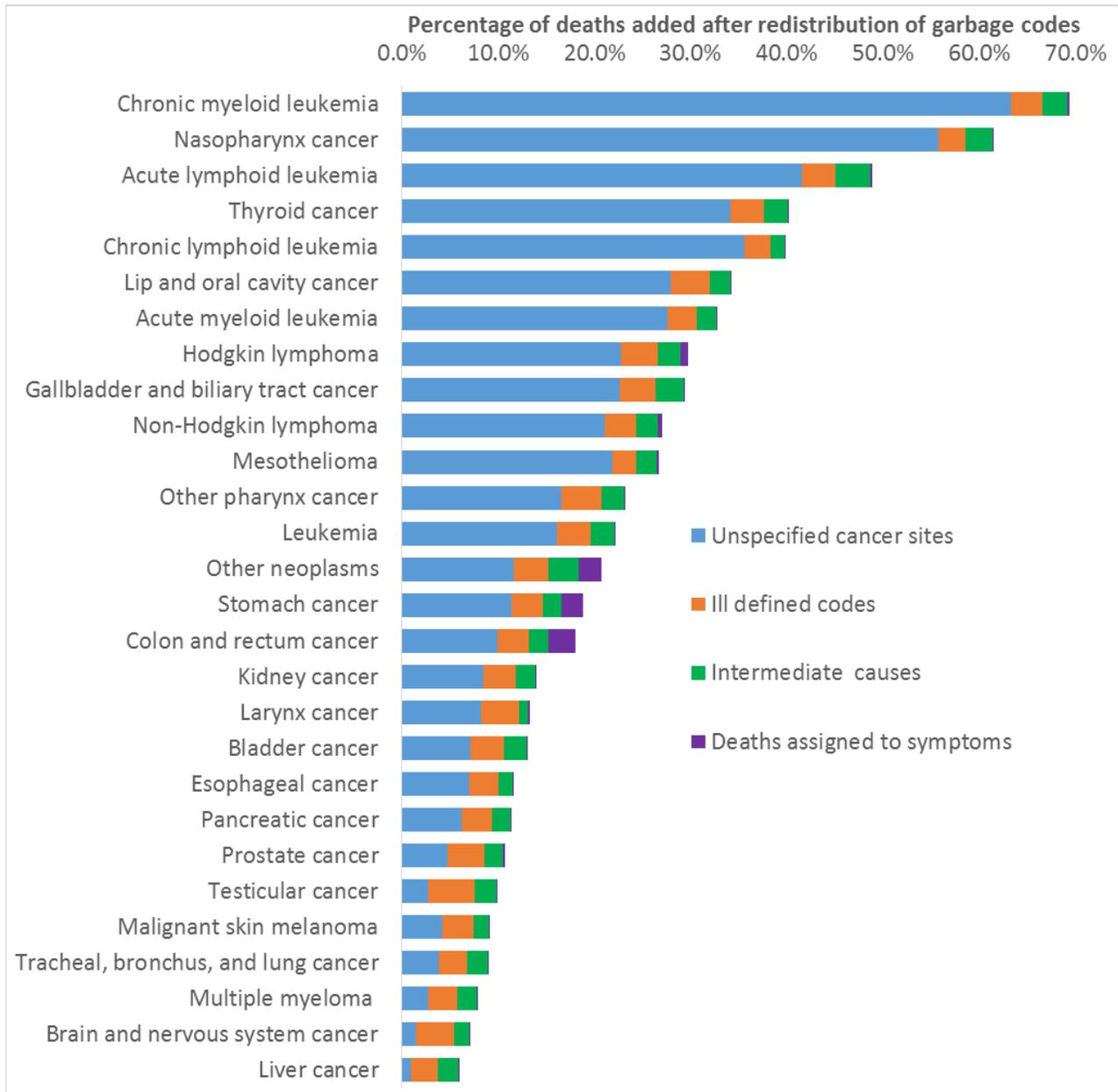
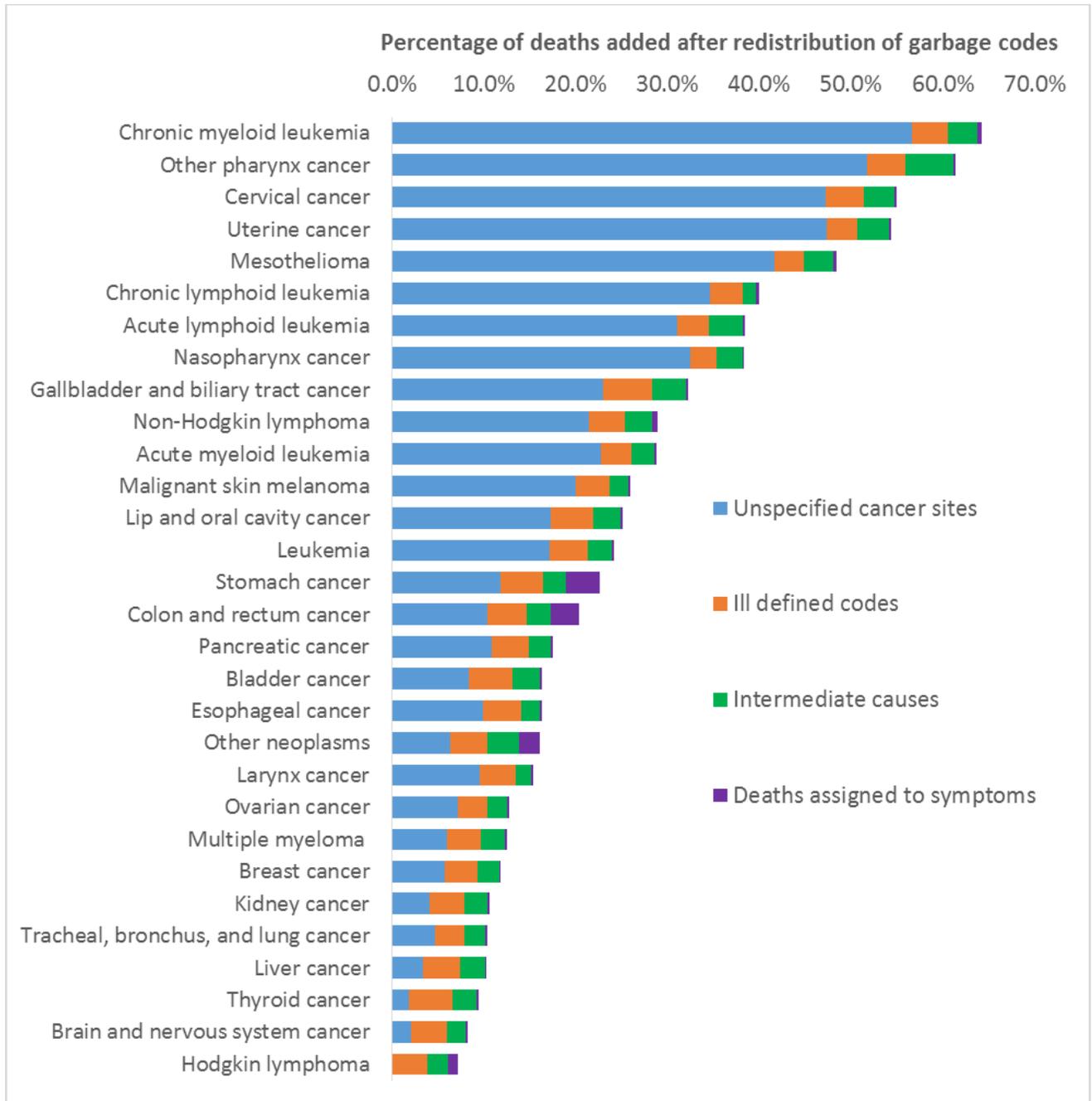


Figure 5: Percentage of deaths added to original ICD codes after redistribution of garbage codes, 2010, male



eFigure 6: Percentage of deaths added to original ICD codes after redistribution of garbage codes, 2010, female

Country	Breast Cancer	Tracheal, Bronchus, and Lung Cancer	Colon and Rectum Cancer	Prostate Cancer	Stomach Cancer	Liver Cancer	Non-Hodgkin Lymphoma	Leukemia	Bladder Cancer	Cervical Cancer	Esophageal Cancer	Uterine Cancer	Pancreatic Cancer	Kidney Cancer	Lip and Oral Cavity Cancer	Malignant Skin Melanoma	Thyroid Cancer	Brain and Nervous System Cancer	Ovarian Cancer	Larynx Cancer	Chronic Lymphoid Leukemia	Acute Myeloid Leukemia	Gallbladder and Biliary Tract Cancer	Other Pharynx Cancer	Acute Lymphoid Leukemia	Multiple Myeloma	Nasopharynx Cancer	Hodgkin Lymphoma	Testicular Cancer	Chronic Myeloid Leukemia	Mesothelioma
Global	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
High SDI	2	4	3	1	5	10	6	13	8	22	15	11	12	7	18	9	14	17	16	24	21	23	20	25	30	19	31	27	26	28	29
High-middle SDI	2	1	4	5	3	6	9	7	10	11	8	12	13	16	15	20	18	14	19	17	23	24	21	26	22	27	25	28	29	30	31
Middle SDI	1	2	5	9	3	4	10	8	12	7	6	13	15	23	11	26	17	14	20	16	21	22	25	24	18	27	19	28	30	29	31
Low-middle SDI	1	2	7	10	3	9	8	6	12	4	11	18	17	23	5	26	21	14	20	13	25	19	24	15	16	28	22	27	30	29	31
Low SDI	1	10	8	7	3	4	5	6	13	2	9	20	15	23	11	21	19	16	18	17	27	14	24	22	12	25	26	29	30	28	31
South Asia	1	3	5	10	4	14	8	6	12	7	9	19	16	28	2	27	22	15	18	11	23	17	24	13	20	25	21	26	30	29	31
India	1	4	6	10	3	14	8	7	13	5	9	20	15	28	2	25	22	16	18	11	23	17	24	12	19	26	21	27	30	29	31
Pakistan	1	3	5	16	9	13	4	6	8	17	7	11	20	22	2	29	21	12	14	10	27	19	25	15	18	23	24	28	26	30	31
Bangladesh	1	2	4	12	7	11	8	6	14	5	10	22	18	29	3	26	21	17	20	9	23	16	25	13	15	28	19	24	30	27	31
Nepal	1	5	9	15	3	11	8	4	16	2	12	22	17	29	6	27	19	18	20	7	23	14	25	10	13	28	21	24	30	26	31
Bhutan	1	3	8	10	4	11	6	2	18	5	16	22	15	28	7	24	20	14	19	9	23	12	29	13	17	26	21	25	30	27	31
East Asia	4	1	5	12	2	3	8	7	9	11	6	10	14	19	15	24	20	13	22	17	18	25	23	27	21	26	16	28	31	29	30
China	4	1	5	12	2	3	8	7	9	11	6	10	14	20	15	24	19	13	23	17	18	25	22	27	21	26	16	28	31	29	30
North Korea	4	2	5	15	1	3	9	7	13	8	6	10	14	24	17	25	19	11	20	21	16	22	23	26	18	28	12	27	30	29	31
Taiwan	4	2	1	7	5	3	9	16	8	14	10	13	12	11	6	28	20	22	18	19	26	24	21	17	25	23	15	29	30	27	31
Southeast Asia	1	2	3	9	7	4	8	6	15	5	20	13	16	19	10	26	12	17	14	21	25	23	24	22	11	29	18	27	30	28	31
Indonesia	1	9	7	5	4	8	6	3	13	2	20	10	16	21	15	26	14	17	12	19	24	22	25	23	11	29	18	27	31	28	30
Philippines	1	2	3	6	11	7	10	4	21	5	25	12	19	20	9	22	8	16	15	18	24	14	27	26	13	28	17	29	30	23	31
Vietnam	2	1	3	10	4	5	6	8	17	11	12	16	14	22	7	27	15	20	13	21	29	23	24	9	19	28	18	26	25	30	31
Thailand	2	1	4	8	9	3	11	5	14	7	18	21	17	13	10	28	15	16	20	19	25	23	12	22	6	29	24	27	30	26	31
Myanmar	1	3	5	14	4	8	9	6	16	2	25	12	15	24	7	26	11	17	13	21	23	20	22	19	10	29	18	27	30	28	31
Malaysia	1	2	3	6	7	9	5	4	15	8	20	16	17	19	13	24	12	21	14	18	23	22	28	25	11	26	10	29	30	27	31
Sri Lanka	1	4	5	7	6	18	8	3	16	11	10	13	17	12	2	25	15	14	19	22	28	20	24	21	9	26	23	27	30	29	31

Country	Breast Cancer	Tracheal, Bronchus, and Lung Cancer	Colon and Rectum Cancer	Prostate Cancer	Stomach Cancer	Liver Cancer	Non-Hodgkin Lymphoma	Leukemia	Bladder Cancer	Cervical Cancer	Esophageal Cancer	Uterine Cancer	Pancreatic Cancer	Kidney Cancer	Lip and Oral Cavity Cancer	Malignant Skin Melanoma	Thyroid Cancer	Brain and Nervous System Cancer	Ovarian Cancer	Larynx Cancer	Chronic Lymphoid Leukemia	Acute Myeloid Leukemia	Gallbladder and Biliary Tract Cancer	Other Pharynx Cancer	Acute Lymphoid Leukemia	Multiple Myeloma	Nasopharynx Cancer	Hodgkin Lymphoma	Testicular Cancer	Chronic Myeloid Leukemia	Mesothelioma
Cambodia	1	3	6	11	4	8	9	5	19	2	21	16	14	25	7	28	12	17	13	22	24	18	23	20	10	29	15	26	30	27	31
Laos	1	3	6	11	5	8	9	4	19	2	20	18	17	25	7	27	12	13	15	22	24	14	23	21	10	29	16	26	30	28	31
Mauritius	1	4	2	3	5	14	11	9	10	8	15	6	12	16	7	26	19	20	13	18	29	21	23	22	17	25	24	27	30	28	31
Timor-Leste	1	4	7	13	5	8	10	2	19	3	20	21	14	26	9	27	11	17	18	22	24	12	23	15	6	29	16	25	31	28	30
Maldives	1	6	3	4	8	11	7	2	12	10	23	19	13	21	5	22	14	17	18	15	27	16	25	24	9	26	20	28	31	29	30
Seychelles	2	4	3	1	12	20	7	9	8	6	13	18	16	15	5	22	27	14	17	10	24	26	28	11	19	23	21	25	30	29	31
North Africa and Middle East	1	2	5	6	3	10	8	4	7	11	22	18	14	20	19	24	16	9	21	17	13	12	23	29	15	27	28	26	30	25	31
Egypt	1	5	7	9	8	4	13	2	3	18	23	17	16	20	14	26	15	6	21	19	10	12	24	25	11	27	30	29	31	22	28
Iran	2	5	6	3	1	14	12	4	7	17	9	25	19	21	23	16	20	8	24	10	13	11	22	30	15	27	28	26	29	18	31
Turkey	2	1	4	5	3	14	7	6	8	21	26	13	10	17	22	19	15	9	18	16	12	11	24	31	20	23	28	27	25	29	30
Sudan	1	4	6	12	2	7	5	3	14	8	19	23	15	25	16	27	13	9	24	18	17	11	22	26	10	29	28	21	30	20	31
Algeria	1	2	4	8	5	15	7	3	9	6	28	20	14	25	23	26	18	10	22	19	17	13	11	29	16	24	12	21	31	27	30
Iraq	1	3	8	18	6	11	10	2	7	14	25	17	15	19	16	24	13	4	20	22	12	5	26	23	9	27	28	29	30	21	31
Morocco	1	2	7	5	3	10	9	4	8	6	27	12	14	25	15	24	17	11	21	18	16	13	19	23	20	26	22	29	31	28	30
Afghanistan	1	5	8	17	2	6	7	4	12	3	15	19	23	28	20	27	10	9	25	21	18	14	16	24	11	29	26	13	31	22	30
Saudi Arabia	1	4	2	6	8	7	5	3	10	20	23	15	12	11	17	28	13	9	19	16	18	14	25	29	21	24	26	27	30	22	31
Yemen	1	4	7	14	2	8	6	3	13	5	20	23	17	28	16	26	12	9	24	21	15	11	22	25	10	29	27	18	31	19	30
Syria	1	3	5	6	4	12	7	2	10	15	26	18	11	22	17	23	14	8	20	19	16	9	24	21	13	27	29	28	30	25	31
Tunisia	1	2	3	4	7	10	8	5	6	15	26	9	12	18	20	27	17	13	21	16	11	19	22	29	25	23	14	28	31	24	30
United Arab Emirates	1	5	2	6	10	14	3	8	4	16	20	12	15	9	13	17	23	7	19	11	25	22	29	30	27	21	28	18	24	26	31
Jordan	1	4	2	6	10	20	5	3	7	19	28	12	13	17	16	26	15	9	18	21	11	8	23	29	14	24	25	30	27	22	31
Libya	1	3	2	5	10	12	7	6	4	8	27	18	11	13	19	28	25	9	14	15	22	16	20	30	23	24	21	17	29	26	31
Lebanon	1	3	2	5	8	18	6	7	4	22	28	9	15	12	21	24	19	11	10	13	20	17	23	30	25	16	29	14	26	27	31
Palestine	1	2	4	12	6	9	8	3	13	20	26	15	14	19	23	24	17	5	18	21	16	7	28	29	10	25	27	11	30	22	31

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Oman	1	5	3	6	7	9	2	4	8	13	17	20	15	14	11	25	19	10	22	16	24	12	28	29	21	18	30	23	27	26	31
Kuwait	1	5	2	6	14	10	3	4	8	21	22	7	12	15	17	23	16	9	13	18	20	11	26	28	19	24	30	27	29	25	31
Qatar	1	4	2	6	7	8	5	3	15	25	23	14	11	12	20	24	18	10	13	16	17	9	28	30	19	22	29	26	27	21	31
Bahrain	1	2	3	7	8	17	4	5	6	20	24	9	11	10	22	27	14	13	15	19	18	12	29	28	23	21	26	16	31	25	30
Western Europe	2	4	3	1	9	12	6	10	5	22	18	13	11	7	17	8	14	15	16	25	19	24	21	23	31	20	30	29	26	28	27
Germany	1	4	3	2	7	13	6	11	9	23	20	12	10	8	18	5	15	16	14	25	21	24	19	22	30	17	31	29	26	28	27
France	2	4	3	1	10	12	5	8	9	24	15	16	13	6	14	7	11	18	20	22	17	23	25	19	31	21	28	29	26	27	30
United Kingdom	1	3	2	4	9	15	7	8	11	23	12	13	10	5	19	6	22	17	14	26	16	20	24	25	31	18	30	28	27	29	21
Italy	2	4	3	1	6	8	7	12	5	22	24	13	11	10	20	14	9	15	18	21	17	23	19	25	31	16	30	29	27	26	28
England	1	4	2	3	9	15	7	8	11	23	12	13	10	5	19	6	22	17	14	27	16	20	24	25	31	18	30	29	26	28	21
Spain	3	4	2	1	7	9	8	10	5	20	24	12	13	6	15	11	16	14	17	19	18	25	22	23	30	21	29	28	27	26	31
Netherlands	1	2	4	3	12	20	6	15	7	24	9	11	10	8	16	5	17	23	13	21	26	27	18	19	31	14	29	28	25	30	22
Belgium	2	4	3	1	10	18	5	9	6	24	14	11	12	8	13	7	19	16	17	23	20	22	25	21	30	15	31	29	28	27	26
Greece	1	3	4	2	7	6	15	8	5	19	27	12	9	11	24	14	17	10	16	22	13	21	18	30	29	23	28	20	26	25	31
Portugal	3	4	2	1	5	12	7	16	6	15	18	9	13	8	17	11	10	14	20	21	23	25	24	19	30	22	28	26	27	29	31
Sweden	2	4	3	1	11	15	7	9	6	19	21	8	12	10	18	5	23	13	14	25	17	22	20	24	30	16	31	29	26	28	27
Austria	2	4	3	1	11	14	7	12	6	22	23	9	8	5	19	10	13	16	15	26	18	24	20	21	31	17	30	28	25	27	29
Switzerland	1	4	3	2	13	11	6	7	9	27	21	10	8	12	16	5	14	18	20	25	15	17	23	22	30	19	31	29	24	28	26
Israel	2	4	3	1	10	18	7	9	5	21	23	12	13	6	20	8	11	14	16	22	15	19	24	28	29	17	30	26	25	27	31
Denmark	1	4	3	2	13	17	7	12	6	21	16	11	9	10	15	5	25	8	14	23	18	22	24	20	31	19	30	28	26	29	27
Finland	1	4	3	2	11	14	5	13	9	23	20	10	7	8	16	6	17	12	15	24	19	22	21	25	29	18	31	27	28	30	26
Scotland	1	2	3	4	8	15	7	9	12	22	10	13	11	5	16	6	21	17	14	25	18	20	26	23	31	19	30	28	27	29	24
Norway	3	4	2	1	13	20	7	11	6	19	22	9	12	8	15	5	21	10	14	26	17	18	24	25	28	16	31	30	23	27	29
Ireland	2	4	3	1	9	18	6	7	10	19	12	15	11	8	21	5	22	14	16	23	13	20	24	26	29	17	31	28	25	27	30

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Wales	1	4	2	3	8	15	7	9	11	21	12	13	10	5	19	6	22	17	14	26	16	20	24	23	31	18	30	28	27	29	25
Northern Ireland	1	3	2	4	8	15	6	9	13	23	14	11	10	5	17	7	19	16	12	26	20	21	25	28	30	18	31	27	24	29	22
Cyprus	2	4	3	1	10	14	6	5	7	22	27	8	13	16	20	12	15	11	18	26	9	17	23	29	24	19	31	28	21	25	30
Luxembourg	3	4	2	1	11	14	6	8	5	24	17	7	10	12	19	9	13	15	16	22	20	18	25	23	31	21	28	29	26	27	30
Malta	2	4	3	1	10	18	5	8	7	22	20	6	9	11	17	12	13	14	15	24	21	19	29	25	31	16	26	27	23	28	30
Iceland	2	4	3	1	12	17	8	11	6	23	18	15	13	7	14	10	5	9	19	24	20	21	22	28	29	16	31	26	25	27	30
Andorra	3	4	2	1	10	17	6	9	5	23	14	12	8	7	20	11	15	16	13	24	19	21	22	26	31	18	30	29	25	27	28
Western SSA	1	8	9	6	3	4	5	7	10	2	17	20	11	15	16	21	23	14	22	18	27	12	19	24	13	25	29	26	30	28	31
Nigeria	1	8	9	6	3	5	2	7	12	4	17	22	11	10	16	21	24	15	20	18	26	13	19	23	14	25	29	27	30	28	31
Ghana	1	12	8	4	6	5	2	7	10	3	19	16	9	17	14	24	25	11	20	18	26	15	23	21	13	22	29	28	30	27	31
Cameroon	1	8	9	5	3	2	6	7	10	4	13	19	12	11	17	20	24	15	22	18	26	14	21	25	16	23	30	27	29	28	31
Cote d'Ivoire	1	8	9	3	2	5	7	6	12	4	28	22	13	27	11	18	17	16	21	15	25	10	19	24	14	20	29	23	30	26	31
Niger	3	8	12	7	1	4	6	5	16	2	13	22	11	20	15	23	19	14	24	17	28	10	21	18	9	26	29	27	30	25	31
Burkina Faso	1	12	7	8	3	4	6	5	15	2	14	22	11	17	16	24	18	13	23	19	28	10	21	20	9	26	29	27	30	25	31
Mali	2	10	7	9	3	1	8	6	5	4	20	24	11	14	21	18	22	15	23	19	26	12	16	28	13	25	29	17	30	27	31
Senegal	1	8	9	7	2	4	6	5	11	3	14	19	10	17	16	22	20	15	24	18	26	12	21	23	13	25	29	28	30	27	31
Chad	1	8	9	7	3	4	5	6	13	2	15	22	12	17	16	23	21	14	24	18	27	11	19	20	10	26	29	25	30	28	31
Guinea	3	5	10	6	4	1	9	7	11	2	20	22	12	17	8	13	23	14	19	16	29	15	21	24	18	26	30	25	27	28	31
Benin	1	8	9	7	2	4	5	6	10	3	12	22	11	18	15	20	19	16	24	17	27	13	23	21	14	25	29	28	30	26	31
Togo	1	8	9	5	2	4	6	7	10	3	12	20	11	17	16	23	19	15	21	18	26	13	22	24	14	25	30	27	29	28	31
Sierra Leone	1	8	9	7	3	4	5	6	10	2	14	20	11	17	15	24	21	16	23	18	27	13	19	22	12	25	29	28	30	26	31
Liberia	1	8	9	7	2	4	6	5	13	3	14	18	10	21	15	24	20	16	23	17	26	11	19	22	12	25	29	28	30	27	31
Mauritania	1	8	9	7	3	4	6	5	12	2	16	19	10	17	15	22	21	14	20	18	26	11	24	23	13	25	29	28	30	27	31
The Gambia	2	7	8	9	4	1	5	6	17	3	19	22	10	16	15	26	23	12	18	20	28	13	25	11	14	27	24	21	30	29	31

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Guinea-Bissau	1	8	9	7	3	4	5	6	10	2	11	20	12	17	15	23	22	16	24	18	28	14	19	21	13	25	29	27	30	26	31
Cape Verde	3	5	11	1	2	6	7	9	13	4	8	18	12	16	10	22	24	15	25	20	23	14	26	19	17	21	28	30	29	27	31
Sao Tome and Principe	1	4	6	7	3	20	5	8	9	2	14	18	12	15	22	23	21	13	17	16	26	10	19	25	11	24	29	30	28	27	31
Eastern SSA	1	11	9	7	4	5	3	8	13	2	6	19	16	25	10	21	20	15	14	18	27	17	26	24	12	23	22	30	29	28	31
Ethiopia	1	11	6	8	4	3	5	7	15	2	9	19	14	26	10	21	18	17	13	20	27	16	25	23	12	24	22	30	29	28	31
Tanzania	1	10	8	6	7	4	3	5	14	2	9	21	17	23	12	20	19	13	15	18	27	16	26	25	11	22	24	29	31	28	30
Kenya	2	17	8	4	3	7	6	5	19	1	10	20	14	26	9	24	22	13	12	11	27	16	23	25	15	21	18	30	29	28	31
Uganda	1	10	6	4	9	7	3	8	17	2	5	18	15	22	13	21	20	14	11	23	27	16	26	25	12	24	19	30	29	28	31
Mozambique	1	9	7	12	4	3	8	5	15	2	6	20	17	24	10	22	19	14	16	18	26	13	25	21	11	23	28	29	31	27	30
Madagascar	1	11	9	6	5	3	4	8	12	2	7	19	14	25	10	21	20	16	13	18	27	17	26	24	15	23	22	30	29	28	31
Malawi	4	11	9	6	10	7	3	8	5	2	1	23	17	21	12	13	20	14	16	19	26	18	25	24	15	22	27	30	29	28	31
Zambia	1	12	6	4	7	8	3	9	11	2	5	21	16	22	10	18	20	14	13	19	27	17	26	25	15	23	24	30	29	28	31
South Sudan	1	11	8	9	3	4	6	7	12	2	5	19	13	26	10	21	20	16	15	17	27	18	25	23	14	24	22	29	31	28	30
Rwanda	1	14	7	8	6	5	3	4	17	2	9	21	16	25	10	19	20	13	12	18	27	15	26	24	11	22	23	29	30	28	31
Burundi	1	13	9	8	3	4	5	6	17	2	7	20	16	25	10	21	19	12	15	18	27	14	26	23	11	24	22	29	30	28	31
Somalia	2	12	8	9	3	4	6	7	15	1	5	16	18	27	10	21	19	13	14	20	26	17	24	22	11	25	23	29	31	28	30
Eritrea	1	11	9	8	3	4	5	6	14	2	7	18	16	25	10	21	20	15	13	19	27	17	26	24	12	23	22	30	29	28	31
Djibouti	1	10	6	3	8	5	4	9	12	2	7	20	14	24	11	19	21	16	13	15	27	17	26	25	18	22	23	30	29	28	31
Comoros	1	12	8	7	6	3	4	5	14	2	9	20	13	25	10	21	19	17	11	18	26	16	27	24	15	23	22	30	29	28	31
High-income North America	2	3	4	1	13	14	5	11	7	22	21	10	12	9	15	6	8	17	19	23	18	20	26	24	29	16	31	27	25	30	28
United States	2	3	4	1	14	13	5	11	7	23	21	9	12	10	15	6	8	17	19	22	18	20	26	24	30	16	31	27	25	29	28
Canada	2	4	3	1	7	17	5	10	9	23	21	11	12	6	20	8	13	14	18	24	16	19	22	25	29	15	31	27	26	30	28
Greenland	3	1	2	4	6	14	10	16	13	7	9	17	8	5	12	19	18	21	20	22	28	24	23	15	29	25	11	30	26	27	31

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Central Latin America	1	6	5	2	3	9	8	7	16	4	25	15	12	10	19	18	13	17	14	22	23	21	20	29	11	26	30	27	24	28	31
Mexico	1	7	4	2	5	9	8	6	16	3	27	15	14	10	21	18	11	17	12	24	23	22	19	29	13	26	30	25	20	28	31
Colombia	1	4	5	3	2	9	6	8	17	7	24	18	10	20	16	13	11	12	14	21	22	23	19	29	15	25	30	27	28	26	31
Venezuela	1	4	5	2	6	14	7	8	11	3	26	9	12	10	16	20	17	18	13	15	23	21	22	29	19	25	30	24	28	27	31
Guatemala	3	9	7	6	1	4	10	5	22	2	24	13	14	23	15	20	12	11	19	21	16	17	18	25	8	30	28	26	29	27	31
Honduras	1	7	9	5	3	12	8	2	19	4	29	10	14	24	13	20	22	16	17	21	25	11	15	18	6	28	27	26	30	23	31
El Salvador	1	7	6	4	3	10	9	5	18	2	27	8	14	20	15	26	19	13	17	21	12	22	16	25	11	28	29	24	30	23	31
Nicaragua	2	8	6	4	3	7	9	5	21	1	28	23	13	20	17	22	12	11	14	19	16	18	15	27	10	29	30	26	25	24	31
Costa Rica	1	5	4	2	3	11	6	7	12	8	26	10	9	13	21	16	18	14	15	22	23	25	20	29	19	17	30	24	28	27	31
Panama	1	6	3	2	4	13	8	7	14	5	25	9	10	11	19	20	17	12	16	18	22	21	24	27	15	23	30	28	29	26	31
Eastern Europe	2	3	1	5	4	15	12	10	9	14	19	6	8	7	17	13	24	16	11	18	20	26	22	21	29	23	30	25	27	28	31
Russia	2	3	1	6	5	14	9	10	11	15	19	4	8	7	17	12	24	16	13	20	18	26	25	23	28	22	30	21	27	29	31
Ukraine	3	2	1	5	4	17	18	12	8	11	19	6	7	10	14	13	23	16	9	15	30	22	20	21	28	24	31	27	29	26	25
Belarus	3	1	2	5	4	21	14	8	11	13	16	6	9	7	15	12	24	17	10	19	28	20	23	22	29	18	30	27	26	25	31
Moldova	1	3	2	4	5	6	10	16	9	8	26	7	14	17	15	11	20	18	19	12	22	24	29	13	23	28	25	21	27	30	31
Lithuania	2	4	3	1	5	15	12	9	11	16	20	7	8	6	19	13	22	14	10	18	17	25	24	23	29	21	30	28	27	26	31
Latvia	1	3	2	4	7	14	15	12	10	17	18	5	8	6	16	11	22	13	9	20	19	25	24	23	29	21	30	26	27	28	31
Estonia	3	4	2	1	6	14	13	11	10	15	21	7	8	5	17	9	24	18	12	20	16	23	25	22	27	19	30	28	29	26	31
Tropical Latin America	1	4	3	2	5	16	7	8	10	6	11	18	13	19	9	14	17	12	21	15	25	22	23	20	26	24	30	27	29	28	31
Brazil	1	4	3	2	5	16	7	9	10	6	11	18	13	19	8	14	17	12	21	15	25	22	23	20	26	24	30	27	29	28	31
Paraguay	1	4	5	3	6	19	8	7	13	2	14	12	11	21	10	17	9	22	20	18	25	16	23	24	15	28	30	27	26	29	31
High-income Asia Pacific	5	3	1	4	2	6	9	14	13	16	12	15	7	8	18	28	10	20	17	23	25	19	11	22	24	21	30	31	27	26	29
Japan	5	3	1	4	2	6	9	14	12	18	11	15	7	8	16	29	13	20	17	23	27	19	10	22	24	21	30	31	25	28	26

Country	Breast Cancer	Tracheal, Bronchus, and Lung Cancer	Colon and Rectum Cancer	Prostate Cancer	Stomach Cancer	Liver Cancer	Non-Hodgkin Lymphoma	Leukemia	Bladder Cancer	Cervical Cancer	Esophageal Cancer	Uterine Cancer	Pancreatic Cancer	Kidney Cancer	Lip and Oral Cavity Cancer	Malignant Skin Melanoma	Thyroid Cancer	Brain and Nervous System Cancer	Ovarian Cancer	Larynx Cancer	Chronic Lymphoid Leukemia	Acute Myeloid Leukemia	Gallbladder and Biliary Tract Cancer	Other Pharynx Cancer	Acute Lymphoid Leukemia	Multiple Myeloma	Nasopharynx Cancer	Hodgkin Lymphoma	Testicular Cancer	Chronic Myeloid Leukemia	Mesothelioma
South Korea	5	3	2	7	1	4	10	12	13	14	15	16	8	11	19	27	6	18	17	22	25	20	9	24	23	21	28	29	30	26	31
Singapore	2	3	1	4	6	5	8	9	14	19	18	7	11	10	20	28	13	22	12	23	24	16	17	25	26	21	15	29	30	27	31
Brunei	2	4	1	3	6	8	5	12	17	7	26	10	20	11	13	24	9	16	14	29	27	25	23	19	22	21	18	28	15	30	31
Central Europe	3	1	2	4	6	15	11	10	5	14	23	8	9	7	17	12	25	13	16	18	19	26	21	20	29	24	30	27	22	28	31
Poland	2	1	3	4	8	20	13	11	5	14	21	7	9	6	17	15	24	12	10	16	18	26	19	22	29	23	31	27	25	28	30
Romania	3	1	2	4	5	6	12	14	10	11	22	8	7	9	13	19	23	16	17	15	20	26	24	18	29	25	28	27	21	30	31
Czech Republic	3	4	2	1	10	14	11	12	6	15	20	8	9	5	19	7	25	17	13	22	18	26	16	24	29	23	30	27	21	28	31
Hungary	3	1	2	4	6	17	11	12	8	23	19	9	5	7	13	10	25	15	16	22	18	26	20	14	30	24	27	28	21	29	31
Serbia	3	2	1	4	9	13	16	12	5	10	22	6	11	7	18	15	26	8	14	19	25	23	20	21	24	29	30	28	17	27	31
Bulgaria	2	3	1	4	6	14	15	12	7	9	22	5	8	13	18	17	25	10	11	16	19	27	20	21	28	24	30	26	23	29	31
Slovakia	2	3	1	4	7	17	11	13	9	14	21	6	8	5	19	10	25	20	12	23	24	26	18	15	28	22	30	27	16	29	31
Croatia	2	3	1	4	6	10	14	13	5	18	22	8	9	7	17	12	23	11	15	20	16	26	19	21	31	24	30	27	25	28	29
Bosnia and Herzegovina	1	2	3	4	5	6	12	14	7	15	23	8	11	13	17	10	20	9	18	16	25	26	19	22	28	27	30	24	21	29	31
Albania	2	3	5	1	4	6	15	9	7	14	25	10	12	13	16	18	17	8	22	11	23	19	20	27	24	29	30	26	21	28	31
Macedonia	1	2	3	4	5	9	15	11	6	14	29	8	12	18	19	7	20	10	17	13	24	22	21	26	25	28	30	23	16	27	31
Slovenia	3	4	1	2	5	13	7	10	11	18	22	12	9	8	15	6	27	17	14	20	25	26	16	21	28	19	31	29	24	23	30
Montenegro	1	2	4	3	6	12	16	9	8	14	22	13	11	15	17	10	19	7	18	5	27	25	23	28	24	29	30	21	20	26	31
Central SSA	1	6	7	9	4	3	8	5	15	2	10	21	14	22	11	20	19	17	18	12	25	16	24	23	13	26	27	28	30	29	31
DRC	1	6	8	10	3	4	7	5	16	2	9	20	14	25	11	21	18	17	19	12	24	15	23	22	13	26	27	28	30	29	31
Angola	1	8	7	10	4	3	6	5	14	2	9	20	15	22	11	19	21	16	18	13	25	17	23	26	12	24	27	28	30	29	31
CAR	1	5	8	9	3	4	10	7	13	2	6	21	14	25	11	20	18	17	19	12	24	16	22	23	15	26	28	27	30	29	31
Congo	1	7	5	6	4	3	8	9	11	2	10	16	13	22	12	20	21	17	14	15	25	19	24	26	18	23	27	28	30	29	31
Gabon	1	6	4	3	8	5	7	10	9	2	11	16	13	18	12	19	23	17	14	15	25	20	24	26	21	22	27	28	29	30	31

Country	Breast Cancer	Tracheal, Bronchus, and Lung Cancer	Colon and Rectum Cancer	Prostate Cancer	Stomach Cancer	Liver Cancer	Non-Hodgkin Lymphoma	Leukemia	Bladder Cancer	Cervical Cancer	Esophageal Cancer	Uterine Cancer	Pancreatic Cancer	Kidney Cancer	Lip and Oral Cavity Cancer	Malignant Skin Melanoma	Thyroid Cancer	Brain and Nervous System Cancer	Ovarian Cancer	Larynx Cancer	Chronic Lymphoid Leukemia	Acute Myeloid Leukemia	Gallbladder and Biliary Tract Cancer	Other Pharynx Cancer	Acute Lymphoid Leukemia	Multiple Myeloma	Nasopharynx Cancer	Hodgkin Lymphoma	Testicular Cancer	Chronic Myeloid Leukemia	Mesothelioma
Equatorial Guinea	1	5	4	6	7	3	8	10	11	2	9	20	13	17	12	16	22	18	15	14	26	19	24	25	21	23	27	28	30	29	31
Central Asia	1	3	4	7	2	9	13	6	11	5	10	8	16	17	14	19	23	12	18	15	22	20	24	25	21	29	30	26	27	28	31
Uzbekistan	1	3	6	11	2	13	8	4	14	5	7	15	20	18	12	19	26	9	22	10	21	16	24	25	17	30	27	23	29	28	31
Kazakhstan	1	2	4	8	3	13	18	10	9	5	7	6	12	14	11	16	20	17	15	19	23	24	21	22	25	30	29	26	28	27	31
Azerbaijan	1	2	4	6	3	13	12	5	9	8	10	7	16	14	18	22	23	11	17	15	21	20	25	27	19	28	30	24	26	29	31
Tajikistan	1	5	7	10	2	4	9	3	15	12	6	20	17	23	13	18	21	8	19	14	22	16	26	24	11	29	27	25	28	30	31
Kyrgyzstan	1	4	5	8	2	7	14	6	12	3	15	9	16	18	10	19	17	11	13	20	24	21	25	23	22	30	28	26	27	29	31
Turkmenistan	1	5	4	12	2	14	11	7	13	3	6	15	27	9	8	19	17	10	16	18	22	26	25	24	20	28	29	21	23	30	31
Georgia	1	2	5	6	3	13	11	9	7	8	19	4	16	14	10	15	20	17	18	12	21	24	22	26	25	28	30	23	27	29	31
Armenia	1	2	3	6	4	10	14	7	5	8	21	11	9	20	17	24	23	12	15	13	16	18	26	25	19	27	28	31	30	22	29
Mongolia	4	3	7	15	2	1	9	8	19	5	6	12	13	18	10	24	14	11	16	17	23	20	21	25	22	28	29	27	30	26	31
Southern Sub-Saharan Africa	1	4	5	2	7	9	12	8	11	3	6	16	13	22	10	14	20	21	17	15	23	19	25	26	18	24	28	27	31	30	29
South Africa	1	4	5	2	7	14	13	8	10	3	6	16	12	21	9	11	18	22	17	15	24	19	25	26	20	23	28	27	31	30	29
Zimbabwe	1	4	6	2	9	5	8	11	7	3	10	21	12	23	18	19	20	13	15	14	22	17	26	28	16	25	27	24	30	29	31
Namibia	1	11	6	4	5	16	10	7	14	2	20	12	13	22	3	8	23	15	19	9	24	17	28	18	21	25	29	27	26	30	31
Botswana	1	4	6	3	7	10	11	8	13	2	5	17	15	25	9	14	19	21	16	12	22	18	26	23	20	24	28	27	30	29	31
Lesotho	2	4	8	3	5	9	12	7	14	1	6	18	13	25	10	15	16	22	19	11	21	20	23	24	17	27	28	26	30	29	31
Swaziland	2	4	7	3	6	10	11	8	12	1	5	17	15	23	9	14	20	21	16	13	22	19	27	24	18	25	28	26	30	29	31
Southern Latin America	1	4	3	2	5	17	13	11	10	6	15	14	8	9	19	16	12	20	18	22	23	21	7	29	26	25	31	28	24	27	30
Argentina	1	4	3	2	5	18	12	11	8	6	15	13	7	9	17	16	10	21	19	20	23	22	14	29	26	25	31	28	24	27	30
Chile	2	5	3	1	4	14	8	10	16	11	15	13	9	7	23	17	12	21	18	27	24	22	6	29	25	20	31	28	19	26	30
Uruguay	1	4	3	2	5	24	9	12	6	8	13	14	7	10	17	16	15	21	19	20	18	23	11	25	29	22	30	27	28	26	31
Andean Latin America	1	7	5	3	2	10	6	8	15	4	24	9	13	16	21	20	12	14	19	22	25	18	11	26	17	23	30	29	28	27	31

Country	Breast Cancer	Tracheal, Bronchus, and Lung Cancer	Colon and Rectum Cancer	Prostate Cancer	Stomach Cancer	Liver Cancer	Non-Hodgkin Lymphoma	Leukemia	Bladder Cancer	Cervical Cancer	Esophageal Cancer	Uterine Cancer	Pancreatic Cancer	Kidney Cancer	Lip and Oral Cavity Cancer	Malignant Skin Melanoma	Thyroid Cancer	Brain and Nervous System Cancer	Ovarian Cancer	Larynx Cancer	Chronic Lymphoid Leukemia	Acute Myeloid Leukemia	Gallbladder and Biliary Tract Cancer	Other Pharynx Cancer	Acute Lymphoid Leukemia	Multiple Myeloma	Nasopharynx Cancer	Hodgkin Lymphoma	Testicular Cancer	Chronic Myeloid Leukemia	Mesothelioma
Peru	1	6	5	2	3	9	7	8	16	4	25	10	11	15	21	19	12	14	17	22	23	20	13	26	18	24	30	29	27	28	31
Ecuador	3	8	6	2	1	10	4	7	18	5	24	9	12	17	20	21	11	13	19	22	27	16	15	25	14	23	30	26	29	28	31
Bolivia	1	7	5	4	3	10	11	8	14	2	22	9	12	21	19	18	15	17	23	24	26	13	6	20	16	25	30	28	29	27	31
Caribbean	2	4	3	1	6	11	8	9	10	5	16	7	14	15	12	22	18	17	19	13	21	23	25	24	26	20	29	27	30	28	31
Cuba	4	1	2	3	10	17	7	12	6	8	14	5	15	13	11	21	18	16	19	9	22	27	25	24	29	20	28	23	30	26	31
Haiti	1	8	7	4	3	9	6	5	22	2	21	10	15	28	11	23	12	18	25	16	17	14	19	20	13	27	29	24	31	26	30
Dominican Republic	2	4	3	1	6	8	11	7	15	5	22	10	12	21	9	25	18	13	23	14	20	17	27	16	19	24	26	29	30	28	31
Puerto Rico	3	5	2	1	7	9	4	10	11	15	18	6	13	8	17	21	20	14	19	22	16	23	24	27	28	12	30	25	26	29	31
Jamaica	2	4	3	1	6	13	7	9	10	5	16	8	14	17	20	23	12	22	11	18	19	21	26	27	24	15	28	29	30	25	31
Trinidad and Tobago	2	4	3	1	8	15	7	10	16	5	21	6	9	12	14	28	18	19	11	17	24	20	23	22	26	13	29	27	30	25	31
Guyana	1	8	4	2	6	11	9	7	14	3	26	5	16	12	13	18	15	23	10	19	20	28	24	27	17	22	29	25	30	21	31
Suriname	2	5	3	1	8	9	6	7	14	4	28	12	11	17	15	21	16	10	13	22	18	19	25	29	23	20	26	24	30	27	31
The Bahamas	2	5	3	1	8	17	6	9	14	7	15	4	19	13	11	18	22	21	12	16	20	25	24	23	28	10	29	27	31	26	30
Belize	2	4	5	1	6	10	9	7	12	3	22	8	11	15	13	19	21	14	23	16	18	20	25	27	17	26	29	24	31	28	30
Barbados	2	7	3	1	6	18	5	9	11	8	15	4	13	12	16	23	17	20	14	22	19	21	24	25	29	10	27	28	31	26	30
Saint Lucia	2	7	3	1	6	18	4	9	10	5	21	8	12	19	13	16	11	22	15	20	17	23	25	24	28	14	27	26	30	29	31
Saint Vincent and the Grenadines	2	8	3	1	7	17	5	9	11	4	27	6	15	19	10	16	14	21	18	13	12	24	25	23	28	20	29	22	30	26	31
Grenada	2	7	4	1	8	14	3	9	12	5	18	6	11	21	13	19	10	20	15	22	16	23	24	26	25	17	29	28	30	27	31
Virgin Islands, U.S.	3	4	2	1	6	20	7	9	10	13	19	5	12	8	17	14	21	22	15	18	16	23	24	25	29	11	26	28	31	27	30
Antigua and Barbuda	2	7	3	1	4	16	5	9	10	8	18	6	14	12	17	13	22	21	11	15	25	20	23	24	26	19	29	28	30	27	31
Dominica	2	6	4	1	3	14	5	8	10	7	18	9	13	15	11	23	27	25	21	16	17	22	24	20	19	12	29	26	30	28	31
Bermuda	2	4	3	1	12	22	5	8	7	20	15	6	10	9	14	11	23	21	18	16	17	19	27	24	28	13	29	25	31	26	30

Country	Breast Cancer	Tracheal, Bronchus, and Lung Cancer	Colon and Rectum Cancer	Prostate Cancer	Stomach Cancer	Liver Cancer	Non-Hodgkin Lymphoma	Leukemia	Bladder Cancer	Cervical Cancer	Esophageal Cancer	Uterine Cancer	Pancreatic Cancer	Kidney Cancer	Lip and Oral Cavity Cancer	Malignant Skin Melanoma	Thyroid Cancer	Brain and Nervous System Cancer	Ovarian Cancer	Larynx Cancer	Chronic Lymphoid Leukemia	Acute Myeloid Leukemia	Gallbladder and Biliary Tract Cancer	Other Pharynx Cancer	Acute Lymphoid Leukemia	Multiple Myeloma	Nasopharynx Cancer	Hodgkin Lymphoma	Testicular Cancer	Chronic Myeloid Leukemia	Mesothelioma
Australasia	3	5	2	1	8	15	6	10	12	25	17	9	11	7	23	4	13	14	18	26	19	20	22	21	28	16	31	30	27	29	24
Australia	3	5	2	1	8	16	6	12	11	25	17	9	10	7	24	4	13	14	18	26	19	21	22	20	29	15	31	30	27	28	23
New Zealand	3	5	2	1	10	14	6	7	11	23	16	9	12	8	21	4	18	17	20	28	13	19	24	26	25	15	31	30	22	29	27
Oceania	1	4	7	10	3	6	9	5	18	2	24	8	16	28	11	22	13	23	20	15	29	12	25	14	21	27	19	26	30	17	31
Papua New Guinea	1	4	8	11	3	6	9	5	20	2	24	7	19	28	10	22	13	23	21	16	29	12	25	14	18	27	17	26	30	15	31
Fiji	1	7	6	10	9	11	8	3	13	2	22	4	17	27	12	15	16	21	14	18	30	5	28	20	19	23	29	24	26	25	31
Solomon Islands	1	4	7	8	3	6	9	5	21	2	24	10	18	28	11	20	13	23	22	17	29	12	25	14	15	27	19	26	30	16	31
Vanuatu	1	3	9	6	4	7	10	5	17	2	24	8	15	26	11	19	13	23	22	16	29	12	27	14	18	25	20	28	30	21	31
Samoa	1	6	2	7	4	9	10	8	17	5	27	3	12	26	19	13	15	16	11	24	30	14	28	18	22	23	20	29	21	25	31
Guam	2	1	3	4	11	7	6	9	8	15	20	5	13	14	10	19	16	25	21	18	30	17	27	23	26	22	12	28	29	24	31
Northern Mariana Islands	1	2	5	9	10	11	6	7	14	8	26	4	16	13	3	21	22	18	20	15	29	12	30	24	23	19	17	28	27	25	31
Kiribati	1	3	8	10	5	4	9	6	23	2	19	20	14	22	7	17	21	16	18	11	26	12	29	15	13	27	25	30	28	24	31
Tonga	1	2	7	4	5	3	6	8	13	21	25	24	10	20	9	14	11	15	16	18	30	12	27	17	23	22	19	28	29	26	31
Federated States of Micronesia	1	2	7	3	6	9	10	8	15	4	25	5	14	24	11	17	13	20	16	18	30	12	27	19	21	26	23	28	29	22	31
American Samoa	1	4	5	3	6	7	8	12	11	9	27	2	17	22	14	16	13	19	10	20	29	23	26	15	25	21	18	28	30	24	31
Marshall Islands	1	3	6	9	4	8	10	5	15	2	25	7	14	24	11	18	13	22	19	17	30	12	28	16	20	26	21	27	29	23	31

Colors correspond to the ranking, with dark red as the most common cancer and dark green as the least common cancer for the location indicated. Rankings do not include the "other cancer" group. The numbers inside each box indicate the ranking. Abbreviations: SSA: Sub-Saharan Africa; DRC: Democratic Republic of Congo; CAR: Central African Republic

Figure 7: Cancer ranking by total incidence based on global level for developing and developed regions and all countries, both sexes, 2015

Country	Tracheal, Bronchus, and Colon and Rectum	Stomach Cancer	Liver Cancer	Breast Cancer	Esophageal Cancer	Pancreatic Cancer	Prostate Cancer	Leukemia	Cervical Cancer	Non-Hodgkin	Brain and Nervous	Bladder Cancer	Ovarian Cancer	Acute Myeloid Leukemia	Lip and Oral Cavity	Gallbladder and Biliary	Kidney Cancer	Acute Lymphoid	Larynx Cancer	Multiple Myeloma	Uterine Cancer	Other Pharynx Cancer	Nasopharynx Cancer	Chronic Lymphoid	Malignant Skin	Chronic Myeloid	Mesothelioma	Thyroid Cancer	Hodgkin Lymphoma	Testicular Cancer	
Global	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
High SDI	1	2	3	6	4	10	5	7	8	18	9	14	11	13	15	20	16	12	26	23	17	21	24	29	22	19	27	25	28	30	31
High-middle SDI	1	4	3	2	6	5	7	8	9	11	12	10	13	15	16	18	14	19	17	20	21	22	24	23	25	26	27	29	28	30	31
Middle SDI	1	4	3	2	6	5	8	10	7	9	12	11	15	17	16	14	19	22	13	20	23	21	24	18	25	28	27	30	26	29	31
Low-middle SDI	1	5	2	4	3	6	11	10	8	7	12	13	15	16	18	9	20	23	17	14	22	19	21	24	26	29	25	31	28	27	30
Low SDI	7	6	3	1	5	4	10	8	9	2	11	12	13	14	17	18	19	21	16	22	20	15	23	25	26	27	24	31	29	28	30
South Asia	1	3	5	8	2	4	10	13	7	9	11	14	15	16	17	6	20	24	19	12	21	22	18	23	27	29	25	31	28	26	30
India	1	4	2	8	5	3	10	11	7	6	13	14	16	15	17	9	20	24	19	12	21	23	18	22	27	29	25	31	28	26	30
Pakistan	2	4	9	6	1	3	14	15	8	19	7	10	12	16	20	5	23	22	18	11	17	13	21	24	28	30	25	31	29	27	26
Bangladesh	1	2	5	9	4	7	10	12	6	8	13	11	17	18	15	3	21	26	16	14	23	22	19	20	27	30	24	31	28	25	29
Nepal	1	6	2	7	3	8	9	13	5	4	12	11	18	16	15	14	20	27	17	10	23	21	19	22	26	29	24	31	28	25	30
Bhutan	1	5	4	6	3	8	7	10	2	9	12	11	17	19	14	13	22	24	16	15	20	23	18	21	27	29	25	31	28	26	30
East Asia	1	5	3	2	7	4	6	10	8	12	11	9	15	20	18	17	16	21	13	19	23	22	27	14	24	26	30	28	25	29	31
China	1	5	3	2	7	4	6	10	8	12	11	9	15	20	18	17	16	21	13	19	23	22	28	14	24	26	30	27	25	29	31
North Korea	1	4	3	2	6	5	8	14	7	10	12	9	15	16	17	20	18	21	11	23	24	19	27	13	22	29	26	30	25	28	31
Taiwan	2	3	4	1	6	5	7	9	11	13	10	18	12	19	20	8	15	16	22	23	21	24	17	14	28	27	25	29	26	30	31
Southeast Asia	1	3	5	2	4	11	8	10	6	7	12	14	18	13	17	15	16	20	9	22	25	21	23	19	30	29	26	28	24	27	31
Indonesia	5	6	3	2	1	12	8	9	4	7	11	14	16	13	15	22	18	20	10	21	24	19	23	17	30	28	26	29	25	27	31
Philippines	1	3	8	4	2	20	10	6	5	7	13	12	22	14	11	15	24	19	9	21	25	17	26	16	29	27	23	28	18	30	31
Vietnam	1	3	4	2	5	6	7	12	8	11	9	16	17	13	20	10	19	22	15	21	24	23	14	18	31	29	27	28	25	26	30
Thailand	2	3	7	1	5	13	10	12	4	9	18	14	16	17	21	11	8	15	6	19	25	24	22	20	30	29	28	26	23	27	31
Myanmar	1	3	4	6	2	16	8	13	7	5	12	14	18	10	19	11	17	22	9	21	25	15	23	20	28	29	26	30	24	27	31
Malaysia	1	2	6	4	3	14	9	11	5	12	8	16	17	13	18	15	23	19	7	21	20	24	25	10	29	27	26	30	22	28	31
Sri Lanka	1	4	6	10	3	5	9	11	2	16	12	13	21	15	17	7	18	14	8	24	22	23	19	20	30	29	28	27	25	26	31
Cambodia	1	4	3	5	2	12	9	10	6	7	13	15	20	14	16	11	17	22	8	21	26	18	23	19	28	29	24	30	25	27	31
Laos	1	3	2	5	4	13	9	10	6	7	11	14	20	15	16	12	17	22	8	21	25	19	23	18	28	29	24	30	27	26	31

Mauritius	1	3	4	7	2	10	6	5	8	9	15	17	14	12	18	11	19	20	13	21	22	16	24	23	30	28	26	29	25	27	31
Timor-Leste	1	4	5	2	6	14	9	10	3	7	11	13	20	15	16	12	18	23	8	22	25	19	21	17	29	30	27	28	24	26	31
Maldives	1	2	7	6	4	17	8	5	3	13	11	12	15	16	14	10	21	20	9	19	22	24	26	18	30	29	27	23	25	28	31
Seychelles	3	2	9	11	4	10	8	1	7	5	13	12	17	18	21	6	23	19	15	16	22	24	14	20	28	25	26	30	29	27	31
North Africa and Middle East	1	4	2	6	3	13	9	8	5	15	12	7	11	17	10	24	16	19	14	18	21	20	30	25	22	29	23	28	27	26	31
Egypt	2	6	8	1	4	15	10	12	3	19	13	5	7	16	11	22	21	18	9	17	24	20	27	29	14	28	23	25	26	30	31
Iran	2	5	1	9	7	4	11	8	3	20	16	6	14	19	10	22	15	18	13	12	23	26	29	27	21	24	17	30	28	25	31
Turkey	1	2	3	9	6	18	5	7	4	22	11	8	12	13	10	25	19	16	17	15	14	20	31	26	21	24	27	23	28	29	30
Sudan	2	6	1	4	3	13	10	8	5	14	9	7	15	17	11	22	16	21	12	19	23	18	28	27	24	30	20	29	26	25	31
Algeria	1	2	5	9	3	20	6	8	4	10	12	7	14	18	13	25	11	21	15	19	17	22	28	16	23	30	24	29	27	26	31
Iraq	1	7	8	5	2	17	9	13	3	18	12	4	11	15	6	20	23	14	10	22	24	16	26	27	21	28	19	29	25	30	31
Morocco	1	4	3	7	2	17	9	5	6	10	12	8	11	16	14	23	15	22	18	19	20	13	26	24	21	30	25	27	29	28	31
Afghanistan	3	5	1	4	2	9	15	11	6	7	10	8	14	20	17	24	12	23	16	18	25	13	28	27	22	30	21	29	26	19	31
Saudi Arabia	2	1	7	3	4	12	8	10	5	21	9	6	15	16	11	22	18	13	14	20	17	24	27	23	25	29	19	30	26	28	31
Yemen	1	6	2	4	3	13	9	11	5	10	8	7	15	18	14	24	16	22	12	19	25	17	27	28	23	30	20	29	26	21	31
Syria	1	3	2	9	4	15	8	7	5	17	11	6	13	14	10	22	16	18	12	21	20	19	25	29	23	28	24	30	26	27	31
Tunisia	1	2	7	6	3	23	8	4	5	21	11	10	9	19	12	25	20	14	24	16	18	17	29	13	15	30	22	27	26	28	31
United Arab Emirates	1	2	8	7	3	12	9	11	5	17	6	4	14	20	10	19	21	13	18	16	15	29	28	24	26	25	22	31	30	23	27
Jordan	1	2	8	12	4	18	9	10	3	22	6	7	11	14	5	21	17	15	13	23	16	19	27	25	20	28	24	30	26	31	29
Libya	1	2	8	4	6	19	3	13	7	10	9	5	11	14	17	24	16	12	21	15	18	22	28	20	26	29	25	30	27	23	31
Lebanon	1	2	8	12	3	21	9	5	7	22	6	10	4	11	14	24	17	16	19	15	13	18	31	29	25	28	23	27	26	20	30
Palestine	1	2	7	6	3	18	9	11	5	21	12	4	13	16	8	25	24	17	10	22	20	14	29	27	23	28	19	31	26	15	30
Oman	1	2	4	3	7	12	8	10	5	17	6	9	13	18	11	19	20	16	15	21	14	24	25	26	27	30	22	28	29	23	31
Kuwait	2	3	10	5	1	16	6	11	4	19	7	8	12	13	9	21	20	15	14	23	18	17	26	25	27	29	24	28	22	30	31
Qatar	1	3	6	5	2	13	7	11	4	20	9	10	16	14	8	18	22	15	12	19	17	23	27	29	25	28	21	30	24	26	31
Bahrain	1	3	6	7	2	16	5	10	4	20	8	11	12	13	9	18	26	14	15	19	17	22	29	25	27	30	23	28	24	21	31
Western Europe	1	2	6	8	3	11	5	4	7	21	10	13	9	12	15	20	17	14	27	24	16	23	25	29	18	19	26	22	28	30	31
Germany	1	2	6	8	3	14	4	5	7	22	10	13	9	12	15	20	16	11	28	25	17	23	21	29	18	19	26	24	27	30	31
France	1	2	8	6	3	10	4	5	7	22	11	15	9	12	16	19	18	14	27	23	13	24	20	28	17	21	26	25	29	30	31
United Kingdom	1	2	8	12	3	6	5	4	7	23	10	13	9	11	14	22	20	15	28	26	16	21	25	27	19	18	24	17	29	30	31
Italy	1	2	4	6	3	18	5	7	8	23	10	12	9	14	15	19	13	11	27	21	16	24	26	29	17	20	25	22	28	30	31
England	1	2	8	12	3	6	5	4	7	23	10	13	9	11	14	22	20	15	28	25	17	21	26	27	19	18	24	16	29	30	31

Spain	1	2	5	8	3	15	6	4	9	23	10	11	7	12	13	19	17	14	27	20	16	21	24	28	18	22	25	26	29	30	31
Netherlands	1	5	7	14	2	6	4	3	12	21	9	19	8	11	18	20	17	10	29	24	15	22	25	28	23	13	27	16	26	30	31
Belgium	1	2	6	10	3	11	5	4	7	22	9	14	8	12	15	18	20	13	29	24	16	23	25	27	21	17	26	19	28	30	31
Greece	1	2	6	4	3	21	7	5	8	18	16	10	9	11	12	25	14	13	28	19	17	22	30	27	15	24	20	26	29	23	31
Portugal	2	1	3	8	5	12	6	4	7	20	9	11	10	15	13	17	19	16	27	18	14	22	23	26	21	24	25	29	28	30	31
Sweden	1	2	7	13	4	18	5	3	6	20	8	12	10	9	17	22	16	11	27	28	15	21	25	30	19	14	24	23	26	29	31
Austria	1	2	6	8	3	17	4	5	7	21	9	13	10	11	14	20	15	12	29	24	18	22	23	28	16	19	25	26	27	30	31
Switzerland	1	2	7	8	3	13	5	4	6	24	9	11	10	12	16	20	19	14	29	25	15	22	23	28	18	17	26	21	27	30	31
Israel	1	2	6	11	3	18	4	8	5	19	7	9	10	12	13	22	21	17	25	23	14	20	30	29	15	16	26	27	24	28	31
Denmark	1	2	8	14	3	11	5	4	6	20	12	9	7	10	16	18	21	13	29	25	17	22	24	27	19	15	26	23	28	30	31
Finland	1	2	6	8	4	15	3	5	10	23	7	12	14	11	17	20	16	9	27	26	13	19	24	30	21	18	28	22	25	29	31
Scotland	1	2	7	12	3	5	6	4	8	22	9	13	10	11	15	19	21	14	28	25	16	23	24	27	20	18	26	17	30	29	31
Norway	1	2	6	15	4	17	5	3	7	19	9	11	10	8	16	18	22	12	27	26	14	20	24	29	21	13	25	23	28	30	31
Ireland	1	2	6	12	3	8	5	4	7	19	9	10	13	11	15	20	21	14	27	22	16	23	25	28	17	18	26	24	29	30	31
Wales	1	2	7	12	3	6	5	4	8	22	10	13	9	11	14	23	20	15	28	26	16	21	24	27	18	17	25	19	30	29	31
Northern Ireland	1	2	6	12	3	7	5	4	8	21	9	13	11	10	15	19	20	14	27	24	16	23	25	30	22	18	26	17	28	29	31
Cyprus	1	2	7	9	4	19	5	3	6	20	8	11	10	13	12	22	17	16	23	25	14	21	30	27	15	18	26	24	28	29	31
Luxembourg	1	2	7	8	3	14	4	5	6	24	11	9	10	12	13	20	19	17	29	22	15	21	23	27	18	16	26	25	28	30	31
Malta	1	2	5	14	3	15	4	6	7	22	10	11	8	9	13	19	21	12	28	23	16	17	27	24	25	18	26	20	29	30	31
Iceland	1	2	6	15	5	10	4	3	9	23	11	8	12	14	17	18	19	7	26	25	13	22	27	29	24	16	28	21	20	30	31
Andorra	1	2	7	11	4	10	5	3	6	22	9	13	8	12	15	20	19	14	28	25	16	23	26	27	17	18	24	21	29	30	31
Western SSA	4	7	2	1	6	11	9	5	8	3	10	12	13	18	14	21	17	15	16	22	20	19	23	30	27	26	24	31	29	25	28
Nigeria	3	6	2	1	7	11	9	5	8	4	10	12	16	19	14	21	17	13	15	22	18	20	23	28	27	25	24	31	29	26	30
Ghana	8	10	4	1	2	13	6	3	9	5	7	11	14	18	15	20	19	21	12	22	17	16	23	29	25	26	24	30	28	27	31
Cameroon	3	6	2	1	7	10	8	4	9	5	11	12	13	20	15	21	17	14	16	22	18	19	23	30	26	25	24	31	29	27	28
Cote d'Ivoire	5	7	2	3	6	21	9	1	8	4	10	12	13	17	14	19	15	22	18	20	11	16	27	30	25	26	23	31	28	24	29
Niger	5	8	2	1	9	10	7	4	6	3	11	12	15	19	14	20	18	17	13	21	22	16	23	28	26	29	24	31	27	25	30
Burkina Faso	8	5	2	1	4	10	7	9	6	3	11	12	15	19	14	21	16	18	13	22	20	17	24	30	26	28	23	31	29	25	27
Mali	6	4	2	1	7	14	10	8	9	3	11	15	5	18	16	23	12	13	17	22	19	20	30	31	26	24	25	29	28	21	27
Senegal	4	7	2	1	6	10	9	5	8	3	11	12	13	19	14	21	18	17	15	22	20	16	23	30	25	27	24	31	29	26	28
Chad	4	7	2	1	8	11	9	5	6	3	10	12	15	19	14	21	17	16	13	22	20	18	23	30	26	28	24	31	29	25	27
Guinea	3	6	4	1	7	13	8	5	9	2	14	11	10	15	19	17	16	12	21	20	22	18	26	30	28	24	27	31	29	25	23

Benin	4	7	2	1	6	10	8	5	9	3	11	12	13	19	14	21	18	16	15	22	20	17	23	30	26	27	24	31	29	25	28
Togo	4	7	2	1	6	9	8	5	10	3	11	12	13	19	14	21	17	16	15	22	20	18	23	30	27	28	24	31	29	26	25
Sierra Leone	4	7	2	1	5	10	9	6	8	3	11	12	13	19	15	21	14	17	16	22	20	18	24	30	26	27	23	31	29	25	28
Liberia	5	7	2	1	6	10	8	4	9	3	11	12	13	19	14	21	17	18	15	22	20	16	23	29	25	26	24	31	28	27	30
Mauritania	4	7	2	1	5	11	6	8	9	3	10	12	14	18	13	21	19	16	15	22	20	17	23	29	25	26	24	31	27	28	30
The Gambia	2	5	3	1	7	12	6	8	9	4	10	11	20	13	15	22	17	14	18	25	19	16	21	23	29	27	26	31	30	24	28
Guinea-Bissau	4	7	2	1	5	9	10	6	8	3	11	12	13	19	17	21	15	14	18	22	20	16	23	30	26	27	24	31	29	25	28
Cape Verde	3	8	1	4	9	5	7	2	10	6	11	13	15	23	14	12	21	16	18	22	19	17	20	27	25	26	24	31	28	30	29
Sao Tome and Principe	1	4	2	17	5	11	8	6	7	3	10	12	9	16	13	22	15	20	14	21	19	18	24	29	25	26	23	31	27	30	28
Eastern SSA	8	4	6	2	5	3	11	7	9	1	10	13	14	12	18	17	22	21	16	20	19	15	24	23	28	25	27	30	26	31	29
Ethiopia	8	3	6	2	5	4	11	7	9	1	10	13	16	12	18	14	20	22	17	21	19	15	24	23	27	26	28	30	25	31	29
Tanzania	8	3	7	2	5	4	11	6	9	1	10	13	14	12	16	19	22	20	15	21	18	17	24	23	28	25	27	29	26	31	30
Kenya	11	4	2	3	5	7	9	6	8	1	13	12	20	10	16	18	21	23	17	14	15	19	24	22	25	28	26	30	27	31	29
Uganda	6	2	8	4	9	1	12	3	10	5	7	13	17	11	19	20	23	18	16	22	15	14	24	21	28	25	27	30	26	31	29
Mozambique	7	5	4	1	6	3	12	9	8	2	10	11	15	14	16	17	22	21	13	20	19	18	23	28	25	26	24	29	27	30	31
Madagascar	8	4	6	2	5	3	11	7	10	1	9	13	14	12	18	16	22	21	19	20	17	15	24	23	27	25	28	30	26	31	29
Malawi	8	7	11	3	9	1	12	6	10	2	4	13	5	14	16	17	21	20	15	22	18	19	24	29	25	23	27	30	26	31	28
Zambia	8	3	7	4	5	1	11	6	10	2	9	14	13	12	19	15	22	20	18	21	16	17	25	23	29	24	28	30	27	31	26
South Sudan	8	6	5	2	4	3	11	7	10	1	9	14	15	12	19	16	21	22	17	20	18	13	24	23	26	25	27	29	28	31	30
Rwanda	10	5	6	2	3	4	11	7	8	1	9	13	16	12	17	18	22	21	14	20	19	15	24	23	28	25	26	30	27	31	29
Burundi	10	6	5	2	4	3	11	7	8	1	9	13	16	12	18	17	21	22	14	20	19	15	24	23	28	26	25	29	27	31	30
Somalia	9	6	4	2	5	3	11	7	8	1	10	14	15	13	18	17	21	22	16	20	19	12	24	23	25	28	26	29	27	31	30
Eritrea	8	6	5	2	4	3	11	7	10	1	9	13	15	12	19	17	21	22	16	20	18	14	24	23	26	25	27	30	28	31	29
Djibouti	7	4	8	1	5	2	9	6	11	3	10	14	13	12	18	16	22	21	20	19	15	17	24	23	28	25	26	30	27	31	29
Comoros	9	5	7	2	4	3	10	6	8	1	11	13	14	12	16	18	22	21	17	20	19	15	24	23	27	25	28	30	26	31	29
High-income North America	1	2	9	8	3	10	4	5	6	20	7	13	11	14	12	21	22	15	26	23	16	19	25	30	18	17	27	24	28	29	31
United States	1	2	14	8	3	9	4	5	6	20	7	12	11	13	10	21	23	15	26	22	16	19	25	30	18	17	27	24	28	29	31
Canada	1	2	6	12	3	10	5	4	8	20	7	11	9	13	15	21	17	14	27	24	16	23	25	29	18	19	26	22	28	30	31
Greenland	1	2	5	7	6	4	3	15	11	10	13	19	18	16	17	12	20	9	26	21	22	27	14	8	30	23	25	24	28	29	31
Central Latin America	1	3	2	6	5	17	9	4	7	8	10	12	18	13	16	22	14	15	11	20	19	21	28	30	26	23	25	31	24	27	29
Mexico	1	4	2	6	5	18	9	3	7	8	10	13	17	14	16	21	15	12	11	20	19	22	30	31	27	24	26	29	23	25	28
Colombia	2	3	1	7	4	15	9	5	6	8	10	11	17	14	16	21	13	19	12	20	18	22	28	29	26	23	24	30	25	27	31

Venezuela	1	4	3	9	5	17	8	2	7	6	10	11	18	12	16	22	19	13	14	15	20	21	27	29	26	24	23	31	28	25	30
Guatemala	6	7	1	2	8	15	10	4	5	3	12	11	20	17	16	19	13	18	9	21	22	14	26	27	23	29	24	31	25	28	30
Honduras	3	5	1	8	4	18	10	6	2	9	12	14	17	16	11	20	13	21	7	19	22	15	23	25	27	26	24	31	29	28	30
El Salvador	3	4	1	8	7	16	9	6	5	2	13	11	19	15	18	21	12	20	10	24	23	14	25	27	17	29	22	31	28	26	30
Nicaragua	5	6	1	3	8	18	9	4	7	2	12	11	19	14	15	20	13	16	10	17	23	22	28	29	25	27	21	31	24	26	30
Costa Rica	4	2	1	6	5	19	8	3	7	10	9	11	15	14	16	22	18	17	12	21	13	20	27	28	25	23	24	31	29	26	30
Panama	1	3	4	8	5	20	9	2	6	7	10	11	17	13	14	21	19	15	12	22	16	18	25	28	23	26	24	31	27	29	30
Eastern Europe	1	2	3	8	4	13	5	6	9	14	18	12	11	7	20	15	22	10	25	17	23	16	21	30	24	19	26	28	27	29	31
Russia	1	2	3	7	4	12	5	6	10	14	18	11	13	9	21	16	22	8	25	17	23	15	20	30	24	19	28	29	26	27	31
Ukraine	1	2	3	14	4	16	5	6	8	10	19	11	9	7	17	15	21	12	26	13	24	22	20	27	31	18	25	23	28	29	30
Belarus	1	2	3	17	4	15	5	6	7	9	18	14	10	8	12	16	20	11	25	13	22	23	21	27	30	19	24	28	26	29	31
Moldova	1	2	4	5	3	19	6	7	10	8	15	9	12	13	21	16	23	17	22	11	24	18	14	25	28	20	29	31	27	26	30
Lithuania	1	2	3	14	4	13	6	5	7	12	15	10	11	8	19	16	24	9	25	17	21	18	23	30	22	20	26	29	27	28	31
Latvia	1	2	3	12	4	13	5	6	9	15	14	11	10	7	20	17	24	8	25	19	21	16	23	30	22	18	27	29	26	28	31
Estonia	1	2	3	12	4	17	5	6	7	14	13	11	10	8	15	18	22	9	25	23	19	20	24	30	21	16	26	28	27	29	31
Tropical Latin America	1	2	3	8	5	7	6	4	10	9	12	11	15	18	17	13	14	19	23	16	21	22	20	30	25	24	26	29	27	28	31
Brazil	1	3	2	8	5	7	6	4	10	9	12	11	15	18	17	13	14	19	23	16	21	22	20	30	25	24	26	29	27	28	31
Paraguay	1	3	6	10	5	9	8	2	7	4	11	15	21	13	12	17	16	18	14	20	23	19	22	30	24	25	27	31	26	28	29
High-income Asia Pacific	1	3	2	4	7	8	5	10	11	17	9	19	12	15	13	18	6	14	22	25	16	20	21	26	29	27	28	24	23	30	31
Japan	1	3	2	4	7	8	5	10	11	18	9	20	12	15	13	17	6	14	23	25	16	19	21	26	29	27	28	24	22	30	31
South Korea	1	4	3	2	7	10	5	11	8	15	9	13	12	16	17	20	6	14	19	21	18	24	23	26	28	25	27	29	22	30	31
Singapore	1	2	4	3	5	12	6	9	7	15	8	18	17	11	13	20	16	14	23	22	21	19	24	10	28	27	29	26	25	30	31
Brunei	1	2	5	3	4	21	9	10	7	8	6	11	22	12	18	13	14	15	17	24	19	23	20	16	27	25	29	30	26	28	31
Central Europe	1	2	4	7	3	16	5	6	8	13	15	9	10	12	19	17	14	11	25	18	23	22	20	29	24	21	26	30	27	28	31
Poland	1	2	4	14	3	15	5	6	8	13	16	9	7	11	19	18	12	10	25	17	21	23	24	30	22	20	26	29	27	28	31
Romania	1	2	4	6	3	18	5	7	11	8	16	9	10	12	19	13	20	14	25	15	24	21	17	26	23	22	29	30	27	28	31
Czech Republic	1	2	6	9	4	15	3	5	8	16	14	13	12	11	17	19	10	7	25	24	20	22	23	30	18	21	26	29	27	28	31
Hungary	1	2	5	11	3	17	4	6	7	18	16	9	8	13	19	12	14	10	25	20	23	24	15	27	21	22	26	29	28	30	31
Serbia	1	2	5	8	3	17	4	6	9	11	15	7	10	12	19	18	14	13	24	16	23	21	22	29	27	20	25	31	28	26	30
Bulgaria	1	2	4	7	3	18	5	6	10	11	15	8	9	12	22	17	20	16	25	13	24	14	23	30	19	21	27	31	28	26	29
Slovakia	1	2	5	9	3	16	4	6	7	18	17	10	14	13	20	15	12	8	25	23	22	19	11	29	24	21	26	31	28	27	30
Croatia	1	2	4	7	3	15	6	5	8	18	13	9	10	12	21	16	14	11	27	20	22	24	23	30	19	17	26	25	28	29	31

Bosnia and Herzegovina	1	2	3	6	4	17	5	7	9	14	15	8	10	13	20	18	12	11	22	16	23	19	24	29	28	21	25	30	27	26	31
Albania	1	5	2	4	7	16	8	3	10	15	17	6	9	18	13	19	14	12	20	11	22	21	25	30	28	24	26	23	27	29	31
Macedonia	1	2	3	6	4	21	5	7	9	13	18	8	10	12	15	20	16	19	22	11	23	17	25	30	27	14	24	31	28	26	29
Slovenia	1	2	5	8	3	17	6	4	7	19	11	12	9	10	20	22	15	14	23	24	18	21	13	30	27	16	25	26	28	29	31
Montenegro	1	2	6	8	3	14	5	4	10	12	17	7	11	13	19	16	18	15	20	9	24	22	26	30	28	21	23	31	27	25	29
Central SSA	5	7	3	1	4	6	9	10	8	2	11	12	14	13	16	18	19	21	15	22	20	17	23	26	24	27	25	30	29	28	31
DRC	5	7	3	1	4	6	10	9	8	2	11	12	15	13	16	18	19	21	14	22	20	17	23	26	24	28	25	30	29	27	31
Angola	4	6	5	1	3	7	9	11	8	2	10	12	15	13	16	18	21	19	14	22	20	17	24	26	27	23	25	30	29	28	31
CAR	5	7	3	1	6	4	9	8	10	2	11	14	12	13	19	16	17	22	20	18	21	15	23	27	26	28	24	31	29	25	30
Congo	4	5	7	1	3	6	8	9	10	2	11	14	13	12	16	19	21	20	18	22	17	15	24	26	25	23	27	30	28	29	31
Gabon	2	3	9	1	4	6	8	7	10	5	11	14	12	13	17	15	21	18	20	22	16	19	24	25	26	23	27	30	28	29	31
Equatorial Guinea	2	3	7	1	4	5	8	9	10	6	11	14	13	12	18	16	20	15	19	22	17	21	24	25	27	23	26	31	28	29	30
Central Asia	1	5	2	3	4	6	8	11	7	10	16	9	14	12	13	18	20	17	19	15	24	21	22	28	25	23	26	30	29	27	31
Uzbekistan	2	5	1	7	4	3	10	14	6	9	13	8	18	20	11	16	17	19	15	12	22	21	23	28	27	24	25	31	30	26	29
Kazakhstan	1	3	2	6	4	5	7	12	9	8	20	11	13	10	18	15	16	14	22	17	25	19	21	27	24	23	26	30	28	29	31
Azerbaijan	1	3	2	6	4	5	9	10	7	11	18	8	17	15	12	20	19	16	13	14	23	21	25	29	22	24	27	31	28	26	30
Tajikistan	4	7	1	2	6	3	9	11	5	15	14	8	16	13	12	18	17	19	10	20	25	21	22	27	26	23	28	31	29	24	30
Kyrgyzstan	2	5	1	3	4	7	8	12	9	6	17	10	16	11	14	15	20	13	19	21	25	18	22	26	28	23	27	31	24	29	30
Turkmenistan	3	5	1	6	4	2	11	18	7	8	17	9	19	13	14	12	15	10	16	21	22	24	20	27	25	26	30	31	29	23	28
Georgia	1	4	2	5	3	15	6	7	8	9	18	11	10	12	20	16	19	17	21	13	26	14	23	29	24	22	28	30	27	25	31
Armenia	1	4	3	6	2	17	5	10	7	11	15	8	9	12	14	19	23	21	16	13	24	18	25	27	20	28	22	26	29	30	31
Mongolia	3	6	2	1	7	4	8	17	10	5	12	9	21	11	14	15	13	16	18	19	22	20	24	27	26	29	25	30	23	28	31
Southern SSA	1	5	9	7	4	3	8	6	10	2	13	15	11	12	16	14	22	21	17	19	18	20	26	27	24	23	28	25	29	30	31
South Africa	1	6	9	7	4	3	8	5	10	2	13	18	14	11	15	12	22	21	17	19	16	20	26	27	25	23	28	24	29	30	31
Zimbabwe	1	4	9	2	6	5	11	7	10	3	12	13	8	14	16	19	20	22	15	21	18	17	29	28	23	24	27	31	26	25	30
Namibia	2	3	4	10	5	11	8	9	7	1	12	13	23	15	16	6	24	21	17	19	22	14	20	27	25	18	26	31	30	29	28
Botswana	2	6	8	5	4	3	10	7	9	1	14	16	17	13	15	11	21	22	18	12	19	20	24	26	25	23	27	30	29	28	31
Lesotho	2	8	5	6	4	3	10	7	9	1	14	19	15	13	18	11	20	22	16	12	21	17	26	27	23	24	25	30	29	28	31
Swaziland	2	6	8	5	4	3	10	7	9	1	13	18	15	14	16	11	22	21	17	12	20	19	25	26	24	23	27	30	29	28	31
Southern Latin America	1	2	3	11	4	9	6	5	10	8	13	16	14	15	17	21	7	12	23	20	18	19	27	31	24	22	25	29	26	30	28
Argentina	1	2	4	12	3	10	6	5	9	7	13	16	14	15	17	21	8	11	23	18	20	19	28	31	24	22	25	27	26	29	30
Chile	2	3	1	8	6	10	7	5	11	9	12	17	14	16	18	21	4	13	22	25	15	19	28	31	24	20	23	29	26	30	27

Uruguay	1	2	5	18	3	8	6	4	9	10	12	15	13	14	16	22	7	11	26	19	17	21	25	29	20	23	24	30	27	28	31
Andean Latin America	2	4	1	6	7	18	9	3	8	5	11	12	20	15	13	21	10	17	14	23	19	16	24	31	27	25	26	29	22	28	30
Peru	2	4	1	5	7	19	9	3	8	6	10	12	20	15	13	21	11	16	14	23	18	17	25	31	27	24	26	29	22	28	30
Ecuador	3	4	1	5	8	18	9	2	7	6	10	11	20	16	14	22	12	17	13	23	19	15	25	31	28	24	26	30	21	27	29
Bolivia	2	6	1	7	8	13	10	4	9	3	14	12	20	18	15	21	5	19	16	23	17	11	22	30	27	25	24	29	26	28	31
Caribbean	1	3	5	7	4	11	8	2	9	6	10	12	14	18	19	16	21	20	22	15	17	13	24	28	23	26	25	30	29	27	31
Cuba	1	3	6	7	4	8	5	2	9	12	14	13	10	18	20	15	21	19	25	11	17	16	22	29	24	27	23	30	28	26	31
Haiti	5	6	2	7	3	12	10	1	8	4	9	13	21	16	15	19	14	24	17	18	20	11	25	28	23	29	22	30	27	26	31
Dominican Republic	2	3	6	5	4	14	9	1	8	7	13	11	21	20	12	10	22	23	15	18	17	16	19	24	25	28	26	30	27	29	31
Puerto Rico	2	1	6	5	4	11	7	3	8	15	9	16	12	13	14	19	23	18	22	21	10	20	24	28	17	25	26	30	27	29	31
Jamaica	2	3	5	10	4	12	9	1	7	6	8	17	15	14	16	24	19	22	20	18	13	11	26	28	21	27	23	30	25	29	31
Trinidad and Tobago	4	2	7	11	3	16	5	1	9	6	10	15	17	8	14	18	19	20	22	21	12	13	23	28	26	27	24	30	25	29	31
Guyana	5	3	6	7	2	15	9	1	8	4	11	18	20	10	23	19	17	14	13	21	16	12	25	30	24	26	22	29	28	27	31
Suriname	2	3	7	6	4	20	9	1	8	5	10	11	16	12	13	18	17	15	19	23	14	21	28	25	22	26	24	30	29	27	31
The Bahamas	4	3	5	7	2	11	9	1	8	6	13	15	21	12	18	16	19	20	25	17	10	14	22	27	23	24	26	30	28	29	31
Belize	2	4	5	6	7	13	9	1	8	3	11	10	16	22	15	20	19	18	14	17	21	12	25	29	23	27	24	28	30	26	31
Barbados	4	2	5	12	3	13	6	1	7	10	9	16	17	14	15	20	19	18	25	21	8	11	22	28	23	27	24	30	26	29	31
Saint Lucia	3	4	5	10	2	14	7	1	8	6	9	18	13	12	17	16	22	21	23	19	11	15	24	28	20	25	27	31	26	29	30
Saint Vincent and the Grenadines	4	3	6	10	2	20	9	1	7	5	8	19	18	14	16	11	21	23	22	13	15	12	24	29	17	26	25	30	27	28	31
Grenada	4	2	7	10	3	11	8	1	9	5	6	15	17	13	16	18	19	24	22	21	12	14	26	28	20	25	27	29	23	30	31
Virgin Islands, U.S.	3	2	5	12	4	13	6	1	7	10	9	17	16	11	15	21	23	14	27	18	8	20	24	25	19	22	29	28	26	30	31
Antigua and Barbuda	4	3	5	8	2	12	9	1	7	6	10	15	16	11	13	19	20	21	24	17	14	18	23	28	26	22	25	30	27	29	31
Dominica	3	5	2	9	4	12	6	1	7	10	8	22	13	19	15	14	20	17	16	18	11	21	23	28	24	26	25	30	29	27	31
Bermuda	1	3	8	13	4	10	5	2	6	17	7	16	9	14	11	18	24	15	26	19	12	20	23	29	22	21	25	28	30	27	31
Australasia	1	2	8	12	4	10	5	3	6	22	7	11	13	16	15	21	19	14	25	26	17	23	24	27	20	9	28	18	29	30	31
Australia	1	2	8	12	4	10	5	3	6	22	7	11	13	16	15	21	19	14	25	26	17	23	24	27	20	9	28	18	29	30	31
New Zealand	1	2	7	14	3	11	5	4	6	22	9	10	13	12	15	23	20	16	24	26	17	21	25	27	19	8	28	18	29	30	31
Oceania	1	6	3	4	2	14	10	8	7	5	11	16	22	13	12	15	23	25	19	18	24	9	20	21	31	27	17	29	26	28	30
Papua New Guinea	1	6	3	4	2	15	10	9	7	5	11	17	23	13	12	16	22	25	19	18	24	8	20	21	31	28	14	29	26	27	30
Fiji	5	4	8	6	1	13	10	9	3	2	11	15	19	14	7	16	21	24	18	22	17	12	20	27	31	25	23	30	28	26	29
Solomon Islands	1	6	2	4	3	13	10	8	7	5	11	15	22	16	12	14	23	25	18	19	24	9	20	21	31	27	17	29	26	28	30
Vanuatu	1	5	3	4	2	13	9	7	8	6	11	14	22	16	12	15	24	25	17	18	21	10	20	23	31	26	19	29	27	28	30

Samoa	2	1	5	3	4	16	6	7	8	9	10	14	17	11	13	24	20	25	18	26	15	12	19	22	31	21	23	30	28	29	27
Guam	1	2	8	3	4	13	6	5	7	15	9	21	14	16	11	12	25	18	27	19	17	20	22	10	31	24	23	28	26	29	30
Northern Mariana Islands	1	4	6	3	2	16	7	11	5	12	10	13	22	21	9	8	26	18	19	20	14	15	23	17	31	25	24	30	27	28	29
Kiribati	1	6	4	2	3	11	8	10	7	5	13	14	23	17	12	9	24	18	15	16	20	22	19	25	27	26	21	31	28	29	30
Tonga	1	6	4	2	3	15	8	5	9	23	7	12	16	13	11	10	22	17	20	21	14	26	19	18	31	25	24	29	27	28	30
Federated States of Micronesia	1	4	5	3	2	15	9	6	7	8	11	16	19	13	10	14	25	24	17	20	18	12	22	23	31	26	21	29	27	28	30
American Samoa	1	5	4	3	2	21	9	6	10	11	12	14	18	7	17	19	20	25	23	22	15	8	13	16	30	24	26	28	27	29	31
Marshall Islands	1	4	5	3	2	14	9	8	6	7	12	13	23	15	10	16	25	24	17	21	19	11	22	18	31	26	20	29	27	28	30

Colors correspond to the ranking, with dark red as the most common cancer and dark green as the least common cancer for the location indicated. Rankings do not include the "other cancer" group. The numbers inside each box indicate the ranking. Abbreviations: SSA: Sub-Saharan Africa; DRC: Democratic Republic of Congo; CAR: Central African Republic

eFigure 8: Cancer ranking by total mortality based on global level for developing and developed regions and all countries, both sexes, 2015

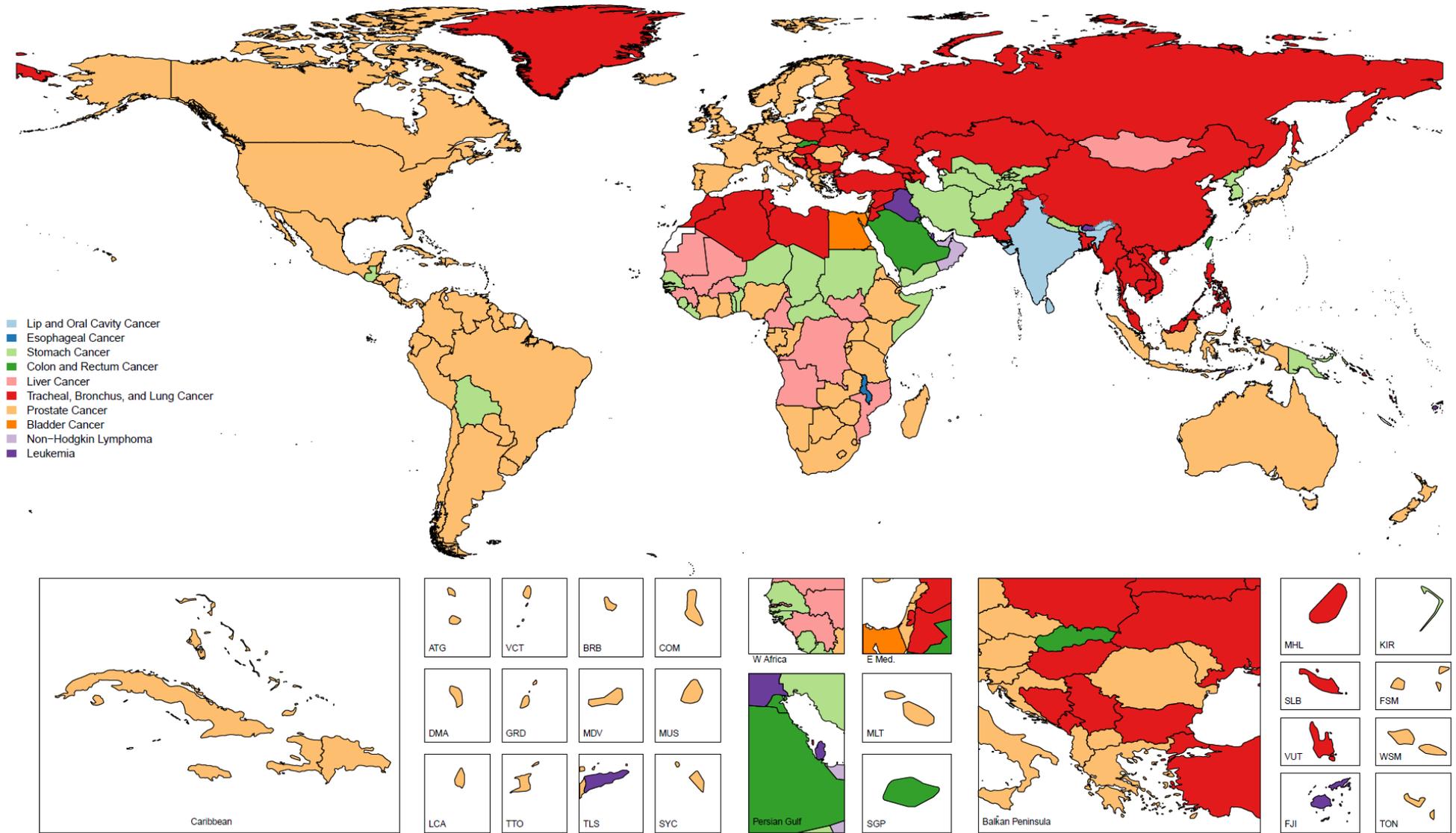
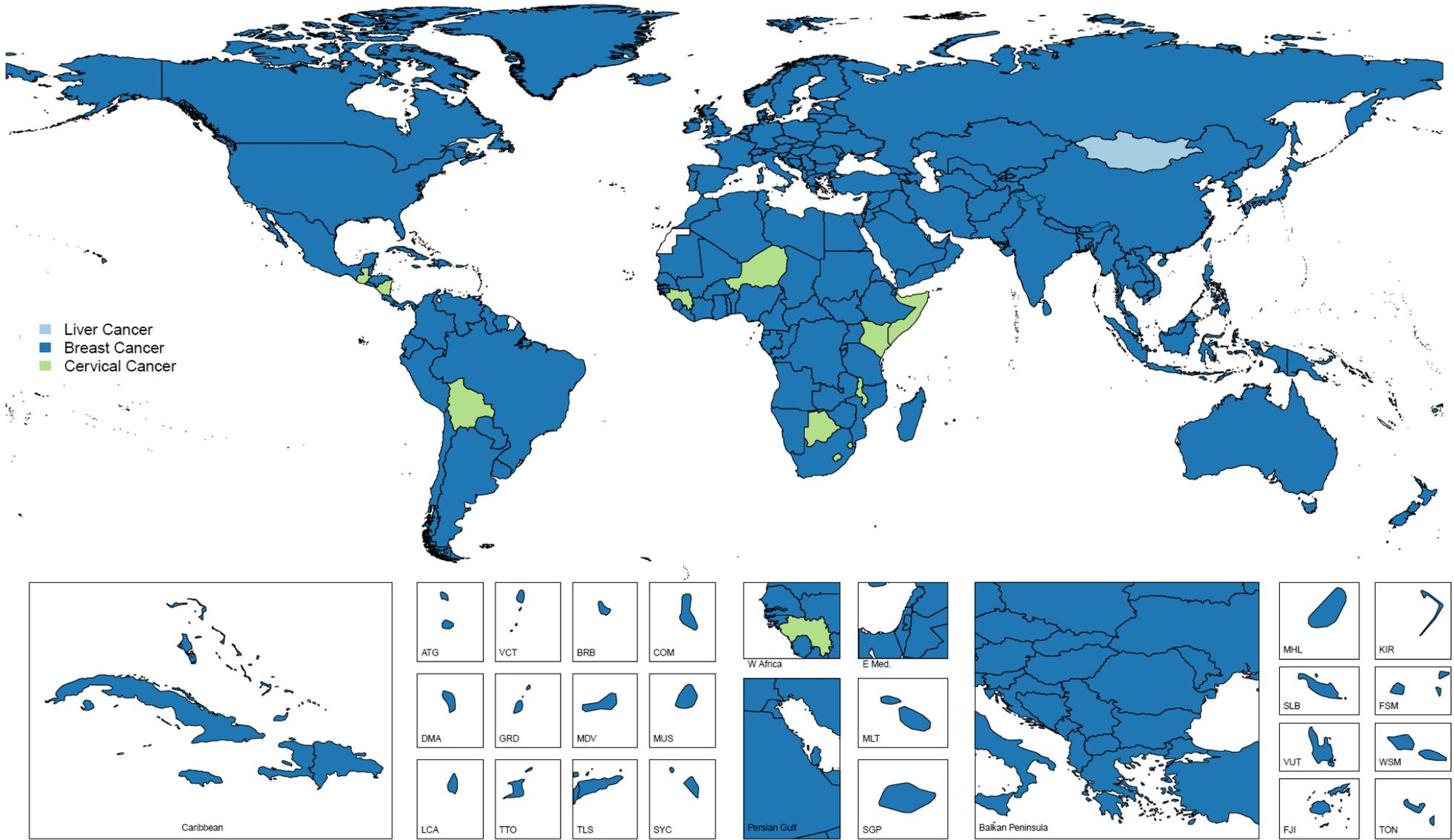
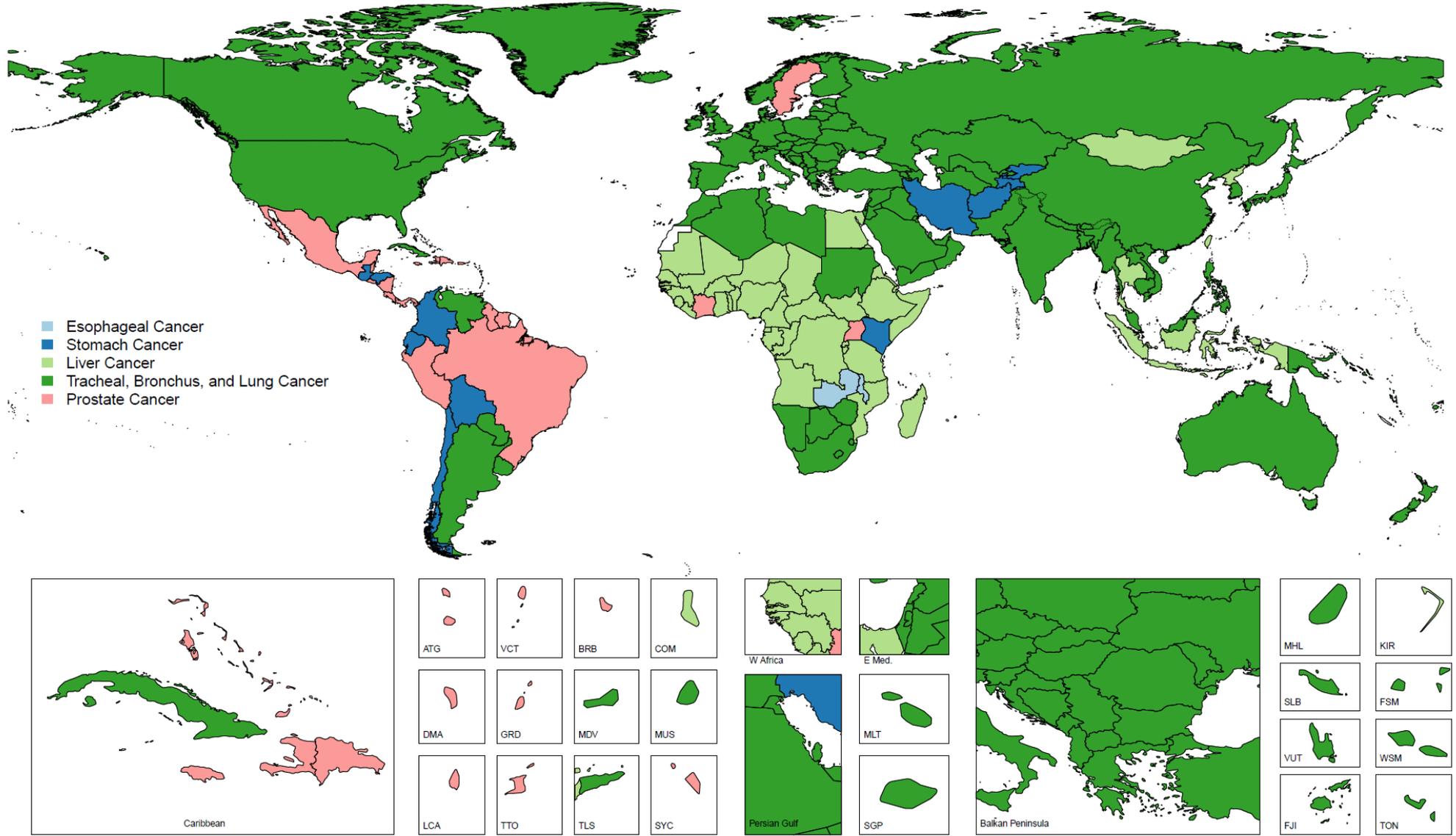


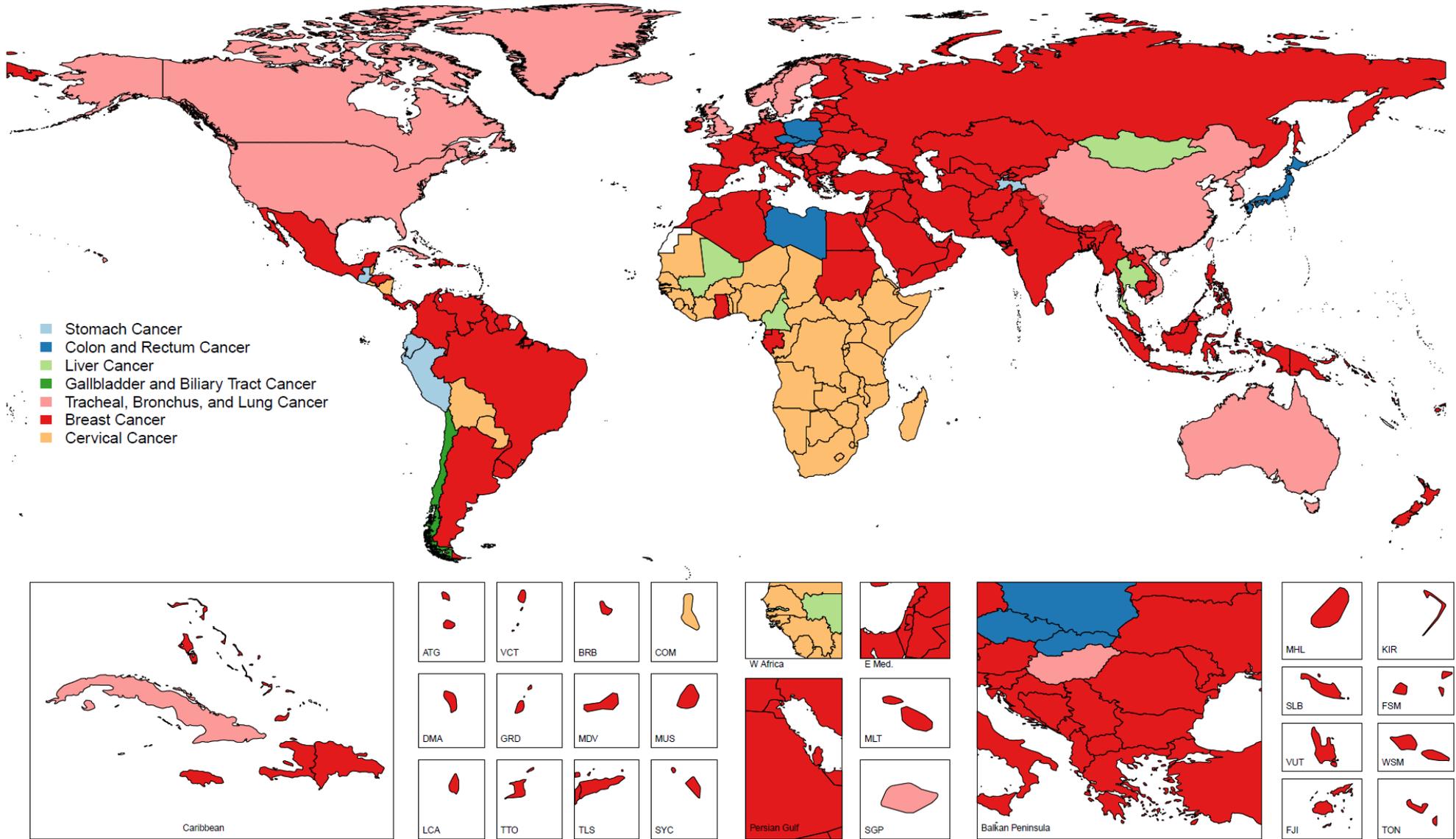
Figure 9: Top ranked cancers by absolute incident cases for all ages in males, 2015



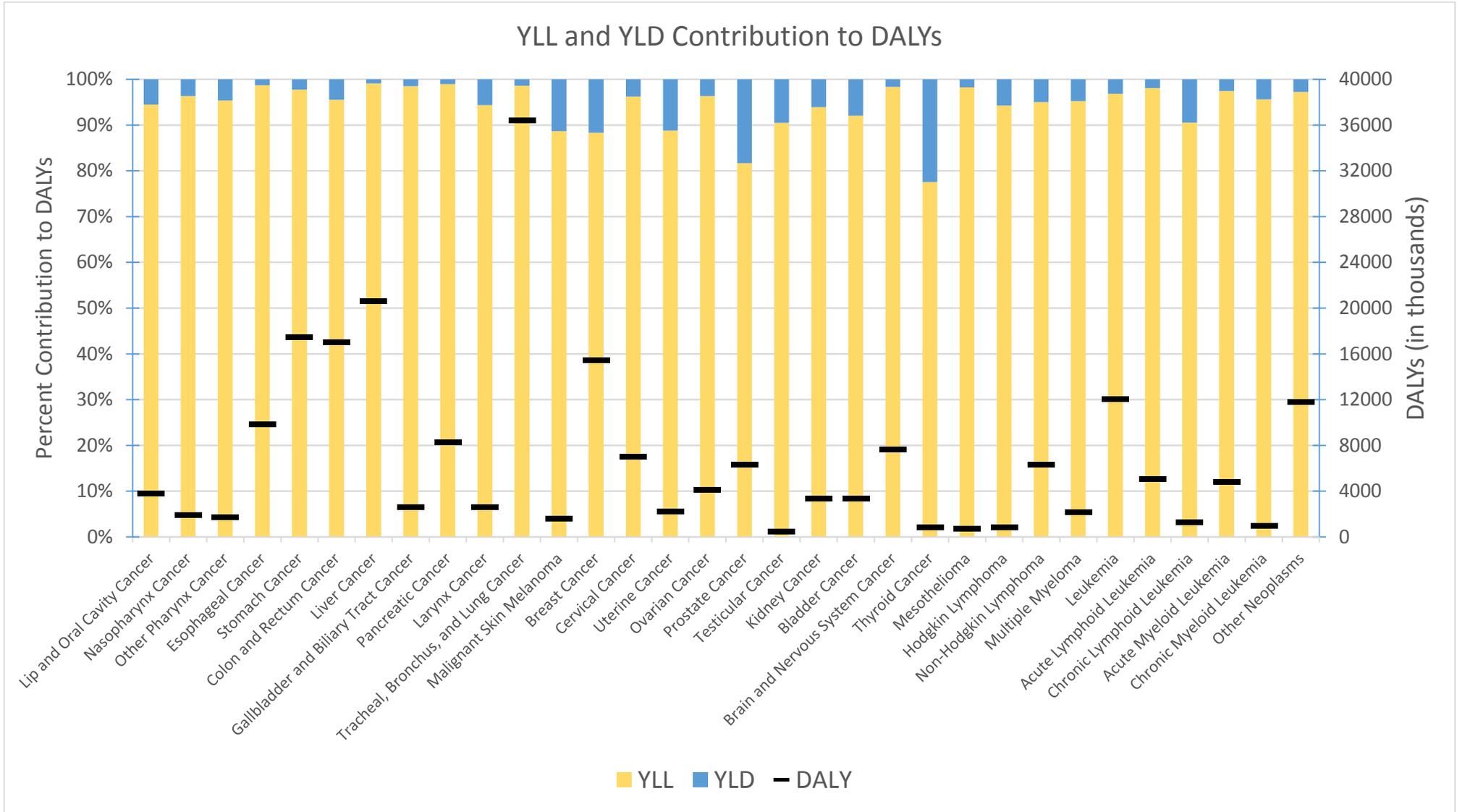
eFigure 10: Top ranked cancers by absolute incident cases for all ages in females, 2015



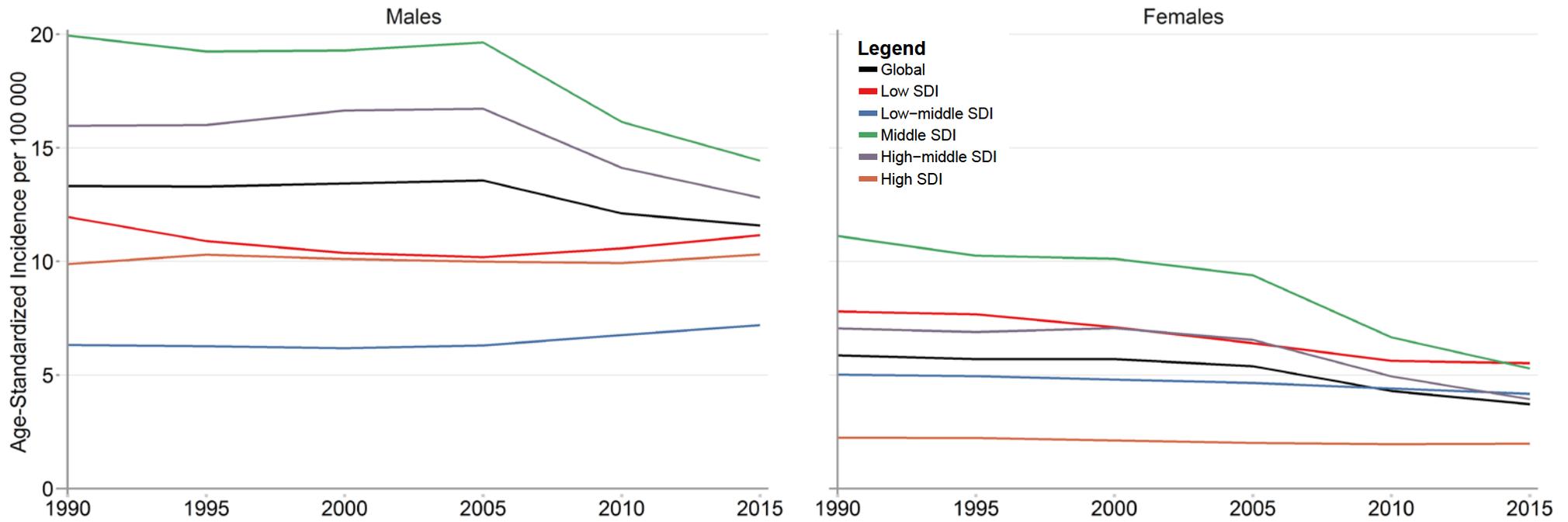
eFigure 11: Top ranked cancers by absolute deaths for all ages in males, 2015



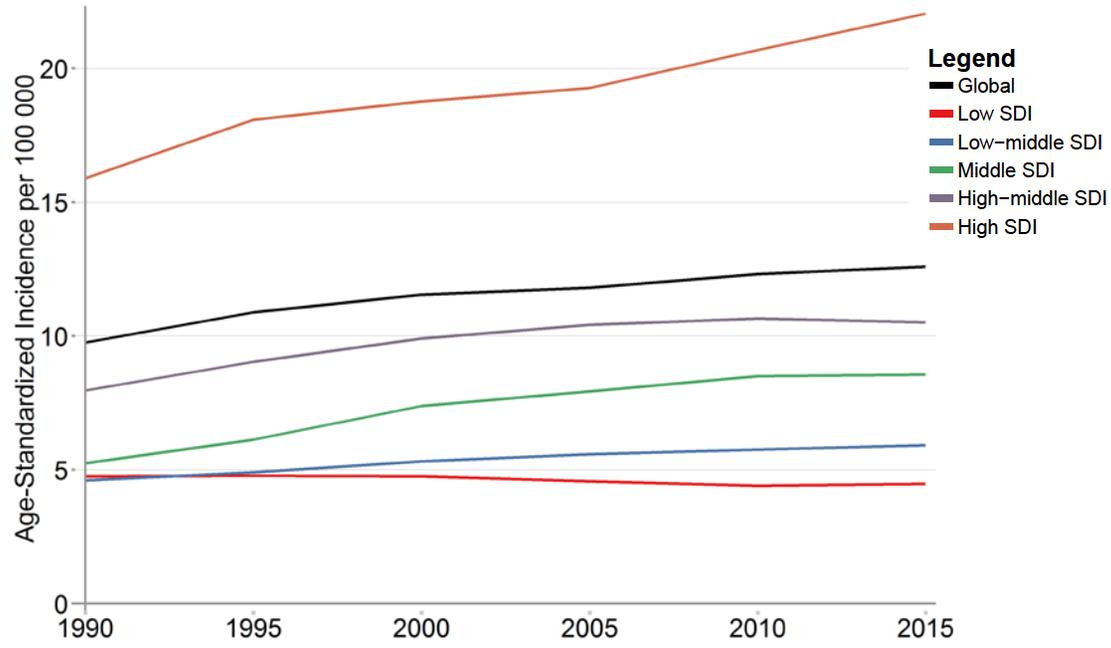
eFigure 12: Top ranked cancers by absolute deaths for all ages in females, 2015



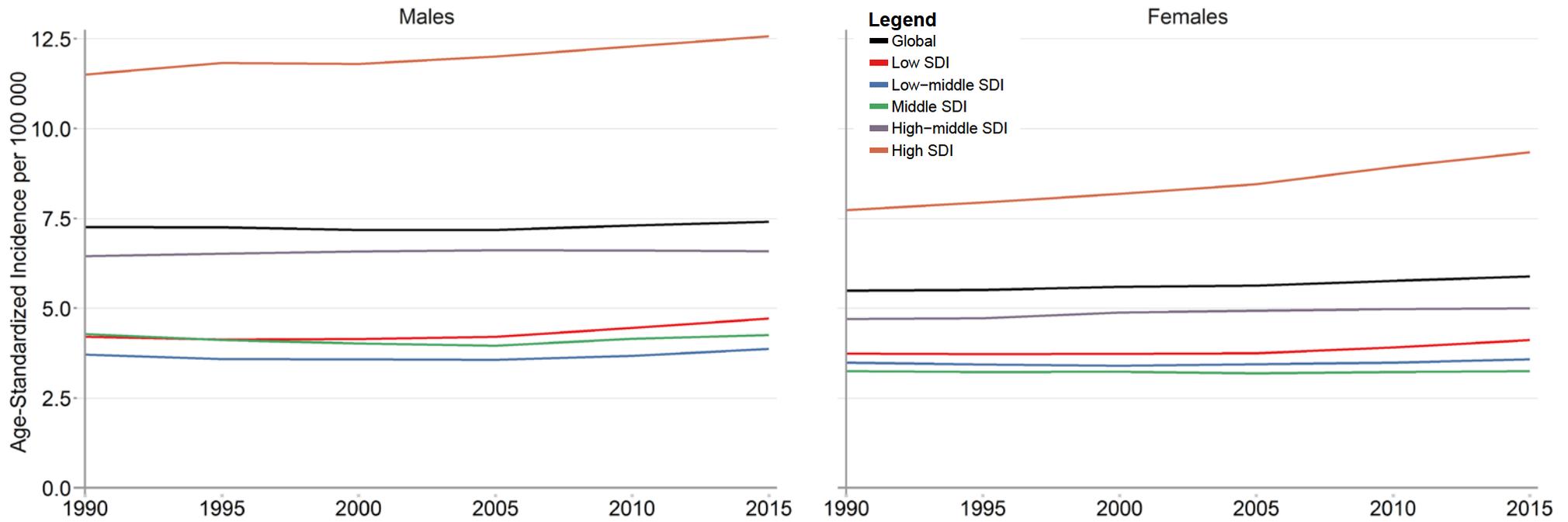
eFigure 13: Contribution of YLDs and YLLs to DALYs by cancer, global, both sexes, 2015



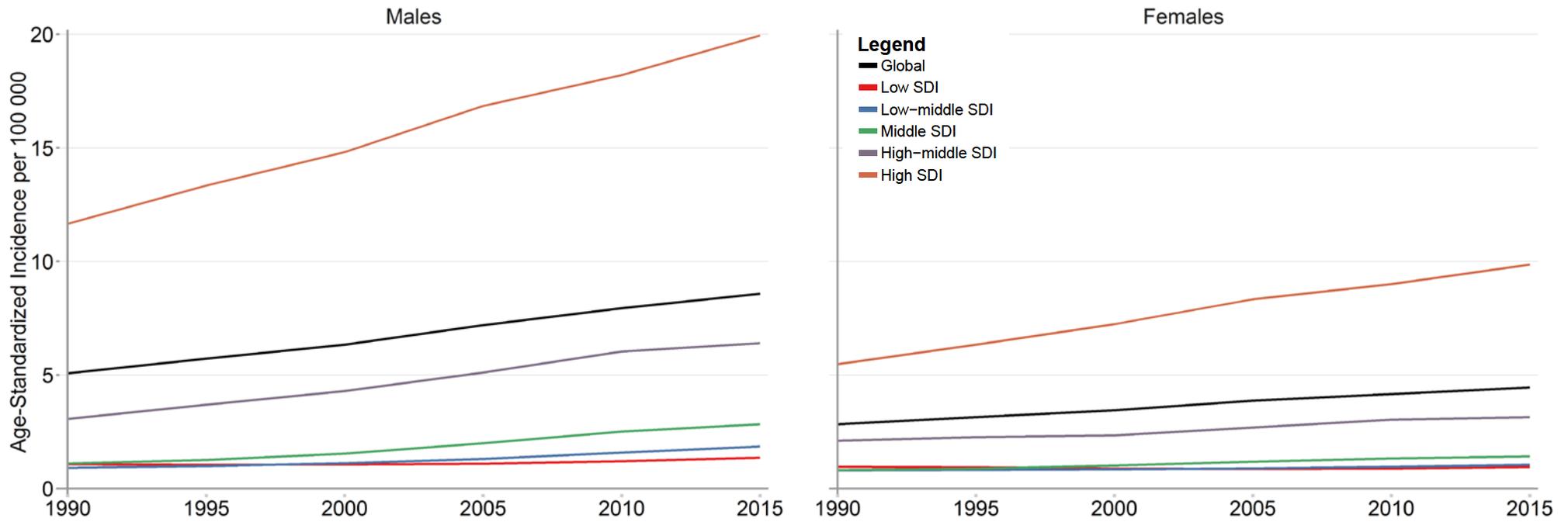
eFigure 14: Trends in Age-Standardized Incidence Rates for Esophageal Cancer, 1990-2015



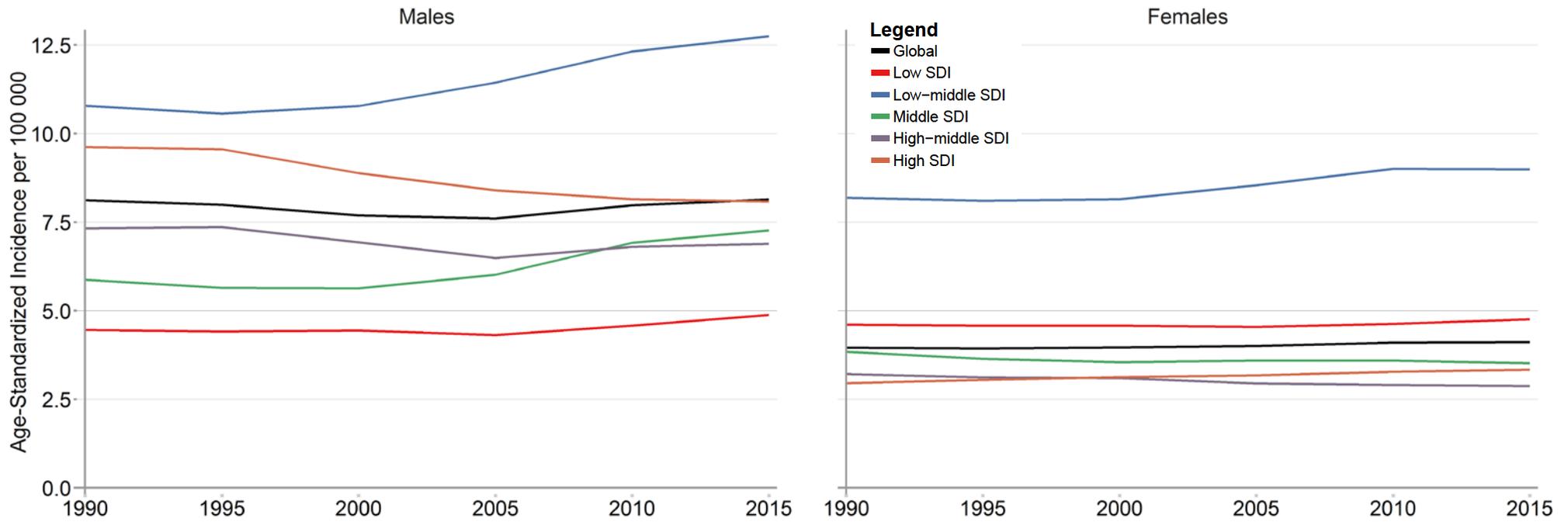
eFigure 15: Trends in Age-Standardized Incidence Rates for Uterine Cancer, 1990-2015



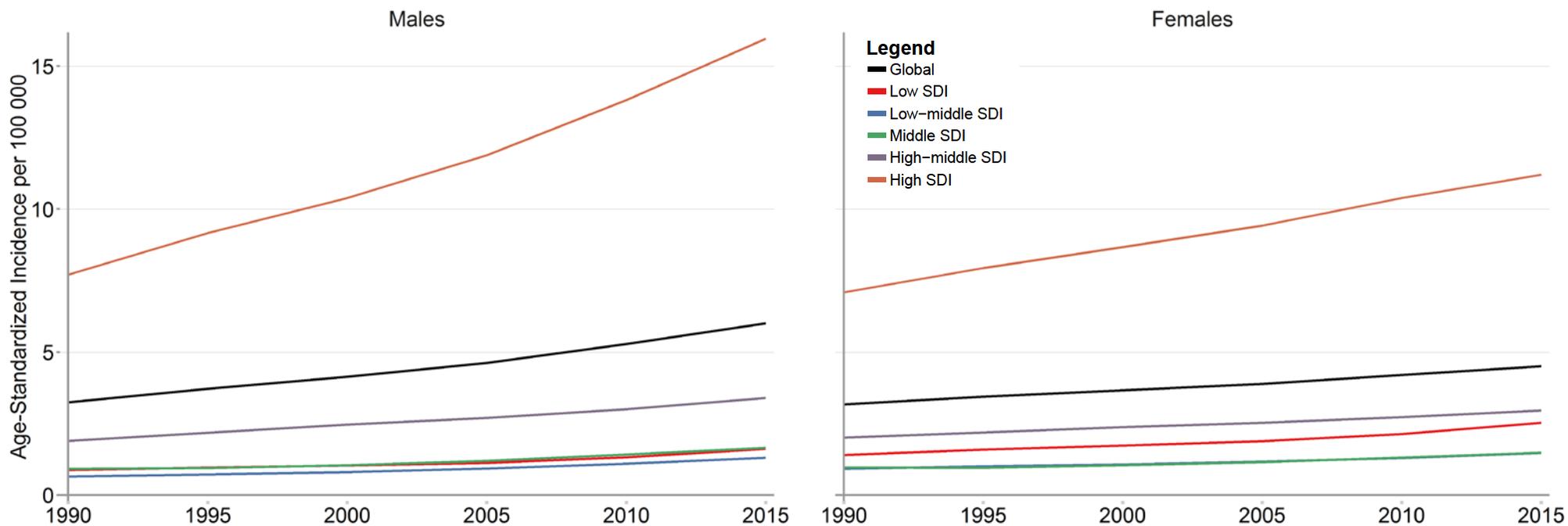
eFigure 16: Trends in Age-Standardized Incidence Rates for Pancreatic Cancer, 1990-2015



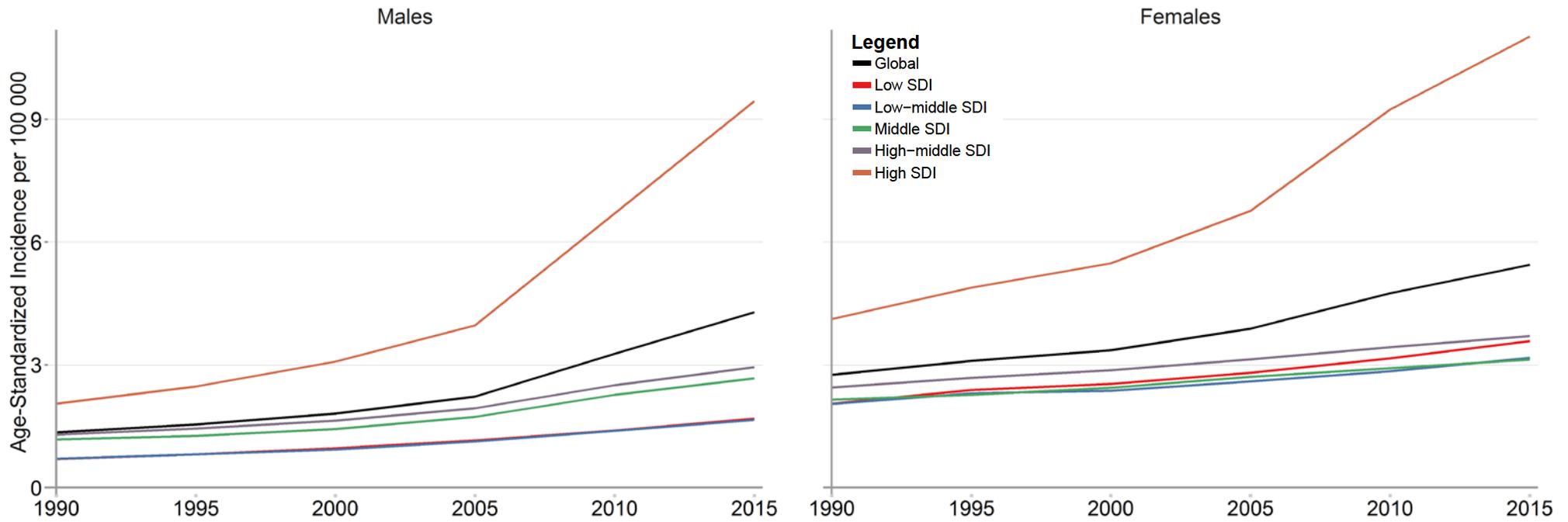
eFigure 17: Trends in Age-Standardized Incidence Rates for Kidney Cancer, 1990-2015



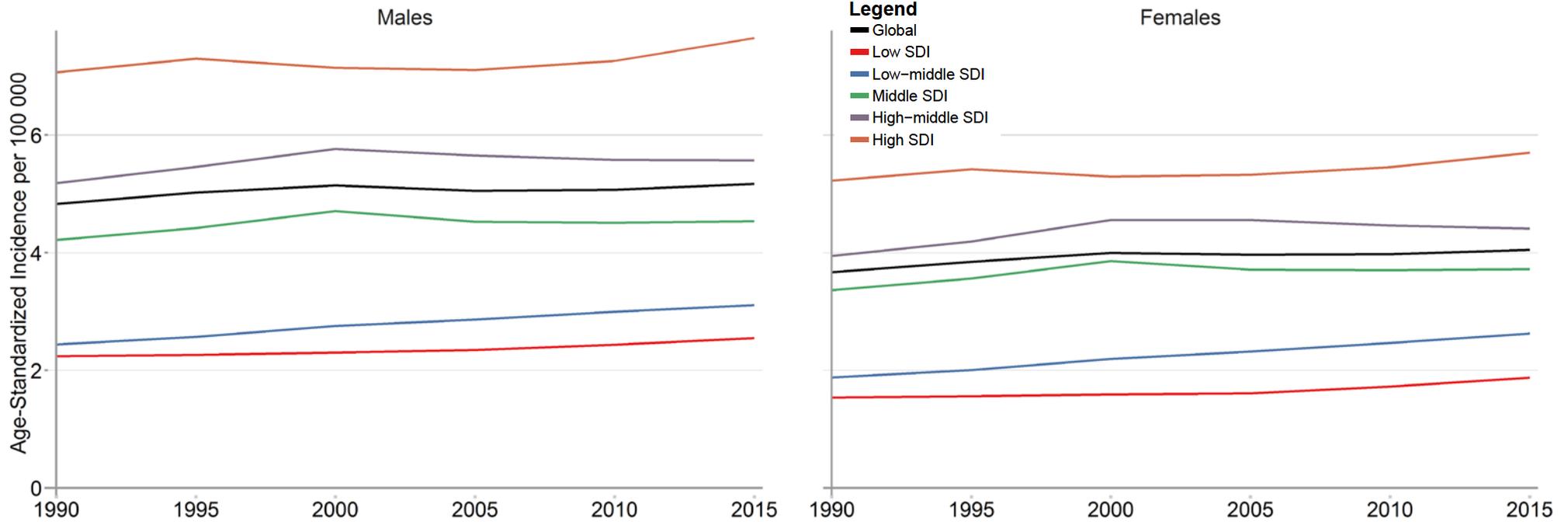
eFigure 18: Trends in Age-Standardized Incidence Rates for Lip, and Oral Cavity Cancer, 1990-2015



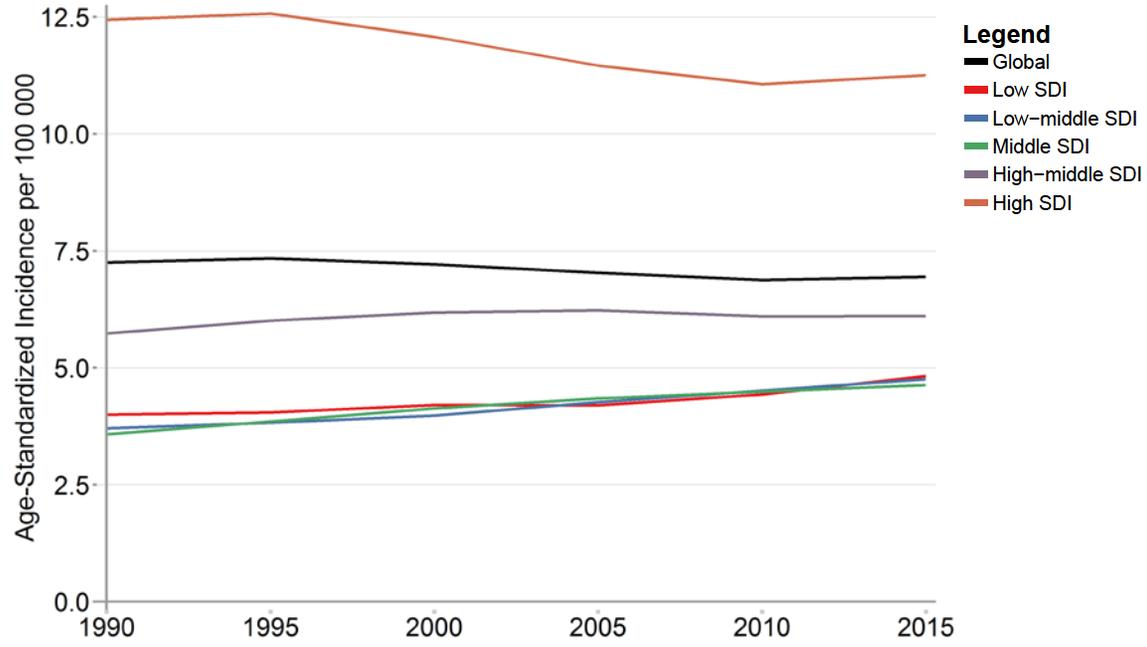
eFigure 19: Trends in Age-Standardized Incidence Rates for Malignant Melanoma, 1990-2015



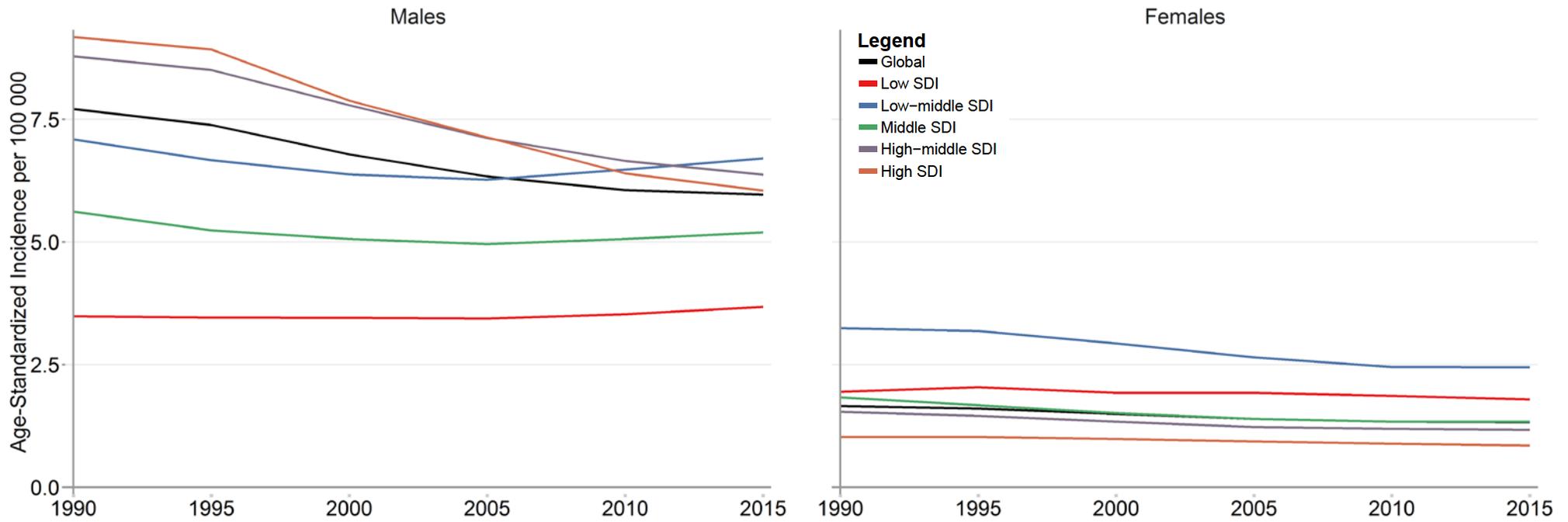
eFigure 20: Trends in Age-Standardized Incidence Rates for Thyroid cancer, 1990-2015



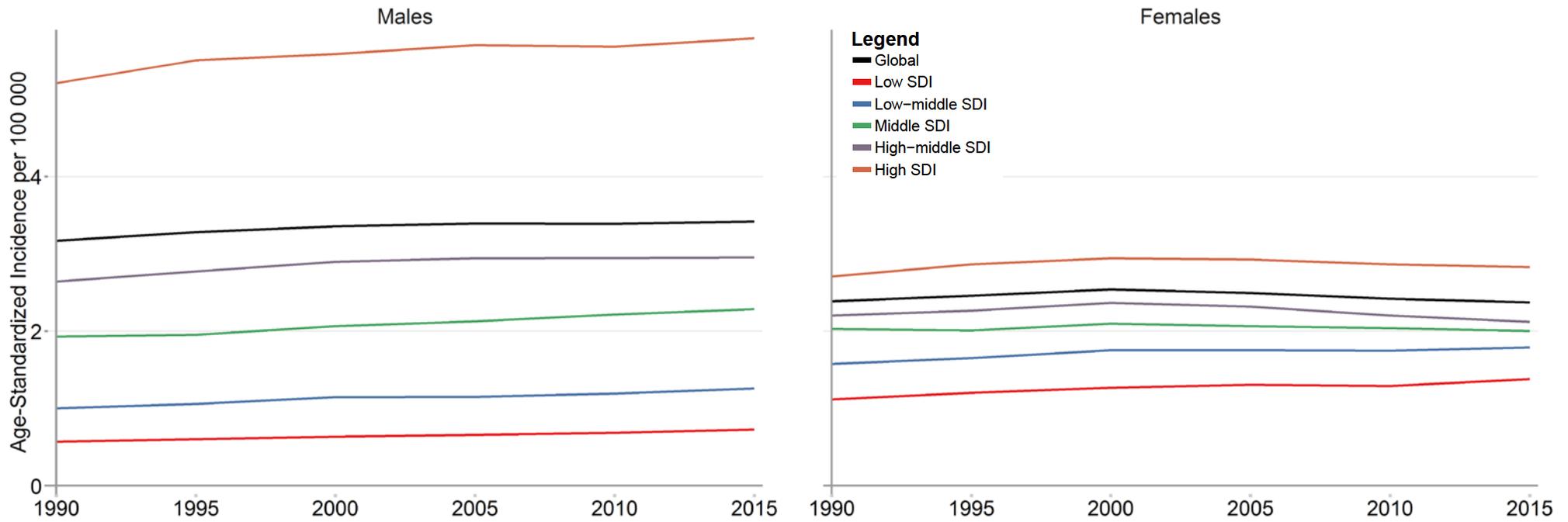
eFigure 21: Trends in Age-Standardized Incidence Rates for Brain and Nervous System Cancer, 1990-2015



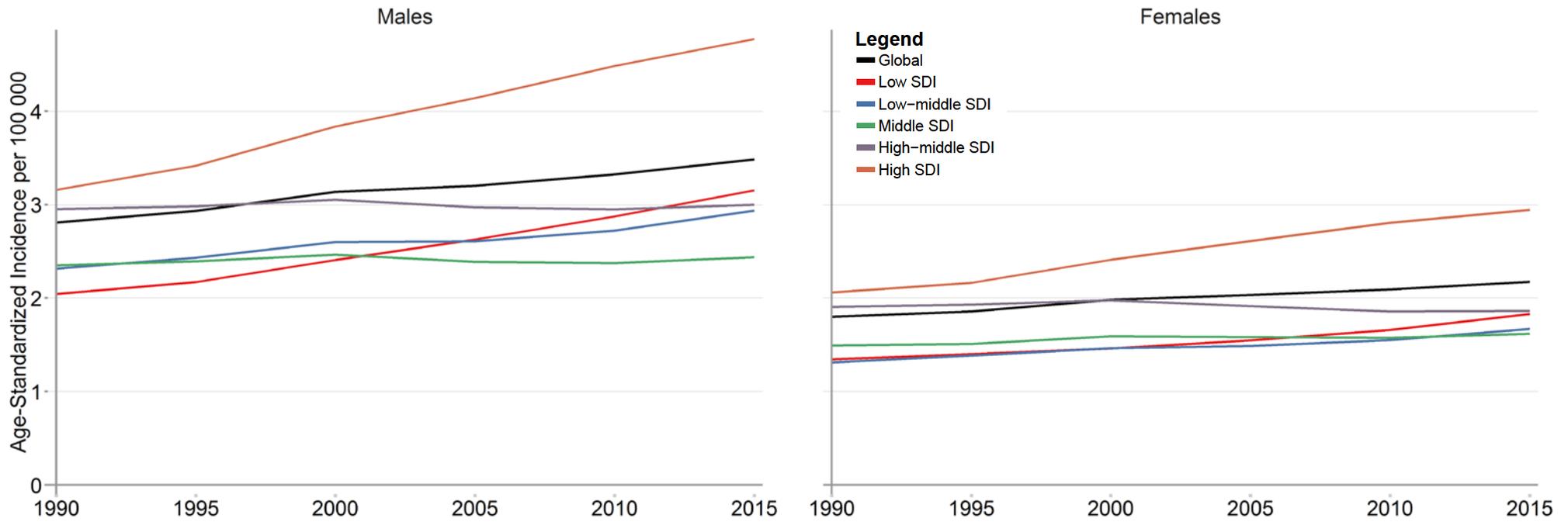
eFigure 22: Trends in Age-Standardized Incidence Rates for Ovarian Cancer, 1990-2015



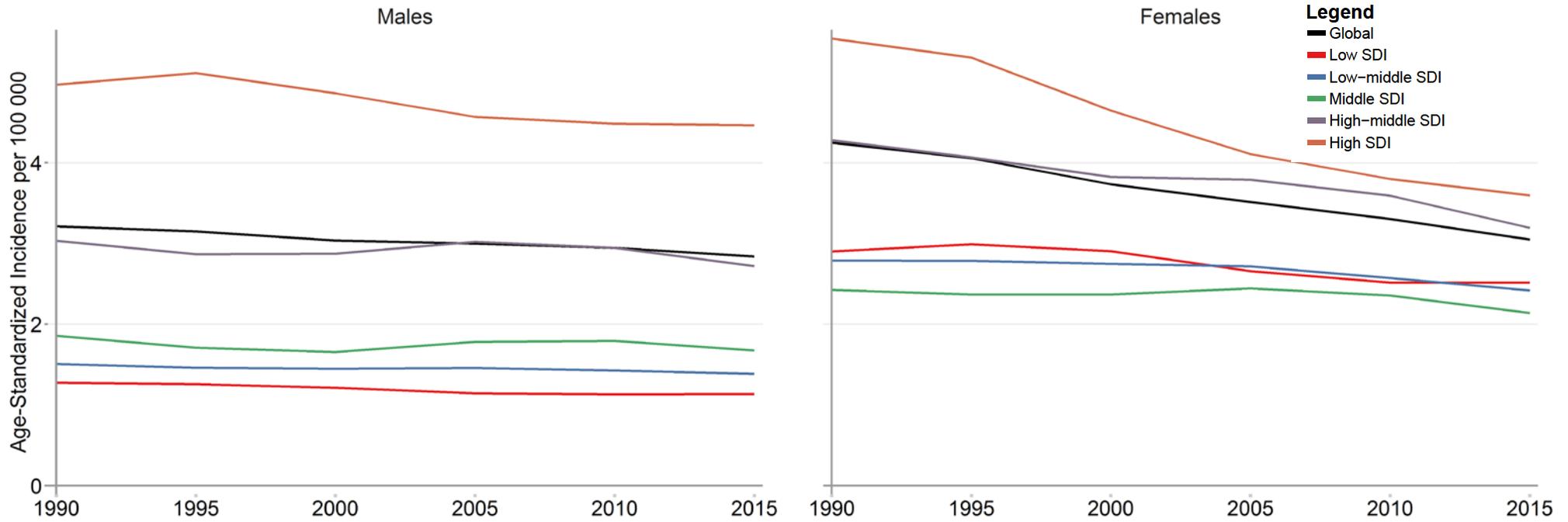
eFigure 23: Trends in Age-Standardized Incidence Rates for Larynx Cancer, 1990-2015



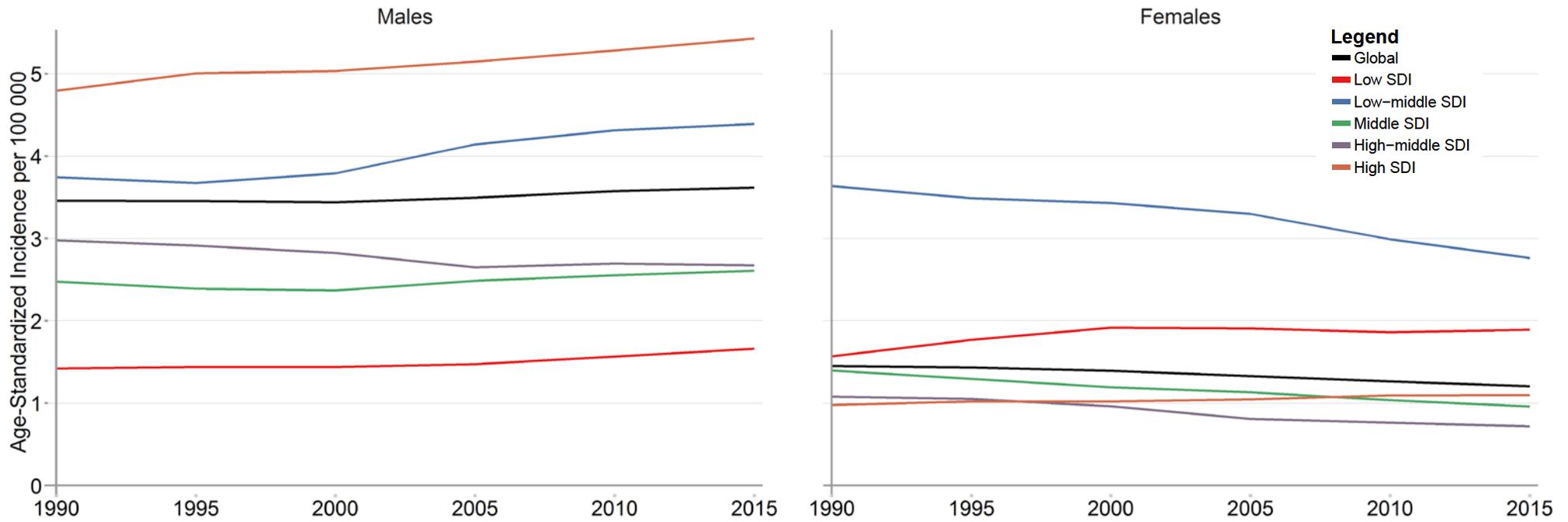
eFigure 24: Trends in Age-Standardized Incidence Rates for Chronic Lymphoid Leukemia, 1990-2015



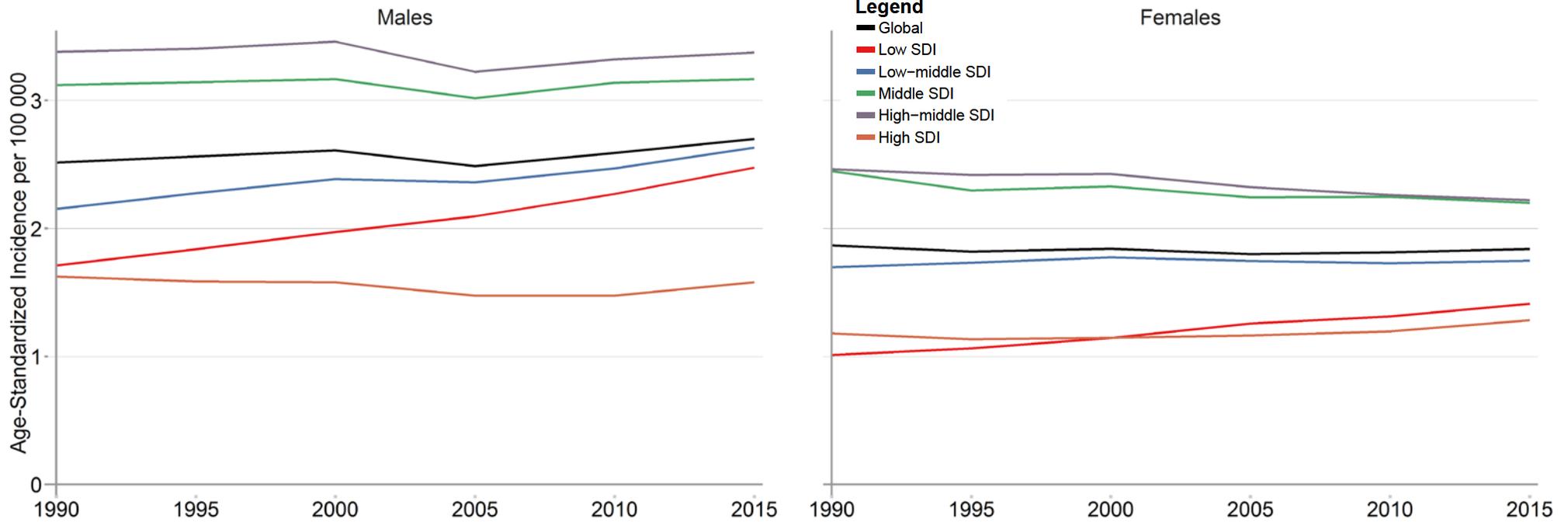
eFigure 25: Trends in Age-Standardized Incidence Rates for Acute Myeloid Leukemia, 1990-2015



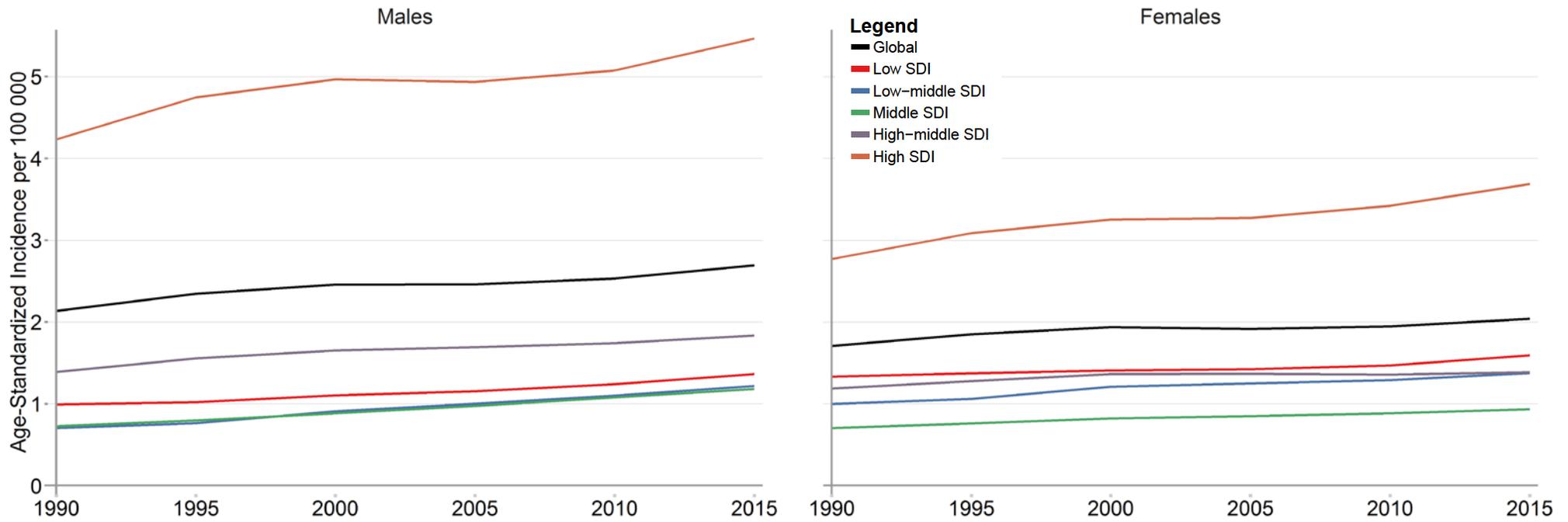
eFigure 26: Trends in Age-Standardized Incidence Rates for Gallbladder and Biliary Tract Cancer, 1990-2015



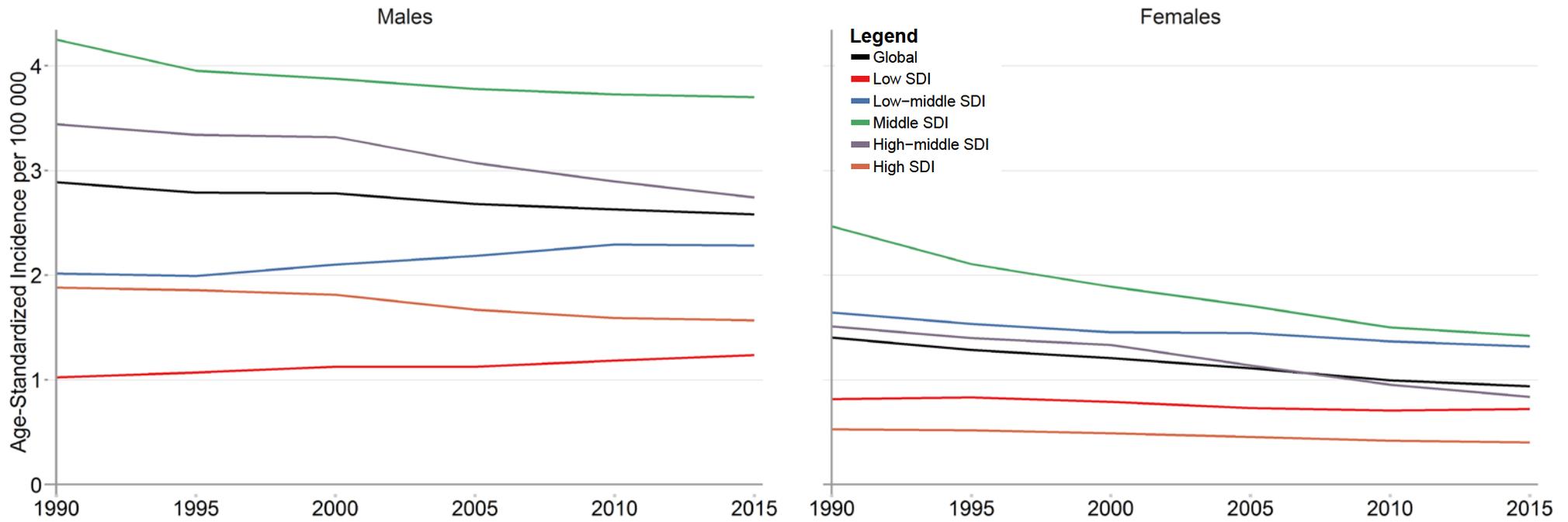
eFigure 27: Trends in Age-Standardized Incidence Rates for Other Pharynx Cancer, 1990-2015



eFigure 28: Trends in Age-Standardized Incidence Rates for Acute Lymphoid Leukemia, 1990-2015

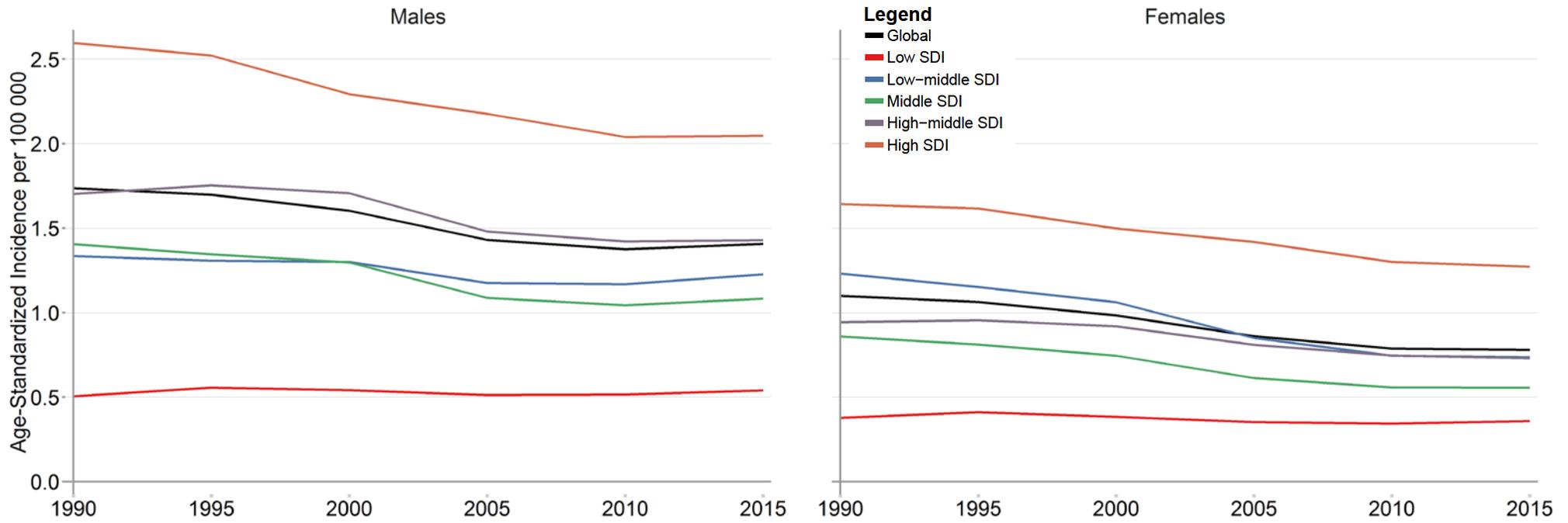


eFigure 29: Trends in Age-Standardized Incidence Rates for Multiple Myeloma, 1990-2015



eFigure 30: Trends in Age-Standardized Incidence Rates for Nasopharynx Cancer, 1990-2015

240



eFigure 31: Trends in Age-Standardized Incidence Rates for Hodgkin Lymphoma, 1990-2015

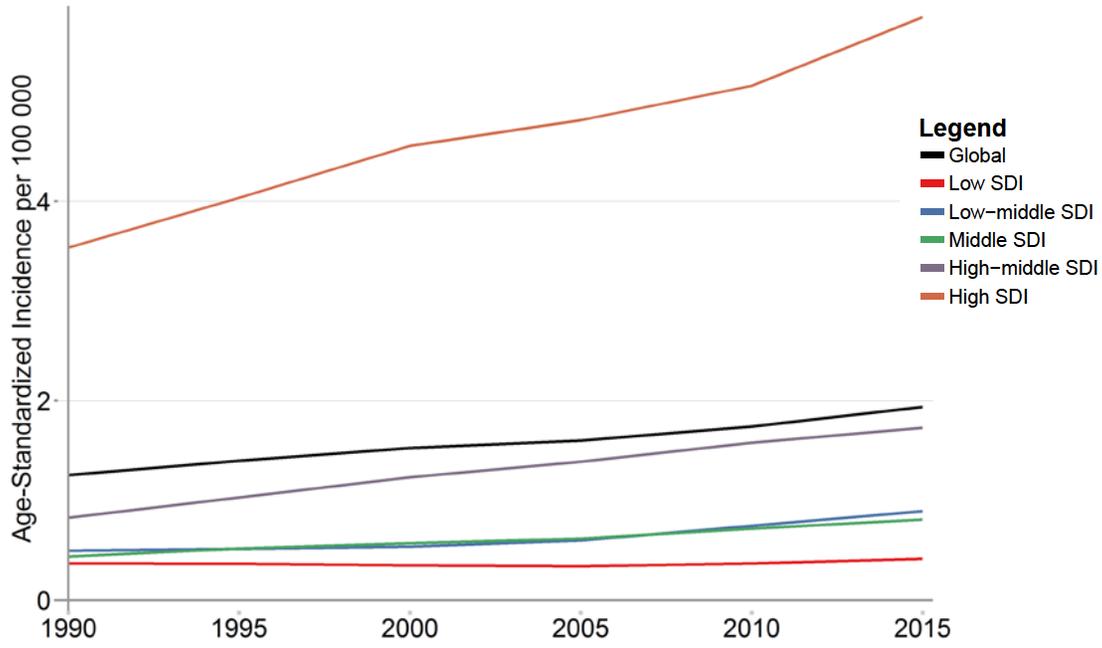
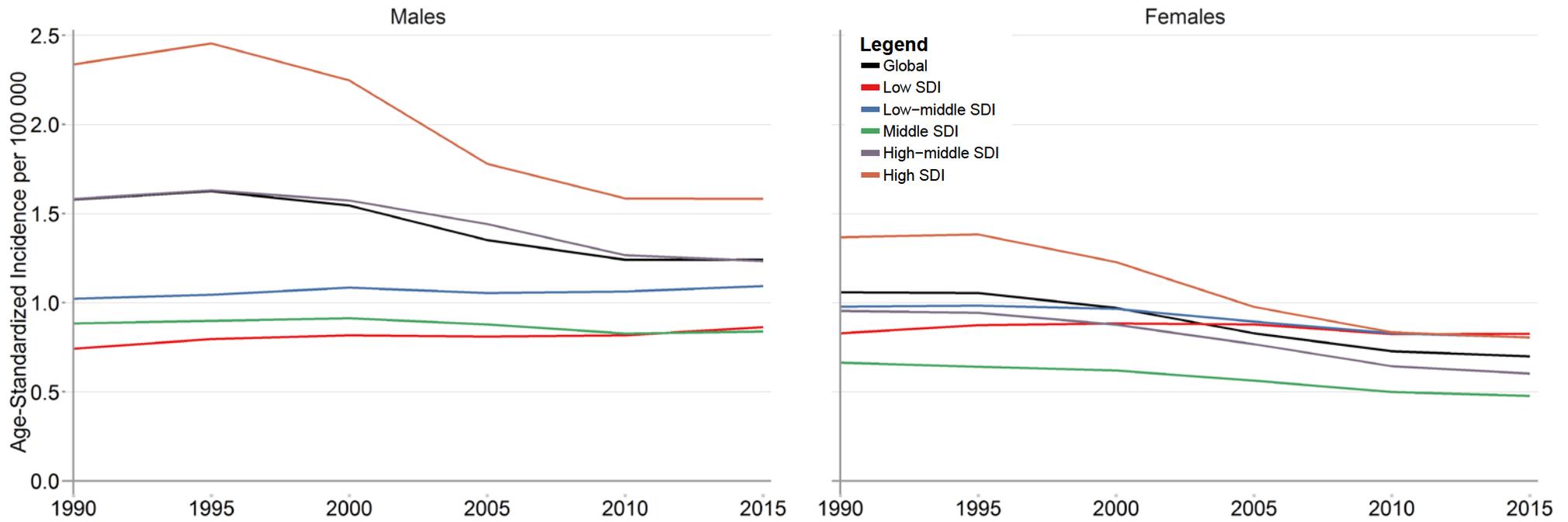
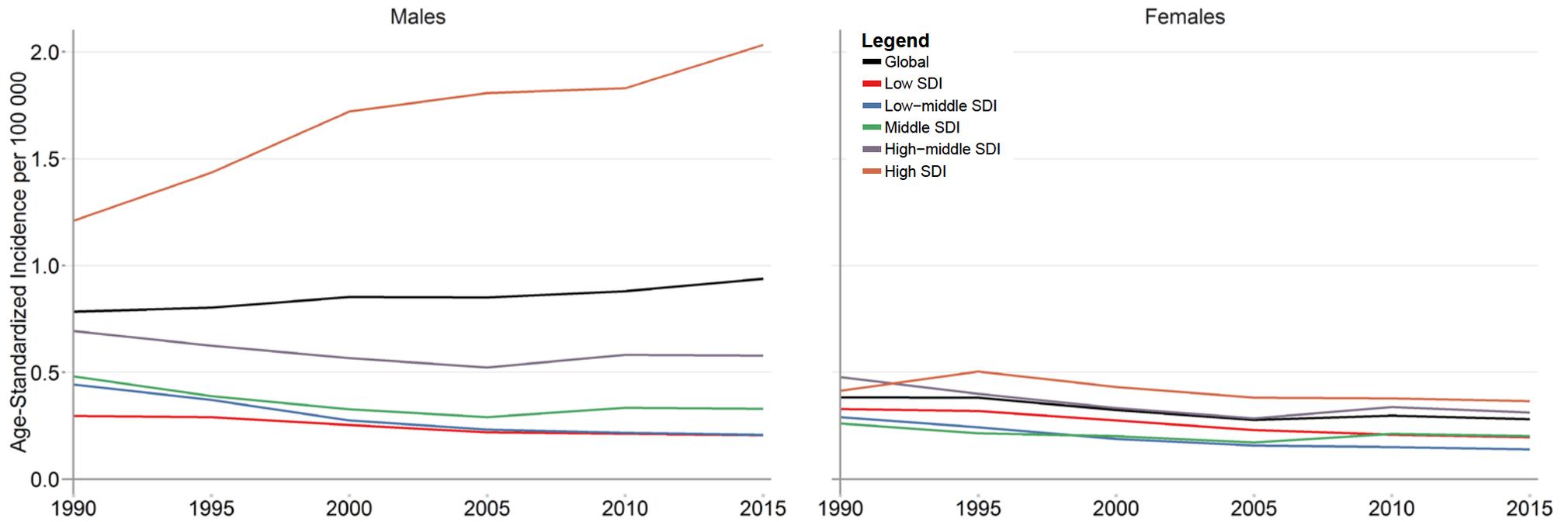


Figure 32: Trends in Age-Standardized Incidence Rates for Testicular Cancer, 1990-2015



eFigure 33: Trends in Age-Standardized Incidence Rates for Chronic Myeloid Leukemia, 1990-2015



eFigure 34: Trends in Age-Standardized Incidence Rates for Mesothelioma, 1990-2015

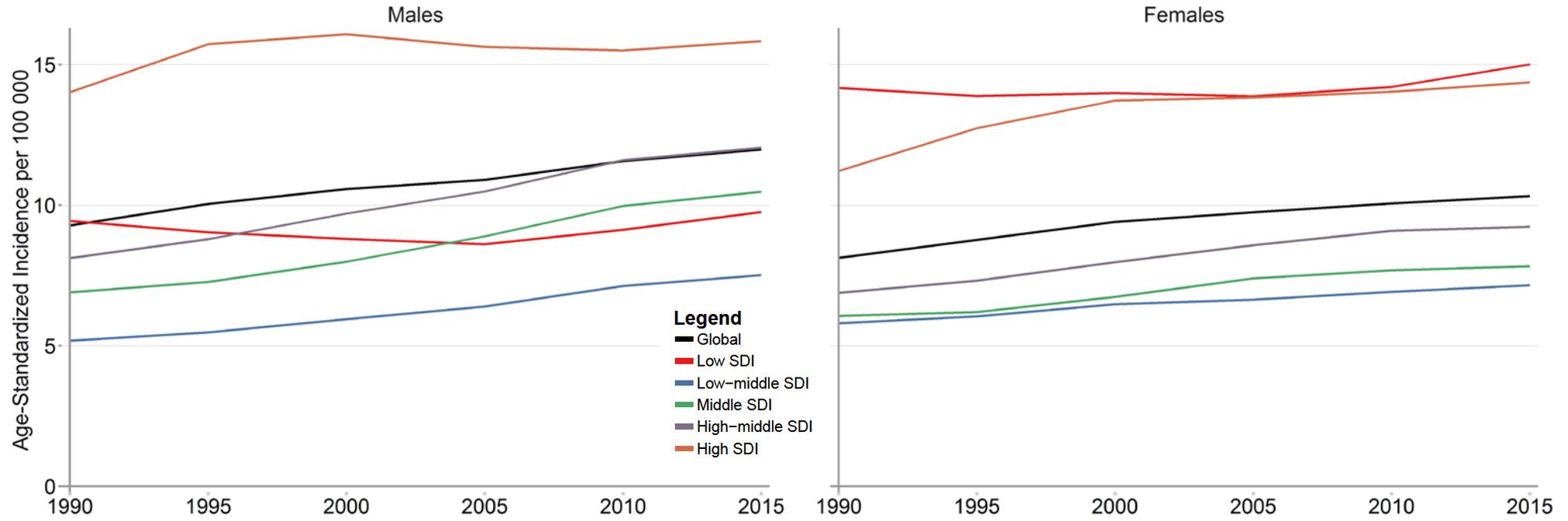


Figure 35: Trends in age-standardized incidence rates, other cancers, 1990–2015