Supplementary



Figure S1 Kaplan-Meier curves without adjustment for other covariates.



Figure S2 (Continue) Kaplan-Meier curves without adjustment for other covariates.



Figure S3 Overfitting-corrected calibration plot with Efron's bootstrap and with 500 resamples and at least 4,500 patients per interval. Solid blue line represents bias-corrected calibration. Dashed dot line represents the perfect calibration in which predicted outcome corresponds perfectly with actual ones.

Suicide/Injury	• 1.21	• 2.28	• 1.01	• 0.85	• 4.12
Stomach C	• 0.99	• 1.04	• 0.01	• 0.61	• 1.93
Septicemia	• 0.17	• 0.23	• 0.17	• 0.14	• 0.01
Pneumonia/Influenza	• 1.95	• 1.13	• 1.99	• 1.38	• 1.19
Oth Respir C	• 1.07	• 0.66	• 2.23	• 3.07	• 3.52
Oth Dis	• 7.68	20.00	• 11.64	• 3.40	• 0.01
Oth Dig C	• 0.97	• 1.12	• 0.91	• 0.94	• 1.67
Oth C2	• 0.52	• 0.55	• [1.51]	• [1.25]	• 0.01
Oth C1	• 0.99	• 0.38	• 0.46	• 0.39	
Oral/Pharynx C	• 2.04	• 6.07	• 2.44	• 2.23	20.00
Nephropathy	20.00	6.47	12.18	15.54	• 4.51
MMC	• [1.56]	• 0.49	• 0.68	• 0.32	• 0.01
Male genital C	• 1.26	• 1.61	• 2.07	• 2.11	• 1.28
Lung C	• 1.00	• 0.68	• 0.83	• 1.45	• 0.01
Leukemia/Lymphoma	• 1.81	• 1.65	• 2.07	• 1.91	• 1.54
Ö HIV/OIPD	• 0.56	• 0.01	• 1.55	• 0.68	
HD	• 0.64	• 1.26	• 2.09	• 1.99	20.00
Female genital C	• 1.01	• 0.98	• 1.03	• 0.98	• 0.56
Esophagus C	• 0.76	• 0.69	• 0.60	• 0.91	• 0.01
DM	• 1.09	• 1.05	• 1.04	• 0.95	• 1.15
DC/Non-COD	• 0.90	• 0.60	• 0.65	• 1.99	
CVA	• 2.37	• 1.47	• 1.16	• 2.91	• 0.01
COPD	• 1.15	• 1.16	• 0.57	• 1.42	• 1.31
CLD/Cirrhosis	• 0.84	• 1.15	• 1.26	• 0.94	• 2.54
AD	• 1.41	• 2.44	• 0.96	• 0.14	
Accidents/AEs	• 0.01	• 0.16	• 0.57	• 0.47	• 0.01
AAD/OAD	• 1.53	• 0.56	• 1.77	• 1.08	• 2.05
	1995-1999	2000-2004	2005-2009	2010-2014	2015-2016
			Year of diagnosis		

Figure S4 Change of the adjusted subdistribution hazard ratio (SDHR) over time to year of diagnosis. Esophagua C, Esophageal cancer; HD, diseases of heart; Stomach C, stomach cancer; Oth Dis, other diseases (non-cancer) of death, including unknown behavior neoplasm, tuberculosis, syphilis, hypertension without heart disease, stomach and duodenal ulcers, complications of pregnancy, childbirth, puerperium, congenital anomalies, certain conditions originating in perinatal period, symptoms, signs and ill-defined conditions, homicide and legal intervention; MMC, miscellaneous malignant cancer, including mesothelioma and kaposi sarcoma; Lung C, lung cancer; COPD, chronic obstructive pulmonary disease; Oth Dig C, other digestive system cancer, including small intestine, colon, rectum, anus, anal canal, anorectum and others; DC/non-COD, state DC not available or state DC available but no cause of death; CVA, cerebrovascular diseases; Female genital C, female genital cancer; Oral/Pharynx C, oral/pharynx cancer; AAD/OAD, atherosclerosis, aortic aneurysm and dissection, and other diseases of arteries, arterioles, capillaries; Male genital C, male genital cancer; Oth C1, bones and joints, soft tissue (including heart), skin system cancer and myeloma; DM, diabetes mellitus; Other Respir C, other respiratory system cancer, including larynx and others; CLD/Cirrhosis, chronic liver disease and cirrhosis; AD, Alzheimer's disease; Oth C2, eye, orbit, endocrine brain and other nervous system cancer, and Urinary C, urinary cancer.



Figure S5 The age at diagnosis-specific COS according to histology type given patients that have survived 36 months, with an adjustment for sex, ethnicity, marital status, tumor grade and stage, location, year of diagnosis, and treatment modalities.



Figure S6 The sex-specific COS according to histology type given patients that have survived 36 months, with an adjustment for age at diagnosis, ethnicity, marital status, tumor grade and stage, location, year of diagnosis, and treatment modalities.



Figure S7 The Surgery-specific COS according to histology type given patients that have survived 36 months, with an adjustment for age at diagnosis, sex, ethnicity, marital status, tumor grade and stage, location, year of diagnosis, and other treatment modalities, including chemotherapy and radiation therapy.



Figure S8 The ethnicity-specific COS according to histology type given patients that have survived 36 months, with an adjustment for age at diagnosis, sex, marital status, tumor grade and stage, location, year of diagnosis, and treatment modalities.



Figure S9 The marital status-specific COS according to histology type given patients that have survived 36 months, with an adjustment for age at diagnosis, sex, ethnicity, tumor grade and stage, location, year of diagnosis, and treatment modalities.



Figure S10 The tumor grade-specific COS according to histology type given patients that have survived 36 months, with an adjustment for age at diagnosis, sex, ethnicity, marital status, tumor stage and location, year of diagnosis, and treatment modalities.



Figure S11 The tumor stage-specific COS according to histology type given patients that have survived 36 months, with an adjustment for age at diagnosis, sex, ethnicity, marital status, tumor grade and location, year of diagnosis, and treatment modalities.



Figure S12 The year of diagnosis-specific COS according to histology type given patients that have survived 36 months, with an adjustment for age at diagnosis, sex ethnicity, marital status, tumor grade and stage, location, and treatment modalities.



Figure S13 The year of diagnosis- and esophageal cancer-specific conditional survival according to histology type given patients that have survived 36 months, with an adjustment for age at diagnosis, sex, ethnicity, marital status, tumor grade and stage, location, and treatment modalities.



Figure S14 The age at diagnosis- and esophageal cancer-specific conditional survival according to histology type given patients that have survived 36 months, with an adjustment for sex, ethnicity, marital status, tumor grade and stage, location, year of diagnosis, and treatment modalities.



Figure S15 The sex- and esophageal cancer-specific conditional survival according to histology type given patients that have survived 36 months, with an adjustment for age at diagnosis, ethnicity, marital status, tumor grade and stage, location, year of diagnosis, and treatment modalities.



Figure S16 The tumor grade- and esophageal cancer-specific conditional survival according to histology type given patients that have survived 36 months, with an adjustment for age at diagnosis, sex, ethnicity, marital status, tumor stage and location, year of diagnosis, and treatment modalities.



Figure 17 The tumor stage- and esophageal cancer-specific conditional survival according to histology type given patients that have survived 36 months, with an adjustment for age at diagnosis, sex, ethnicity, marital status, tumor grade and location, year of diagnosis, and treatment modalities.



Figure 18 The surgery- and esophageal cancer-specific conditional survival according to histology type given patients that have survived 36 months, with an adjustment for age at diagnosis, sex, ethnicity, marital status, tumor grade and stage, location, year of diagnosis, and other treatment modalities, including chemotherapy and radiation therapy.