

Supplementary Material

# Platelet Count and Survival after Cancer

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**Table S1.** Description of administrative datasets used.

Datasets	Years used	Description of use
Population and demographics		
Client Agency Program Enrollment (CAPE)	1999–2016	The CAPE dataset indicates an Ontario resident’s enrollment to a primary care/ family doctor along with a start and end date of the enrollment.
		The CAPE dataset was used to determine what individuals in the cohort were rostered to a primary care physician on the index date.
Immigration, Refugees and Citizenship Canada Permanent Resident Database (CIC)	1985–2016	The CIC dataset includes immigration application records for individuals in Ontario.
		The CIC dataset was used to capture immigration status among individuals in the cohort. The landing date was used to further classify an individual as a recent immigrant ( $\leq 10$ years from index date) or past immigrant ( $>10$ years from index date).
Office of the Registrar General – Deaths (ORGD)	2007–2017	The ORGD dataset contains cause of death information for Ontario residents.
		The ORGD dataset was used to derive cancer-specific or non-specific death for individuals in the cohort that had a death date in the follow-up period. The underlying cause of death variable, along with ICD-9 codes and the index cancer type were used to derive this variable.
Surname-based Ethnicity Group Database (ETHNIC)	1990–2016	The ETHNIC database is a surname-based algorithm which classifies Ontario residents as either General Population, Chinese, or South Asian <sup>1</sup> .
Registered Persons Database (RPDB)	1991–2017	The RPDB dataset provides basic demographic information on all Ontario residents registered with provincial health coverage. Demographic variables in the RPDB include date of birth, death date, sex, and postal code (updated annually). Start and end dates of provincial health coverage enrollment are also provided.
		The RPDB dataset was used to get an individual’s age (using date of birth) and sex. Neighborhood income quintile and residence location were derived from postal code information. Start and end dates for provincial health coverage (OHIP) and death date were used to determine eligibility.
Health services		
Discharge Abstract Database (DAD)	2002–2017	The DAD dataset includes patient-level data for acute care hospitalizations. The data includes clinical details for each hospitalization such as clinical diagnosis (ICD-10) and health-related interventions (CCI).

		Data from DAD was used to capture urgent inpatient hospitalization episodes, Charlson comorbidities, and historic documentation of diseases. Data from DAD was also used to identify chemotherapy or radiotherapy that occurs in an inpatient setting.
National Ambulatory Care Reporting System Database (NACRS)	2002–2017	<p>The NACRS dataset includes visits to an emergency department in Ontario. The data includes details on clinical diagnosis (ICD-10) and health-related interventions (CCI).</p> <p>Data from NACRS was used to capture unscheduled emergency department visits. The NACRS dataset also contains cancer clinic visits, which were used to identify chemotherapy and radiotherapy use.</p>
Ontario Drug Benefit Claims Database (ODB)	2005–2016	<p>The ODB dataset includes dispensed medication claims among individuals enrolled in the ODB program in Ontario. All Ontario residents 65 and older are eligible for the ODB program.</p> <p>Data from the ODB was used to determine what proportion of individuals are active in the program (i.e. have more than one claim in the year prior), capture low-income seniors, as well as capture concurrent and historic medication use.</p>
Ontario Health Insurance Plan Claims (OHIP)	1997–2017	<p>The OHIP dataset includes physician billings to the province of Ontario among residents with provincial health coverage. Each billing includes a data element on the physician ID, the physician specialty, the patient ID, a diagnostic code (ICD-9), a fee code, and the service date.</p> <p>Data from the OHIP dataset was used to obtain variables for primary care visits, specialist visits, cancer screening, cancer treatment, comorbidities, and chronic conditions.</p>
Ontario Laboratories Information System (OLIS)	2007–2017	<p>The OLIS dataset includes laboratory test results among tests being conducted in Ontario.</p> <p>The data was used to acquire a dataset of complete blood count (CBC) tests among Ontario residents in the accrual period. These CBC tests were used for exclusions and the exposure definition.</p>
Same Day Surgery (SDS)	2002–2017	<p>The SDS dataset contains patient-level information on same day surgeries, with a similar format to the DAD data.</p> <p>Data from the SDS data was used to assign Charlson comorbidities, chemotherapy and radiotherapy.</p>
<i>Registries</i>		
Cancer Activity Level Reporting (ALR)	2005–2017	<p>The ALR dataset includes patient-level activity among cancer patients.</p> <p>The dataset was used to determine chemotherapy and radiotherapy treatment among eligible subjects.</p>
New Drug Funding Program (NDFP)	2005–2017	<p>The NDFP data contains dispensation records of new oncologic medications that are typically not funded under standard provincial health coverage.</p> <p>The dataset was used to determine chemotherapy and radiotherapy treatment among eligible subjects.</p>
Ontario Breast Screening Program (OBSP)	2005–2016	The OBSP data contains breast screening data among women enrolled in the OBSP program. The data was used to determine if a woman was up to date on her breast cancer screening.

Ontario Cancer Registry (OCR)	1964–2016	<p>The OCR dataset includes all reportable incident cancer diagnosis in Ontario between January 1964 and September 2019<sup>2</sup>. Each incident cancer diagnosis contains information on the cancer site/topology (ICD-10) and cancer morphology (ICD-O-3).</p> <p>The OCR data was used to create our inclusion cohort; individuals diagnosed with a cancer in the accrual period. The data was also used to capture cancer-specific variables such as cancer topology, histology and stage.</p>
<i>ICES derived cohorts</i>		
		A population-level cohort of Ontario residents with asthma.
Ontario Asthma Dataset (ASTHMA)	1993–2016	<p>A validated algorithm using DAD and OHIP data<sup>3</sup>:</p> <p>Sensitivity = 80.6%</p> <p>Specificity = 81.4%</p> <p>PPV = 72.5%</p> <p>NPV = 87.3%</p>
		A population-level cohort of Ontario residents with congestive heart failure.
Congestive Heart Failure (CHF)	1991–2016	<p>A validated algorithm using DAD, NACRS and OHIP data<sup>4</sup>:</p> <p>Sensitivity = 84.8%</p> <p>Specificity = 97.0%</p> <p>PPV = 55.6%</p>
Chronic Obstructive Pulmonary Disease (COPD)	1991–2016	<p>A population-level cohort of Ontario residents with chronic obstructive pulmonary disease.</p> <p>Validated algorithm using DAD and OHIP data<sup>5</sup>:</p> <p>Sensitivity = 85.0%</p> <p>Specificity = 78.4%</p>
Ontario Dementia Database (DEMENTIA)	1996–2016	<p>A population-level cohort of Ontario residents with dementia.</p> <p>Validated algorithm using DAD, SDS, ODB and OHIP data<sup>6</sup>:</p> <p>Sensitivity = 79.3%</p> <p>Specificity = 99.1%</p>
Ontario HIV Database (HIV)	1991–2016	<p>A population-level cohort of Ontario residents with HIV.</p> <p>Validated algorithm using OHIP data<sup>7</sup>:</p> <p>Sensitivity = 96.2%</p> <p>Specificity = 99.6%</p>
Ontario Hypertension dataset (HYPER)	1991–2016	<p>A population-level cohort of Ontario residents with hypertension.</p> <p>Validated algorithm using DAD and OHIP data<sup>8</sup>:</p> <p>Sensitivity = 72%</p> <p>Specificity = 95%</p> <p>PPV = 87%</p> <p>NPV = 88%</p>
Ontario Mother-Baby Linked Dataset (MOMBABY)	1988–2016	<p>The MOMBABY dataset includes infant deliveries in an inpatient setting beginning in 1988. The MOMBABY dataset was used to capture the number of previous infant deliveries and/or any recent infant deliveries (in the 2 years prior) among female individuals.</p>
Ontario Crohn's and Colitis Cohort Dataset (OCCC)	1991–2016	<p>A population-level cohort of Ontario residents with Crohn's and Colitis.</p> <p>Validated algorithm using DAD, NACRS and OHIP data<sup>9</sup>:</p> <p>Sensitivity = 59.3%</p>

		Specificity = 99.0% PPV = 71.1% NVP = 98.3%
A population-level cohort of Ontario residents with diabetes.		
Ontario Diabetes Dataset (ODD)	1991–2016	Validated algorithm using DAD and ODB data <sup>10</sup> : Sensitivity = 90.0% Specificity = 97.7% PPV = 92.6%
A population-level cohort of Ontario residents with rheumatoid arthritis.		
Ontario Rheumatoid Arthritis Dataset (ORAD)	1993–2016	Validated algorithm using DAD and OHIP data <sup>11</sup> : Sensitivity = 78% Specificity = 100% PPV = 78% NVP = 100%
<i>Other datasets</i>		
		The DIN dataset includes drug information unique by the drug DIN. Drug data includes drug name, drug class, strength, and route administered.
Drug List Dataset (DIN)	1990–2020	Unique drug name was used to determine the concurrent number of drugs being used. Drug class was used to identify historic use of drugs that affect platelet function.
ICD = International Classification of Disease; CCI = Canadian Classification of Health Interventions; PPV = Positive Predictive Value; NPV = Negative Predictive Value; ODB = Ontario Drug Benefits Database.		

**Table S2.** Definitions of site-specific cancer events.

Definition	Sub-definition	Data source(s)	Code type	Codes	Conditions/Notes
<i>Incident cancer diagnosis</i>	Any malignant neoplasm	OCR	ICD-10	C00-C97	
	Any primary solid tumour	OCR	ICD-10	C00-C97	
<i>Malignant solid tumour **</i>	Colon	OCR	ICD-10	C18 – Colon C19 – Rectosigmoid junction C20 – Rectum	
	Lung	OCR	ICD-10	C34 – Bronchus or lung	
	Breast	OCR	ICD-10	C50 – Breast	Female sex
	Ovary	OCR	ICD-10	C56 – Ovary C570 – Fallopian tube	Female sex
	Cervical	OCR	ICD-10	C53 – Cervix	Female sex
	Endometrium	OCR	ICD-10	C54 – Corpus uteri	Female sex
	Prostate	OCR	ICD-10	C61 – Prostate	Male sex
	Testicle	OCR	ICD-10	C62 – Testis	Male sex
	Thyroid	OCR	ICD-10	C73 – Thyroid gland	
	Pancreas	OCR	ICD-10	C25 – Pancreas	
	Stomach	OCR	ICD-10	C16 – Stomach	
	Kidney	OCR	ICD-10	C64 – Kidney C65 – Renal Pelvis	
	Bladder	OCR	ICD-10	C67 – Bladder	
	Liver	OCR	ICD-10	C22 – Liver and intrahepatic bile ducts	
	Esophagus	OCR	ICD-10	C15 – Esophagus	
	Other gastrointestinal tract	OCR	ICD-10	C17 – Small intestine C21 – Anus and anal canal C23 – Gallbladder	
	Brain	OCR	ICD-10	C71 – Brain	
	Melanoma	OCR	ICD-10	C00-C97, <b>and one of</b> 8720/3 – Malignant Melanoma, NOS 8743/3 – Superficial Spreading Melanoma 8721/3 – Nodular Melanoma 8742/3 – Lentigo Maligna Melanoma 8744/3 – Acral Lentiginous Melanoma 8772/3 – Spindle Cell Melanoma, NOS	Note: All ICD-O-3 melanoma codes were derived from the cancer registry and are in order from most frequent to least frequent among melanoma pathologies.
			ICD-O-3		

8745/3 – Desmoplastic Melanoma  
8770/3 – Mixed Epithelioid and Spindle Cell Melanoma  
8771/3 – Epithelioid Cell Melanoma  
8730/3 – Amelanotic Melanoma  
8723/3 – Malignant Melanoma, Regressing  
8774/3 – Spindle Cell Melanoma, Type B  
8761/3 – Malignant Melanoma in a Giant Pigmented Nevus  
8740/3 – Malignant Melanoma in Junctional Nevus  
8722/3 – Balloon Cell Melanoma  
8773/3 – Spindle Cell Melanoma, type A  
8746/3 – Mucosal Lentiginous Melanoma  
8741/3 – Malignant Melanoma in Precancerous Melanosis

Head and neck	OCR	ICD-10	C00-C09 – Lip, oral cavity	
			C10 – Oropharynx	
			C11 – Nasopharynx	
			C13 – Hypopharynx	
			C12 – Piriform sinus	
			C14 – Lip, oral cavity and pharynx (ill-defined)	
			C30 – Nasal cavity and middle ear	
			C31 – Accessory sinuses	
			C32 – Larynx	
Other solid tumour	OCR	ICD-10	C00-C97	Cancer event met solid tumour definition, but none of the site-specific definitions described above.

\*\* Solid tumours are morphologic codes that are not in hematological, lymphoid and related tissue definitions.

Table S3. Definitions of descriptive and treatment variables.

Variable Class	Definition	Data source(s)	Code type	Codes	Conditions/Notes
<i>Health services utilization</i>	Core primary care visit	OHIP	Fee code	A001 - MINOR ASSESS.-F.P./G.P. A002 - Family Practice & Practice in General - Enhanced 18 month well baby visit A003 - GEN. ASSESS. -F.P./G.P. A004 - GEN.RE-ASSESS-F.P./G.P. A005 - CONSULTATION -F.P./G.P. A007 - INTERMED.ASSESS/WELL BABY CARE-F.P./G.P./PAED. A008 - MINI ASSESSMENT-F.P./G.P. A903 - GEN/FAM PRACT-PRE-DENTAL/OPER.ASSESS LIMIT 2 PER YEAR/PT E075 - GERIATRIC GENERAL ASSESSMENT PREMIUM G212 - D./T. PROC.-ALLERGY-HYPOSENSITIZATION INJECTION PLUS BASIC G271 - D./T. PROC.-CARDIOV.-ANTICOAGULANT SUPERVISION G372 - D./T. PROC.-INJECTIONS-INTRADERMAL/MUSCULAR ETC. EA. ADD. G373 - D./T. PROC.-INJ. INTRADERMAL/MUSC. BASIC FEE (SHICK TEST) G365 - D./T. PROC.-GYNAECOLOGY-PAPANICOLAOU SMEAR G538 - D&T IMMUNIZATION-WITH VISIT, EACH INJECT. G539 - Injection of unspecified agent - sole reason (first injection) G590 - INFLUENZA AGENT +VISIT G591 - Injection of influenza agent - sole reason K005 - INDIVIDUAL CARE PER 1/2 HR K013 - COUNSELLING-ONE OR MORE PEOPLE-PER 1/2HR. K017 - ANNUAL HEALTH EXAM-CHILD AFT. 2ND BIRTHDAY. P004 - OBS.-PRENATAL CARE-MINOR PRENATAL ASSESS.-SUB-SEQ.PRENAT.VIS. K130 - Periodic health visit - adolescent K131 - Periodic health visit - adult aged 18 to 64 inclusive K132 - Periodic health visit - adult 65 years of age and older K030 - DIABETIC MANAGEMENT FEE	Note: All core primary care visits were restricted to OHIP billings from primary care providers (GP and community medicine specialties). A maximum of one core visit per patient-day-physician was counted.
				02 – Dermatologist 03 – General surgeon 06 – Orthopedic surgeon	
Specialist visit		OHIP	Specialty code		

			07 – Geriatrician
			13 – Internal medicine specialist
			15 – Endocrinologist
			16 – Nephrologist
			18 – Neurologist
			19 – Psychiatrist
			20 – OBGYN
			22 – Geneticist
			24 – ENT
			35 – Urologist
			41 – Gastroenterologist
			44 – Oncologist
			47 – Respiriologist
			48 – Rheumatologist
			60 – Cardiologist
			61 – Hematologist
Breast cancer screen	OHIP	Fee code	X172 – Mammogram - No Signs or Symptoms - unilateral X178 – Mammogram - No Signs or Symptoms - bilateral X185 – DIAGNOSTIC RADIOLOGY-MAMMOGRAM-BILATERAL
	OBSP		Screened variable in (“2” “3”)
			E430 – D/T PROC-PAP SMEAR PERFORMED OUTSIDE OF HOSP- ADD
			G365 – D./T. PROC.-GYNAECOLOGY-PAPANICOLAOU SMEAR
			E431 – when papanicolaou smear is performed outside of hospital, to G394
Cervical cancer screen	OHIP	Fee code	G394 – ADD’L PAP SMEAR FOR FOLLOWUP OF ABNORM OR IN- ADEQ SMEARS L713 – LAB.MED.-ANAT PATH,HIST,CYT-CYTOL-GYNAECOLOGICAL SPECIMEN L733 – CERVICOVAGINAL SPECIMEN (MONOLAYER CELL METHODOLOGY) L812 – LAB MED.CYTOLOGY-CERVICOVAG SPEC Q678 – GYNAECOLOGY - PAPANICOLAOU SMEAR- PERIODIC - N.P.
Colon cancer screen			G004 – D./T. PROC-LAB.MED.-OCCULT.BLOOD. L181 – LAB. MED.-BIOCHEM.-OCCULT BLOOD L179 – TRACKING CODE-COLON CANCER CHECK Q152 – FOBT COMPLETION FEE



				Q043 – NEW PATIENT FEE FOBT POSITIVE/CRC INCREASED RISK
				Z535 – INTESTINES-ENDOSCOPY-SIGMOIDOSCOPY W/WITHOUT ANOSCOPY
				Z555 – INTESTINES-ENDOSCOPY-COLONOSCOPY INTO DESCENDING COLON
				Z580 – INTESTINE-ENDOSCOPY-USING 60C.M. FLEXIBLE ENDOSCOPE.
				E740 – INTESTINE ENDO SIGMOID TO SPLENIC FLEXURE ADD
				E741 – INTESTINE END SIGMOID TO HEPATIC FLEXURE ADD
				E747 – INTESTINE-ENDOSCOPY-SIGMOID.TO CAECUM ADD TO Z512/Z555
				E705 – DIGEST.SYST.INTEST.ENDOSC.INTO TERMINAL ILEUM,ADD.
				Z492 – Five year follow up of normal colonoscopy Z499, absence of intervening signs or symptoms
				Z493 – Ten year follow up of normal colonoscopy (Z497), absence of intervening signs or symptoms
				Z497 – Confirmatory colonoscopy - sigmoid to descending colon
				Z498 – Surveillance colonoscopy - sigmoid to descending colon
				Z499 – Colonoscopy - Absence of signs or symptoms, family history of colon cancer in a first degree relative
				G261 – D./T. PROC.INJ/INF-INTRAIVEN-CHEMOTHERAPY-EA.ADD.INJ.TO G381
				G339 – Chemotherapy - Single agent intravenous chemotherapy i.e. doxorubicin, daunorubicin, epirubicin, mitoxintrone, cisplatin or bleomycin (greater than 10 units per metre square)
				G345 – D&T MULT.AGENTS CHEMOTHER.GREATER THAN 10 UNITS PER MET.SQ.
				G359 – D&T SING.AGENT CHEMOTHER.(GREATER THAN 2G/M2 OR 1G/M2.)
				G381 – D./T. PROC. INJECT/INFUS. INTRAVENOUS CHEMOTHERAPY-1ST INJ
				G382 – D./T. PROC.-INJ./INFUSION-SUPERVISION CHEMOTHERAPY BY PHONE
				G388 – Management of special oral chemotherapy, for malignant disease
<i>Cancer treatment</i>	Chemotherapy	OHIP	Fee code	

DAD/SDS/NACRSICD-10			Z511 – Chemotherapy session for neoplasm		
NDFP			Z512 – Other chemotherapy		
ALR (systemic)			Any treatment records		
			Any treatment records		
			<i>External beam radiotherapy</i>		
			X302 – THERA. RADIOL.-TELERADIOOTHERAPY-X-RAY,RADIUM,COBALT ETC.		
			X304 – THERA. RADIOL.-TELERADIOOTHERAPY-MINOR		
			X310 – TREATMENT PLANNING LEVEL 1		
			X311 – TREATMENT PLANNING LEVEL 2		
			X312 – TREATMENT PLANNING LEVEL 3		
			X313 – TREATMENT PLANNING LEVEL 4		
			<i>Brachytherapy</i>		
			X305 – THER.RADIOL.INTRACAVITORY CONTACT X-RAY THERAPY 1ST APPLIC.		
			X306 – THER.RADIOL.INTRACAVITORY CONTACT X-RAY THERAPY REP.APPLIC.		
Radiotherapy	OHIP	Fee code	X322 – THERA. RADIOL.-RADIUM-SEALED SOURCE-TREAT. PLANNING		
			X323 – THERAP.RAD.-RADIUM-SEALED SOURCE-INTRACAVITARY-1ST APPL.		
			X324 – THERA. RADIOL.-RADIUM-SEALED SOURCE-INTERSTITIAL APPLICATION		
			X325 – THERA. RADIOL.-RADIUM-SEALED SOURCE-PLAQUE,MOULD		
			X326 – THERA.RADIOL.-RADIOISOTOPES NON SEALED SOURCE-THYROID CA.		
			X329 – THERA.RADIOL.-RADIOISOTOPES-METASTA.CA BONE-NON SEALED SOURC		
			X330 – THERAP.RAD.RADIOISOTOPES-ASCITES/PLEURAL EFFUSIONNOSEALSOURC		
			X336 – THERAPEU.RADIOL.-RADIOISOTOPES-PROSTATE MALIGNANCY		

		<div> <div>External beam radiotherapy</div> <div>substring position 4 length 2 = "27"</div> </div> <div> <div>Brachytherapy</div> <div>substring position 4 length 2 = "26"</div> </div>	
DAD/SDS/NACRS		Inter- ven- tion code	
ALR (radiation)		Any treatment records	
Chronic condi- tions*	Osteoar- thritis	OHIP	ICD-9 715, 274, 710, 711, 716, 718, 720, 727, 728, 729, 739
			M15, M16, M17, M18, M19
		DAD/SDS	ICD-10 M00, M01, M02, M03, M07, M10, M11, M12, M13, M14, M20, M21, M22, M23, M24, M25, M30, M31, M32, M33, M34, M35, M36, M65, M66, M67, M68, M69, M7
	Cardiac Arrhyth- mia	OHIP	ICD-9 427
		DAD/SDS	ICD-10 I480, I481
	Mood dis- orders	OHIP	ICD-9 296, 300, 309, 311
		DAD/SDS	ICD-10 F30, F31, F32, F33, F341, F348, F349, F38, F39, F40, F41, F42, F431, F432, F438, F44, F450, F451, F452, F48, F530, F680, F930, F99
	Other mental health dis- orders	OHIP	ICD-9 291, 292, 295, 297, 298, 299, 301, 302, 303, 304, 305, 306, 307, 313, 314, 315, 319
		DAD/SDS	ICD-10 F1, F2, F04, F050, F058, F059, F060, F061, F062, F063, F064, F07, F08, F340, F35, F36, F37, F430, F439, F453, F454, F458, F46, F47, F49, F50, F51, F52, F531, F538, F539, F54, F55, F56, F57, F58, F59, F60, F61, F62, F63, F64, F65, F66, F67, F681, F688, F69, F7, F8, F90, F91, F92, F931, F932, F933, F938, F939, F94, F95, F96, F97, F98
	Osteoporo- sis	OHIP	ICD-9 733
		DAD/SDS	ICD-10 M81, M82
	Renal dis- ease	OHIP	ICD-9 403, 404, 584, 585, 586, 451
		DAD/SDS	ICD-10 N17, N18, N19, T824, Z492, Z992
	Stroke	OHIP	ICD-9 430, 431, 432, 434, 436
		DAD/SDS	ICD-10 I60, I61, I62, I63, I64

Chronic coronary disease	OHIP	ICD-9	411, 412, 413, 414
	DAD/SDS	ICD-10	I20, I22, I23, I24, I25
Acute myocardial infarction	DAD/SDS	ICD-10	I21

\* All chronic conditions were obtained from validated diagnostic codes<sup>12</sup>. Definitions were defined based on either: 1) minimum of 3 OHIP claims, each claim greater than 30 days apart and less than 2 years apart, or 2) minimum of one inpatient hospitalization with any of the diagnostic codes.

**Table S4.** Definitions of cancer-specific death.

Definition	Data source(s)	Code type	Codes
Colon	ORGD	ICD-9	153 – Malignant neoplasm of colon 154 – Malignant neoplasm of rectum rectosigmoid junction and anus 159 – Malignant neoplasm of other and ill-defined sites within the digestive organs and peritoneum 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Lung	ORGD	ICD-9	162 – Malignant neoplasm of trachea bronchus and lung 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Breast	ORGD	ICD-9	174 – Malignant neoplasm of female breast 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Ovary	ORGD	ICD-9	183 – Malignant neoplasm of ovary and other uterine adnexa 184 – Malignant neoplasm of other and unspecified female genital organs 158 – Malignant neoplasm of retroperitoneum and peritoneum 159 – Malignant neoplasm of other and ill-defined sites within the digestive organs and peritoneum 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Cervical	ORGD	ICD-9	180 – Malignant neoplasm of cervix uteri 179 – Malignant neoplasm of uterus, part unspecified 184 – Malignant neoplasm of other and unspecified female genital organs 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Endometrium	ORGD	ICD-9	182 – Malignant neoplasm of body of uterus

			179 – Malignant neoplasm of uterus, part unspecified 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Prostate	ORGD	ICD-9	185 – Malignant neoplasm of prostate 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Testicle	ORGD	ICD-9	186 – Malignant neoplasm of testis 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Thyroid	ORGD	ICD-9	193 – Malignant neoplasm of thyroid gland 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Pancreas	ORGD	ICD-9	157 – Malignant neoplasm of pancreas 159 – Malignant neoplasm of other and ill-defined sites within the digestive organs and peritoneum 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Stomach	ORGD	ICD-9	151 – Malignant neoplasm of stomach 150 – Malignant neoplasm of esophagus 152 – Malignant neoplasm of small intestine including duodenum 159 – Malignant neoplasm of other and ill-defined sites within the digestive organs and peritoneum 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Kidney	ORGD	ICD-9	189 – Malignant neoplasm of kidney and other and unspecified urinary organs 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Bladder	ORGD	ICD-9	188 – Malignant neoplasm of bladder 189 – Malignant neoplasm of kidney and other and unspecified urinary organs 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site
Esophagus	ORGD	ICD-9	150 – Malignant neoplasm of esophagus 151 – Malignant neoplasm of stomach 197 – Secondary malignant neoplasm of respiratory and digestive systems 198 – Secondary malignant neoplasm of other specified sites 199 – Malignant neoplasm without specification of site

Other gastrointestinal tract	ORGD	ICD-9	150 – Malignant neoplasm of esophagus
			151 – Malignant neoplasm of stomach
			152 – Malignant neoplasm of small intestine including duodenum
			153 – Malignant neoplasm of colon
			154 – Malignant neoplasm of rectum rectosigmoid junction and anus
			156 – Malignant neoplasm of gallbladder and extrahepatic bile ducts
			157 – Malignant neoplasm of pancreas
			158 – Malignant neoplasm of retroperitoneum and peritoneum
			159 – Malignant neoplasm of other and ill-defined sites within the digestive organs and peritoneum
			197 – Secondary malignant neoplasm of respiratory and digestive systems
Brain	ORGD	ICD-9	198 – Secondary malignant neoplasm of other specified sites
			199 – Malignant neoplasm without specification of site
			191 – Malignant neoplasm of brain
			197 – Secondary malignant neoplasm of respiratory and digestive systems
			237 – Neoplasm of uncertain behavior of endocrine glands and nervous system
			198 – Secondary malignant neoplasm of other specified sites
			199 – Malignant neoplasm without specification of site
			172 – Malignant melanoma of skin
			173 – Oth and unspec malignant neoplasm of skin
			197 – Secondary malignant neoplasm of respiratory and digestive systems
Melanoma	ORGD	ICD-9	198 – Secondary malignant neoplasm of other specified sites
			199 – Malignant neoplasm without specification of site
			14 – Malignant Neoplasm of Lip, Oral Cavity, and Pharynx
			176 – Kaposi's sarcoma
			197 – Secondary malignant neoplasm of respiratory and digestive systems
			198 – Secondary malignant neoplasm of other specified sites
			199 – Malignant neoplasm without specification of site
			14 – Malignant Neoplasm of Lip, Oral Cavity, and Pharynx
			150 – Malignant neoplasm of esophagus
			151 – Malignant neoplasm of stomach
Head and neck	ORGD	ICD-9	152 – Malignant neoplasm of small intestine including duodenum
			153 – Malignant neoplasm of colon
			154 – Malignant neoplasm of rectum rectosigmoid junction and anus
			156 – Malignant neoplasm of gallbladder and extrahepatic bile ducts
			157 – Malignant neoplasm of pancreas
			158 – Malignant neoplasm of retroperitoneum and peritoneum
			159 – Malignant neoplasm of other and ill-defined sites within the digestive organs and peritoneum
			16 – Malignant Neoplasm of Respiratory and Intrathoracic Organs
			17 – Malignant Neoplasm of Bone, Connective Tissue, Skin, and Breast
			18 – Malignant Neoplasm of Genitourinary Organs
Other solid tumour	ORGD	ICD-9	19 – Malignant Neoplasm of Other and Unspecified Sites

**Table S5.** Inclusion table for cancer subjects.

	<b>Frequency</b>	<b>Percent</b>
<i>Total incident cancers diagnosis in accrual period</i>	673,834	
<b>Exclusion</b>		
1. Missing topology information	7	0.00
2. Incident liver cancer	9,756	1.45
3. Incident hematological cancer	81,379	12.08
4. No baseline platelet value	449,104	66.65
<b>Eligible cancer diagnosis for inclusion cohort</b>	<b>133,588</b>	<b>19.83</b>

**Table S6.** Exclusion table for study cohort.

	<b>Frequency</b>	<b>Percent</b>
<i>Total incident cancers meeting inclusion criteria</i>	133,588	
<b>Exclusion</b>		
1. Missing date of birth	≤ 5	0
2. Missing sex	≤ 5	0
3. Age <18 on index date	441	0.33
4. Age >100 on index date	73	0.05
5. Death date prior to/on index date	1,918	1.44
6. OHIP ineligible on index date	126	0.09
7. History of cancer in the OCR prior to index date	12,390	9.27
8. History of cancer therapy (chemotherapy or radiotherapy) in the two years prior to index date	5,014	3.75
9. Multiple primary cancers on index date	1,394	1.04
<b>Eligible cancer subjects</b>	<b>112,231</b>	<b>84.01</b>

**Table S7.** Descriptive table of cancer patients (meeting all exclusion criteria) with versus without a baseline platelet count.

Description	Value	Total	Baseline CBC	No baseline CBC	Standardized Difference
<i>Overall</i>		500,386	112,231 (22.4%)	388,155 (77.6%)	
<i>General demographics</i>					
Calendar year (cont.)	Mean (SD)	2011.5 (2.9)	2013.2 (2.4)	2011.1 (2.8)	0.78
	Median (IQR)	2012 (2009–2014)	2014 (2011–2015)	2011 (2009–2013)	
Calendar year (cat.)	2007–2009	147,885 (29.6%)	12,679 (11.3%)	135,206 (34.8%)	0.58
	2010–2012	149,578 (29.9%)	26,849 (23.9%)	122,729 (31.6%)	0.17
	2013–2016	202,923 (40.6%)	72,703 (64.8%)	130,220 (33.5%)	0.66
Sex	Female	252,066 (50.4%)	56,524 (50.4%)	195,542 (50.4%)	0
	Male	248,320 (49.6%)	55,707 (49.6%)	192,613 (49.6%)	
Age (cont.)	Mean (SD)	65.2 (14.1)	66.9 (14.3)	64.7 (14.0)	0.15
	Median (IQR)	66.0 (56.2–75.5)	68.0 (57.8–77.5)	65.5 (55.8–74.8)	
Age (cat.)	18–29	7,071 (1.4%)	1,474 (1.3%)	5,597 (1.4%)	0.01
	30–39	17,438 (3.5%)	3,352 (3.0%)	14,086 (3.6%)	0.04
	40–49	45,381 (9.1%)	8,819 (7.9%)	36,562 (9.4%)	0.06
	50–59	98,746 (19.7%)	19,640 (17.5%)	79,106 (20.4%)	0.07
	60–69	138,191 (27.6%)	29,287 (26.1%)	108,904 (28.1%)	0.04
	70–79	116,358 (23.3%)	27,954 (24.9%)	88,404 (22.8%)	0.05
	80–89	66,601 (13.3%)	18,445 (16.4%)	48,156 (12.4%)	0.11
	90–100	10,600 (2.1%)	3,260 (2.9%)	7,340 (1.9%)	0.07
Neighbourhood income quintile	1 - Low	96,029 (19.2%)	22,374 (19.9%)	73,655 (19.0%)	0.02
	2	100,846 (20.2%)	23,340 (20.8%)	77,506 (20.0%)	0.02
	3	98,596 (19.7%)	22,225 (19.8%)	76,371 (19.7%)	0
	4	100,394 (20.1%)	21,812 (19.4%)	78,582 (20.2%)	0.02
	5 - High	102,822 (20.5%)	22,171 (19.8%)	80,651 (20.8%)	0.03
	Missing	1,699 (0.3%)	309 (0.3%)	1,390 (0.4%)	
Low-income senior (age 66+)	Yes	40,634 (16.2%)	10,204 (16.4%)	30,430 (16.2%)	0.01
Residence location	Urban	432,560 (86.4%)	97,523 (86.9%)	335,037 (86.3%)	0.02
	Rural	67,416 (13.5%)	14,571 (13.0%)	52,845 (13.6%)	0.02
	Missing	410 (0.1%)	137 (0.1%)	273 (0.1%)	
Recently living in Long-Term Care	Yes	8,309 (1.7%)	2,424 (2.2%)	5,885 (1.5%)	0.05
Landed immigrant (cat.)	Non-immigrant	450,600 (90.1%)	99,372 (88.5%)	351,228 (90.5%)	0.06
	Recent immigrant (≤10 years)	14,442 (2.9%)	3,135 (2.8%)	11,307 (2.9%)	0.01
	Past immigrant (>10 years)	35,344 (7.1%)	9,724 (8.7%)	25,620 (6.6%)	0.08
Ethnicity	General Population	475,426 (95.0%)	105,240 (93.8%)	370,186 (95.4%)	0.07



	Chinese	17,044 (3.4%)	4,879 (4.3%)	12,165 (3.1%)	0.06
	South Asian	7,916 (1.6%)	2,112 (1.9%)	5,804 (1.5%)	0.03
Time eligible in OHIP (years)	Mean (SD)	19.8 (5.5)	21.1 (5.8)	19.4 (5.4)	0.31
	Median (IQR)	20.7 (17.9–23.6)	22.9 (19.6–25.0)	20.2 (17.7–23.0)	
Health Services Utilization					
Any OHIP billings in the year prior	Yes	495,345 (99.0%)	111,616 (99.5%)	383,729 (98.9%)	0.06
Any ODB records on/in the year prior (age 66+)	Yes	241,453 (96.5%)	60,465 (97.1%)	180,988 (96.3%)	0.04
Physician Billings (2 years prior)					
Any core primary care visits to GP/FP	Yes	477,551 (95.4%)	107,481 (95.8%)	370,070 (95.3%)	0.02
Core primary care visits to GP/FP (cont.)	Mean (SD)	2.8 (3.3)	2.9 (3.5)	2.8 (3.3)	0.05
	Median (IQR)	1 (1–3)	2 (1–4)	1 (1–3)	
Core primary care visits to GP/FP (cat.)	0	22,835 (4.6%)	4,750 (4.2%)	18,085 (4.7%)	0.02
	1 - 2	283,140 (56.6%)	61,661 (54.9%)	221,479 (57.1%)	0.04
	3 - 4	104,693 (20.9%)	24,009 (21.4%)	80,684 (20.8%)	0.01
	5 - 9	70,557 (14.1%)	16,980 (15.1%)	53,577 (13.8%)	0.04
	10+	19,161 (3.8%)	4,831 (4.3%)	14,330 (3.7%)	0.03
Emergency and inpatient admissions (2 years prior)					
Any unscheduled ED visits	Yes	249,142 (49.8%)	65,094 (58.0%)	184,048 (47.4%)	0.21
Unscheduled ED visits (cont.)	Mean (SD)	1.2 (2.1)	1.5 (2.4)	1.1 (2.1)	0.15
	Median (IQR)	0 (0–2)	1 (0–2)	0 (0–1)	
Any inpatient hospitalization episodes	Yes	70,996 (14.2%)	20,299 (18.1%)	50,697 (13.1%)	0.14
Inpatient hospitalization episodes (cont.)	Mean (SD)	0.2 (0.6)	0.3 (0.7)	0.2 (0.6)	0.12
	Median (IQR)	0 (0–0)	0 (0–0)	0 (0–0)	
Up to date on cancer screening					
Pap smear (females age 18 to 70)	Yes	102,053 (63.2%)	20,003 (61.0%)	82,050 (63.8%)	0.06
Mammogram (females age 50 to 70)	Yes	82,926 (72.8%)	16,220 (67.1%)	66,706 (74.3%)	0.16
FOBT/sigmoidoscopy/colonoscopy (age 50 to 70)	Yes	141,955 (59.9%)	30,057 (61.4%)	111,898 (59.5%)	0.04
Comorbidities and chronic conditions					
Comorbidities					
Charlson score (cont.)	Mean (SD)	0.3 (1.0)	0.4 (1.1)	0.3 (0.9)	0.12
	Median (IQR)	0.0 (0.0–0.0)	0.0 (0.0–0.0)	0.0 (0.0–0.0)	
Charlson comorbidities (cat.)	0	428,584 (85.7%)	92,158 (82.1%)	336,426 (86.7%)	0.13
	1	33,110 (6.6%)	8,578 (7.6%)	24,532 (6.3%)	0.05
	2	17,028 (3.4%)	4,830 (4.3%)	12,198 (3.1%)	0.06
	3+	21,664 (4.3%)	6,665 (5.9%)	14,999 (3.9%)	0.1
Chronic conditions					
Asthma	Yes	43,072 (8.6%)	10,397 (9.3%)	32,675 (8.4%)	0.03

Congestive heart failure	Yes	33,896 (6.8%)	9,509 (8.5%)	24,387 (6.3%)	0.08
Inflammatory bowel disease	Yes	1,588 (0.3%)	435 (0.4%)	1,153 (0.3%)	0.02
Chronic obstructive pulmonary disease	Yes	44,738 (8.9%)	11,578 (10.3%)	33,160 (8.5%)	0.06
HIV	Yes	809 (0.2%)	171 (0.2%)	638 (0.2%)	0
Hypertension	Yes	264,140 (52.8%)	63,988 (57.0%)	200,152 (51.6%)	0.11
Dementia	Yes	16,950 (3.4%)	4,807 (4.3%)	12,143 (3.1%)	0.06
Diabetes	Yes	85,221 (17.0%)	23,222 (20.7%)	61,999 (16.0%)	0.12
Chronic rheumatoid arthritis	Yes	5,410 (1.1%)	1,464 (1.3%)	3,946 (1.0%)	0.03
Osteoarthritis	Yes	86,044 (17.2%)	20,042 (17.9%)	66,002 (17.0%)	0.02
Mood disorder	Yes	62,418 (12.5%)	13,807 (12.3%)	48,611 (12.5%)	0.01
Other mental health disorder	Yes	25,567 (5.1%)	6,629 (5.9%)	18,938 (4.9%)	0.05
Osteoporosis	Yes	7,114 (1.4%)	1,831 (1.6%)	5,283 (1.4%)	0.02
Renal disease	Yes	18,811 (3.8%)	6,303 (5.6%)	12,508 (3.2%)	0.12
Stroke	Yes	9,398 (1.9%)	2,486 (2.2%)	6,912 (1.8%)	0.03
Chronic coronary syndrome	Yes	48,941 (9.8%)	12,131 (10.8%)	36,810 (9.5%)	0.04
Acute myocardial infarction	Yes	11,096 (2.2%)	2,830 (2.5%)	8,266 (2.1%)	0.03

#### *Medication use (age 66+)*

<i>Concurrent medication use</i>					
Number of concurrent medications being used (cont.)	Mean (SD)	4.2 (3.2)	4.6 (3.3)	4.0 (3.1)	0.18
	Median (IQR)	4 (2–6)	4 (2–7)	4 (2–6)	
Number of concurrent medications being used (cat.)	0	29,466 (11.8%)	6,034 (9.7%)	23,432 (12.5%)	0.09
	1 - 4	119,828 (47.9%)	27,434 (44.1%)	92,394 (49.2%)	0.1
	5 - 9	84,338 (33.7%)	23,467 (37.7%)	60,871 (32.4%)	0.11
	10+	16,584 (6.6%)	5,342 (8.6%)	11,242 (6.0%)	0.1

#### *Recent medication use*

<i>Antiplatelet</i>					
Nonsteroidal anti-inflammatory (ASA-based)	Yes	10,696 (4.3%)	2,062 (3.3%)	8,634 (4.6%)	0.07
Nonsteroidal anti-inflammatory (non-ASA-based)	Yes	49,404 (19.7%)	11,481 (18.4%)	37,923 (20.2%)	0.04
Adenosine diphosphonate inhibitor	Yes	16,755 (6.7%)	4,772 (7.7%)	11,983 (6.4%)	0.05
<i>Cardiovascular</i>					
Coronary vasodilator (nitrate)	Yes	21,264 (8.5%)	5,415 (8.7%)	15,849 (8.4%)	0.01
Beta blocker	Yes	69,115 (27.6%)	18,561 (29.8%)	50,554 (26.9%)	0.06
Calcium channel blocker	Yes	73,721 (29.5%)	19,725 (31.7%)	53,996 (28.7%)	0.06
ACE inhibitor	Yes	79,499 (31.8%)	19,838 (31.9%)	59,661 (31.7%)	0
Angiotensin receptor agonist	Yes	53,630 (21.4%)	14,684 (23.6%)	38,946 (20.7%)	0.07
<i>Lipid-lowering</i>					
Statin	Yes	124,361 (49.7%)	33,080 (53.1%)	91,281 (48.6%)	0.09
<i>Psychotropics</i>					

Tricyclic antidepressant	Yes	11,944 (4.8%)	2,975 (4.8%)	8,969 (4.8%)	0
Selective serotonin reuptake inhibitor	Yes	27,277 (10.9%)	7,311 (11.7%)	19,966 (10.6%)	0.04
<i>Incident cancer type (Ontario Cancer Registry)</i>					
	Breast	79,261 (15.8%)	9,857 (8.8%)	69,404 (17.9%)	0.27
	Prostate	77,572 (15.5%)	8,587 (7.7%)	68,985 (17.8%)	0.31
	Lung	66,390 (13.3%)	20,583 (18.3%)	45,807 (11.8%)	0.18
	Colon	63,655 (12.7%)	17,259 (15.4%)	46,396 (12.0%)	0.1
	Other solid tumour	29,286 (5.9%)	8,051 (7.2%)	21,235 (5.5%)	0.07
	Thyroid	24,656 (4.9%)	5,944 (5.3%)	18,712 (4.8%)	0.02
	Bladder	24,631 (4.9%)	6,963 (6.2%)	17,668 (4.6%)	0.07
	Melanoma	23,661 (4.7%)	2,815 (2.5%)	20,846 (5.4%)	0.15
	Endometrium	18,886 (3.8%)	4,500 (4.0%)	14,386 (3.7%)	0.02
	Head and neck	16,485 (3.3%)	3,160 (2.8%)	13,325 (3.4%)	0.04
	Kidney	15,985 (3.2%)	5,272 (4.7%)	10,713 (2.8%)	0.1
	Pancreas	13,151 (2.6%)	5,195 (4.6%)	7,956 (2.0%)	0.14
	Stomach	10,467 (2.1%)	3,365 (3.0%)	7,102 (1.8%)	0.08
	Ovary	9,111 (1.8%)	3,085 (2.7%)	6,026 (1.6%)	0.08
	Brain	7,405 (1.5%)	2,563 (2.3%)	4,842 (1.2%)	0.08
	Other GI	5,921 (1.2%)	1,726 (1.5%)	4,195 (1.1%)	0.04
	Esophagus	5,511 (1.1%)	1,483 (1.3%)	4,028 (1.0%)	0.03
	Cervix	4,933 (1.0%)	833 (0.7%)	4,100 (1.1%)	0.03
	Testis	3,419 (0.7%)	990 (0.9%)	2,429 (0.6%)	0.03
<i>Follow-up period</i>					
Follow-up time	Mean (SD)	4.0 (3.1)	2.6 (2.4)	4.4 (3.2)	0.62
	Median (IQR)	3.3 (1.2–6.5)	1.9 (0.7–3.9)	4.0 (1.5–7.1)	
<i>Deaths in follow-up period</i>					
Any death	Yes	193,504 (38.7%)	51,738 (46.1%)	141,766 (36.5%)	0.2
Any cancer death	Yes	149,730 (29.9%)	41,968 (37.4%)	107,762 (27.8%)	0.21
Cancer-specific death	Yes	141,081 (28.2%)	40,329 (35.9%)	100,752 (26.0%)	0.22

**Table S8.** Descriptive table of cancer patients by baseline platelet count category.

Description	Value	Total	1 - Low (≤25th pctl)	2 - Medium (>25 to <75th pctl)	3 - High (≥75th pctl)
<i>Overall</i>		112,231	28,307 (25.2%)	55,703 (49.6%)	28,221 (25.1%)
<i>General demographics</i>					
Calendar year (cont.)	Mean (SD)	2013.2 (2.4)	2013.3 (2.4)	2013.2 (2.4)	2013.0 (2.5)
	Median (IQR)	2014 (2011–2015)	2014 (2012–2015)	2014 (2011–2015)	
Calendar year (cat.)	2007–2009	12,679 (11.3%)	2,634 (9.3%)	6,231 (11.2%)	3,814 (13.5%)
	2010–2012	26,849 (23.9%)	6,781 (24.0%)	13,371 (24.0%)	6,697 (23.7%)
	2013–2016	72,703 (64.8%)	18,892 (66.7%)	36,101 (64.8%)	17,710 (62.8%)
Sex	Female	56,524 (50.4%)	14,241 (50.3%)	28,044 (50.3%)	14,239 (50.5%)
	Male	55,707 (49.6%)	14,066 (49.7%)	27,659 (49.7%)	13,982 (49.5%)
Age (cont.)	Mean (SD)	66.9 (14.3)	68.7 (14.3)	66.4 (14.2)	66.0 (14.2)
	Median (IQR)	68.0 (57.8–77.5)	70.2 (60.1–79.4)	67.4 (57.3–76.9)	66.7 (56.8–76.5)
Age (cat.)	18–29	1,474 (1.3%)	369 (1.3%)	767 (1.4%)	338 (1.2%)
	30–39	3,352 (3.0%)	780 (2.8%)	1,685 (3.0%)	887 (3.1%)
	40–49	8,819 (7.9%)	1,761 (6.2%)	4,581 (8.2%)	2,477 (8.8%)
	50–59	19,640 (17.5%)	4,126 (14.6%)	10,097 (18.1%)	5,417 (19.2%)
	60–69	29,287 (26.1%)	6,976 (24.6%)	14,820 (26.6%)	7,491 (26.5%)
	70–79	27,954 (24.9%)	7,626 (26.9%)	13,636 (24.5%)	6,692 (23.7%)
	80–89	18,445 (16.4%)	5,644 (19.9%)	8,650 (15.5%)	4,151 (14.7%)
	90–100	3,260 (2.9%)	1,025 (3.6%)	1,467 (2.6%)	768 (2.7%)
Neighbourhood income quintile	1 - Low	22,374 (19.9%)	5,592 (19.8%)	10,817 (19.4%)	5,965 (21.1%)
	2	23,340 (20.8%)	5,917 (20.9%)	11,544 (20.7%)	5,879 (20.8%)
	3	22,225 (19.8%)	5,540 (19.6%)	11,099 (19.9%)	5,586 (19.8%)
	4	21,812 (19.4%)	5,475 (19.3%)	10,885 (19.5%)	5,452 (19.3%)
	5 - High	22,171 (19.8%)	5,712 (20.2%)	11,207 (20.1%)	5,252 (18.6%)
	Missing	309 (0.3%)	71 (0.3%)	151 (0.3%)	87 (0.3%)
Low-income senior (age 66+)	Yes	10,204 (16.4%)	3,134 (18.0%)	4,714 (15.6%)	2,356 (16.1%)
Residence location	Urban	97,523 (86.9%)	25,005 (88.3%)	48,358 (86.8%)	24,160 (85.6%)
	Rural	14,571 (13.0%)	3,269 (11.5%)	7,276 (13.1%)	4,026 (14.3%)
	Missing	137 (0.1%)	33 (0.1%)	69 (0.1%)	35 (0.1%)
Recently living in Long-Term Care	Yes	2,424 (2.2%)	677 (2.4%)	1,038 (1.9%)	709 (2.5%)
Landed immigrant (cat.)	Non-immigrant	99,372 (88.5%)	24,907 (88.0%)	49,218 (88.4%)	25,247 (89.5%)
	Recent immigrant (≤10 years)	3,135 (2.8%)	833 (2.9%)	1,539 (2.8%)	763 (2.7%)
	Past immigrant (>10 years)	9,724 (8.7%)	2,567 (9.1%)	4,946 (8.9%)	2,211 (7.8%)

Ethnicity	General Population	105,240 (93.8%)	26,342 (93.1%)	52,201 (93.7%)	26,697 (94.6%)
	Chinese	4,879 (4.3%)	1,531 (5.4%)	2,426 (4.4%)	922 (3.3%)
	South Asian	2,112 (1.9%)	434 (1.5%)	1,076 (1.9%)	602 (2.1%)
Time eligible in OHIP (years)	Mean (SD)	21.1 (5.8)	21.2 (5.9)	21.2 (5.7)	21.1 (5.7)
	Median (IQR)	22.9 (19.6–25.0)	23.0 (19.8–25.1)	22.9 (19.6–25.0)	22.8 (19.4–25.0)
<b>Health Services Utilization</b>					
Any OHIP billings in the year prior	Yes	111,616 (99.5%)	28,202 (99.6%)	55,428 (99.5%)	27,986 (99.2%)
Any ODB records on/in the year prior (age 66+)	Yes	60,465 (97.1%)	17,046 (97.7%)	29,263 (97.1%)	14,156 (96.5%)
<i>Physician Billings (2 years prior)</i>					
Any core primary care visits to GP/FP	Yes	107,481 (95.8%)	27,260 (96.3%)	53,514 (96.1%)	26,707 (94.6%)
Core primary care visits to GP/FP (cont.)	Mean (SD)	2.9 (3.5)	3.0 (3.7)	3.0 (3.5)	2.8 (3.3)
	Median (IQR)	2 (1–4)	2 (1–4)	2 (1–4)	1 (1–3)
Core primary care visits to GP/FP (cat.)	0	4,750 (4.2%)	1,047 (3.7%)	2,189 (3.9%)	1,514 (5.4%)
	1 - 2	61,661 (54.9%)	15,279 (54.0%)	30,527 (54.8%)	15,855 (56.2%)
	3 - 4	24,009 (21.4%)	6,172 (21.8%)	12,036 (21.6%)	5,801 (20.6%)
	5 - 9	16,980 (15.1%)	4,494 (15.9%)	8,479 (15.2%)	4,007 (14.2%)
	10+	4,831 (4.3%)	1,315 (4.6%)	2,472 (4.4%)	1,044 (3.7%)
<i>Emergency and inpatient admissions (2 years prior)</i>					
Any unscheduled ED visits	Yes	65,094 (58.0%)	16,583 (58.6%)	31,558 (56.7%)	16,953 (60.1%)
Unscheduled ED visits (cont.)	Mean (SD)	1.5 (2.4)	1.5 (2.7)	1.4 (2.2)	1.5 (2.5)
	Median (IQR)	1 (0–2)	1 (0–2)	1 (0–2)	1 (0–2)
Any inpatient hospitalization episodes	Yes	20,299 (18.1%)	5,578 (19.7%)	9,355 (16.8%)	5,366 (19.0%)
Inpatient hospitalization episodes (cont.)	Mean (SD)	0.3 (0.7)	0.3 (0.8)	0.2 (0.7)	0.3 (0.7)
	Median (IQR)	0 (0–0)	0 (0–0)	0 (0–0)	0 (0–0)
<i>Up to date on cancer screening</i>					
Pap smear (females age 18 to 70)	Yes	20,003 (61.0%)	4,813 (63.2%)	10,520 (63.0%)	4,670 (55.2%)
Mammogram (females age 50 to 70)	Yes	16,220 (67.1%)	3,937 (69.3%)	8,565 (69.4%)	3,718 (60.3%)
FOBT/sigmoidoscopy/colonoscopy (age 50 to 70)	Yes	30,057 (61.4%)	7,348 (66.2%)	15,647 (62.8%)	7,062 (54.7%)
<b>Comorbidities and chronic conditions</b>					
<i>Comorbidities</i>					
Charlson score (cont.)	Mean (SD)	0.4 (1.1)	0.5 (1.2)	0.4 (1.1)	0.4 (1.1)
	Median (IQR)	0 (0–0)	0 (0–0)	0 (0–0)	0 (0–0)
Charlson comorbidities (cat.)	0	92,158 (82.1%)	22,398 (79.1%)	46,492 (83.5%)	23,268 (82.4%)
	1	8,578 (7.6%)	2,351 (8.3%)	4,038 (7.2%)	2,189 (7.8%)
	2	4,830 (4.3%)	1,482 (5.2%)	2,190 (3.9%)	1,158 (4.1%)
	3+	6,665 (5.9%)	2,076 (7.3%)	2,983 (5.4%)	1,606 (5.7%)

*Chronic conditions*

Asthma	Yes	10,397 (9.3%)	2,544 (9.0%)	5,272 (9.5%)	2,581 (9.1%)
Congestive heart failure	Yes	9,509 (8.5%)	3,292 (11.6%)	4,329 (7.8%)	1,888 (6.7%)
Inflammatory bowel disease	Yes	435 (0.4%)	96 (0.3%)	172 (0.3%)	167 (0.6%)
Chronic obstructive pulmonary disease	Yes	11,578 (10.3%)	2,994 (10.6%)	5,588 (10.0%)	2,996 (10.6%)
HIV	Yes	171 (0.2%)	53 (0.2%)	79 (0.1%)	39 (0.1%)
Hypertension	Yes	63,988 (57.0%)	17,283 (61.1%)	31,249 (56.1%)	15,456 (54.8%)
Dementia	Yes	4,807 (4.3%)	1,389 (4.9%)	2,200 (3.9%)	1,218 (4.3%)
Diabetes	Yes	23,222 (20.7%)	6,388 (22.6%)	11,128 (20.0%)	5,706 (20.2%)
Chronic rheumatoid arthritis	Yes	1,464 (1.3%)	393 (1.4%)	708 (1.3%)	363 (1.3%)
Osteoarthritis	Yes	20,042 (17.9%)	5,627 (19.9%)	9,878 (17.7%)	4,537 (16.1%)
Mood disorder	Yes	13,807 (12.3%)	3,596 (12.7%)	6,848 (12.3%)	3,363 (11.9%)
Other mental health disorder	Yes	6,629 (5.9%)	1,794 (6.3%)	3,103 (5.6%)	1,732 (6.1%)
Osteoporosis	Yes	1,831 (1.6%)	526 (1.9%)	877 (1.6%)	428 (1.5%)
Renal disease	Yes	6,303 (5.6%)	2,147 (7.6%)	2,772 (5.0%)	1,384 (4.9%)
Stroke	Yes	2,486 (2.2%)	724 (2.6%)	1,147 (2.1%)	615 (2.2%)
Chronic coronary syndrome	Yes	12,131 (10.8%)	4,089 (14.4%)	5,685 (10.2%)	2,357 (8.4%)
Acute myocardial infarction	Yes	2,830 (2.5%)	875 (3.1%)	1,338 (2.4%)	617 (2.2%)

#### *Medication use (age 66+)*

<i>Concurrent medication use</i>					
Number of concurrent medications being used (cont.)	Mean (SD)	4.6 (3.3)	4.8 (3.4)	4.5 (3.3)	4.6 (3.3)
	Median (IQR)	4 (2–7)	4 (2–7)	4 (2–7)	4 (2–7)
Number of concurrent medications being used (cat.)	0	6,034 (9.7%)	1,560 (8.9%)	2,988 (9.9%)	1,486 (10.1%)
	1 - 4	27,434 (44.1%)	7,459 (42.7%)	13,603 (45.1%)	6,372 (43.4%)
	5 - 9	23,467 (37.7%)	6,814 (39.0%)	11,053 (36.7%)	5,600 (38.2%)
	10+	5,342 (8.6%)	1,623 (9.3%)	2,503 (8.3%)	1,216 (8.3%)

#### *Recent medication use*

<i>Antiplatelet</i>					
Nonsteroidal anti-inflammatory (ASA-based)	Yes	2,062 (3.3%)	564 (3.2%)	999 (3.3%)	499 (3.4%)
Nonsteroidal anti-inflammatory (non-ASA-based)	Yes	11,481 (18.4%)	3,149 (18.0%)	5,513 (18.3%)	2,819 (19.2%)
Adenosine disphosphonate inhibitor	Yes	4,772 (7.7%)	1,504 (8.6%)	2,256 (7.5%)	1,012 (6.9%)
<i>Cardiovascular</i>					
Coronary vasodilator (nitrate)	Yes	5,415 (8.7%)	1,845 (10.6%)	2,515 (8.3%)	1,055 (7.2%)
Beta blocker	Yes	18,561 (29.8%)	6,178 (35.4%)	8,620 (28.6%)	3,763 (25.6%)
Calcium channel blocker	Yes	19,725 (31.7%)	5,329 (30.5%)	9,513 (31.6%)	4,883 (33.3%)
ACE inhibitor	Yes	19,838 (31.9%)	5,729 (32.8%)	9,476 (31.4%)	4,633 (31.6%)
Angiotensin receptor agonist	Yes	14,684 (23.6%)	4,363 (25.0%)	7,072 (23.5%)	3,249 (22.1%)
<i>Lipid-lowering</i>					
Statin	Yes	33,080 (53.1%)	10,039 (57.5%)	15,912 (52.8%)	7,129 (48.6%)

<i>Psychotropics</i>					
Tricyclic antidepressant	Yes	2,975 (4.8%)	767 (4.4%)	1,446 (4.8%)	762 (5.2%)
Selective serotonin reuptake inhibitor	Yes	7,311 (11.7%)	1,971 (11.3%)	3,547 (11.8%)	1,793 (12.2%)
<b><i>Incident cancer type (Ontario Cancer Registry)</i></b>					
	Lung	20,583 (18.3%)	5,171 (18.3%)	10,256 (18.4%)	5,156 (18.3%)
	Colon	17,259 (15.4%)	4,368 (15.4%)	8,561 (15.4%)	4,330 (15.3%)
	Breast	9,857 (8.8%)	2,483 (8.8%)	4,875 (8.8%)	2,499 (8.9%)
	Prostate	8,587 (7.7%)	2,157 (7.6%)	4,269 (7.7%)	2,161 (7.7%)
	Other solid tumour	8,051 (7.2%)	2,036 (7.2%)	3,995 (7.2%)	2,020 (7.2%)
	Bladder	6,963 (6.2%)	1,768 (6.2%)	3,445 (6.2%)	1,750 (6.2%)
	Thyroid	5,944 (5.3%)	1,497 (5.3%)	2,943 (5.3%)	1,504 (5.3%)
	Kidney	5,272 (4.7%)	1,334 (4.7%)	2,618 (4.7%)	1,320 (4.7%)
	Pancreas	5,195 (4.6%)	1,309 (4.6%)	2,576 (4.6%)	1,310 (4.6%)
	Endometrium	4,500 (4.0%)	1,126 (4.0%)	2,238 (4.0%)	1,136 (4.0%)
	Stomach	3,365 (3.0%)	847 (3.0%)	1,673 (3.0%)	845 (3.0%)
	Head and neck	3,160 (2.8%)	794 (2.8%)	1,575 (2.8%)	791 (2.8%)
	Ovary	3,085 (2.7%)	781 (2.8%)	1,527 (2.7%)	777 (2.8%)
	Melanoma	2,815 (2.5%)	710 (2.5%)	1,397 (2.5%)	708 (2.5%)
	Brain	2,563 (2.3%)	650 (2.3%)	1,267 (2.3%)	646 (2.3%)
	Other GI	1,726 (1.5%)	437 (1.5%)	856 (1.5%)	433 (1.5%)
	Esophagus	1,483 (1.3%)	375 (1.3%)	734 (1.3%)	374 (1.3%)
	Testis	990 (0.9%)	253 (0.9%)	489 (0.9%)	248 (0.9%)
	Cervix	833 (0.7%)	211 (0.7%)	409 (0.7%)	213 (0.8%)
<b><i>Complete blood count</i></b>					
Number of baseline CBC observations (cont.)	Mean (SD)	1.5 (1.3)	1.5 (1.5)	1.4 (1.2)	1.5 (1.4)
	Median (IQR)	1 (1–2)	1 (1–1)	1 (1–1)	1 (1–2)
Number of baseline CBC observations (cat.)	1	83,819 (74.7%)	21,324 (75.3%)	42,353 (76.0%)	20,142 (71.4%)
	2	18,559 (16.5%)	4,512 (15.9%)	8,935 (16.0%)	5,112 (18.1%)
	3+	9,853 (8.8%)	2,471 (8.7%)	4,415 (7.9%)	2,967 (10.5%)
Days from baseline CBC to cancer diagnosis	Mean (SD)	12.6 (9.5)	12.4 (9.6)	12.8 (9.5)	12.4 (9.5)
	Median (IQR)	12 (4–21)	12 (4–21)	12 (4–21)	12 (4–21)
Number of CBC observations in the follow-up period (cont.)	Mean (SD)	15.0 (20.3)	15.8 (21.2)	14.8 (19.4)	14.8 (21.0)
	Median (IQR)	8 (3–20)	9 (3–20)	8 (3–19)	8 (2–20)
Number of CBC observations in the follow-up period (cat.)	0	13,109 (11.7%)	2,674 (9.4%)	6,121 (11.0%)	4,314 (15.3%)
	1 - 4	25,385 (22.6%)	6,235 (22.0%)	13,013 (23.4%)	6,137 (21.7%)
	5 - 9	21,958 (19.6%)	5,705 (20.2%)	11,188 (20.1%)	5,065 (17.9%)
	10 - 19	23,405 (20.9%)	6,205 (21.9%)	11,557 (20.7%)	5,643 (20.0%)
	20 - 29	11,679 (10.4%)	3,086 (10.9%)	5,789 (10.4%)	2,804 (9.9%)

	30+	16,695 (14.9%)	4,402 (15.6%)	8,035 (14.4%)	4,258 (15.1%)
<b>Follow-up period</b>					
Follow-up time	Mean (SD)	2.6 (2.4)	2.7 (2.3)	2.7 (2.4)	2.3 (2.5)
	Median (IQR)	1.9 (0.7–3.9)	2.1 (0.9–4.0)	2.0 (0.8–4.1)	1.5 (0.3–3.5)
<b>Deaths in follow-up period</b>					
Any death	Yes	51,738 (46.1%)	11,940 (42.2%)	24,085 (43.2%)	15,713 (55.7%)
Any cancer death	Yes	41,968 (37.4%)	9,048 (32.0%)	19,600 (35.2%)	13,320 (47.2%)
Cancer-specific death	Yes	40,329 (35.9%)	8,666 (30.6%)	18,845 (33.8%)	12,818 (45.4%)

**Table S9.** Sex- and cancer-specific platelet count reference distributions for exposure definition.

Sex	Cancer Type	Frequency	Platelet count distribution						
			Mean	Standard Deviation	P10	P25	P50	P75	P90
Female	All cancers	56,524	291.5	105.2	187	224	272	336	420
	Bladder	1,652	273.0	99.5	176	212	255	309	388
	Brain	1,154	266.2	71.1	180	216	259	309	361
	Breast	9,857	261.3	76.3	181	214	252	297	347
	Cervix*	833	306.4	112.7	197	235	284	350	437
	Colon*	8,188	330.3	123.2	201	246	307	389	489
	Endometrium	4,500	276.4	87.3	189	221	262	311	381
	Esophagus*	358	298.3	104.8	190	229	276	354	435
	Head and neck	788	267.0	78.2	178	218	261	311	366
	Kidney	1,842	284.9	105.6	183	219	263	326	417
	Lung*	10,036	308.5	113.2	189	232	289	363	451
	Melanoma	1,224	261.7	75.9	177	214	252.5	297	349
	Other GI*	980	294.2	98.7	189	226.5	279	345	421
	Other solid tumour*	3,660	298.7	120.4	183	224	276	348	449
	Ovary*	3,085	340.4	122.4	210	255	317	403	498
	Pancreas	2,536	270.5	93.8	167	207	257	321	385
	Stomach*	1,224	312.2	125.4	191	237.5	292	366	454
	Thyroid	4,607	256.6	63.3	185	213	251	292	336
Male	All cancers	55,707	258.5	99.3	159	194	240	300	380
	Bladder	5,311	229.1	76.1	151	180	218	262	319
	Brain	1,409	235.7	65.4	161	193	231	270	313
	Colon*	9,071	284.9	110.7	172	210	263	336	425
	Esophagus*	1,125	280.8	108.2	175	210	264	327	411
	Head and neck	2,372	243.8	78.5	161	192	234.5	279.5	340
	Kidney	3,430	250.8	95.5	161	191	231	288	358



<b>Lung*</b>	<b>10,547</b>	<b>288.5</b>	<b>115.3</b>	<b>168</b>	<b>211</b>	<b>268</b>	<b>343</b>	<b>435</b>
Melanoma	1,591	227.9	72.6	155	184	217	257	309
<b>Other GI*</b>	<b>746</b>	<b>267.3</b>	<b>111.3</b>	<b>154</b>	<b>199</b>	<b>246.5</b>	<b>312</b>	<b>392</b>
<b>Other solid tumour*</b>	<b>4,391</b>	<b>259.3</b>	<b>103.1</b>	<b>151</b>	<b>190</b>	<b>242</b>	<b>308</b>	<b>387</b>
Pancreas	2,659	243.9	90.3	148	184	230	286	355
Prostate	8,587	228.8	73.8	152	182	219	263	316
<b>Stomach*</b>	<b>2,141</b>	<b>283.5</b>	<b>107.8</b>	<b>171</b>	<b>209</b>	<b>266</b>	<b>335</b>	<b>419</b>
Testis	990	244.5	68.4	172	202	235	278	326
Thyroid	1,337	228.9	63.2	162	187	220	259	305

\* Bolded rows have mean values that exceed the overall mean for the respective sex. P10 = 10<sup>th</sup> percentile, P25 = 25<sup>th</sup> percentile, P50 = 50<sup>th</sup> percentile, P75 = 75<sup>th</sup> percentile, P90 = 90<sup>th</sup> percentile.

**Table S10.** Distribution of aggregate cancer stage by cancer site.

<b>Cancer type</b>	<b>Total</b>	<b>Stage I</b>	<b>Stage II</b>	<b>Stage III</b>	<b>Stage IV</b>	<b>Unknown</b>
<i>All cancers</i>	<i>112,231</i>	<i>19,058 (17.0%)</i>	<i>16,936 (15.1%)</i>	<i>15,098 (13.5%)</i>	<i>23,406 (20.9%)</i>	<i>37,733 (33.6%)</i>
Lung	20,583 (18.3%)	3,506 (17.0%)	1,416 (6.9%)	3,627 (17.6%)	10,273 (49.9%)	1,761 (8.6%)
Colon	17,259 (15.4%)	2,939 (17.0%)	4,414 (25.6%)	4,790 (27.8%)	3,771 (21.8%)	1,345 (7.8%)
Breast	9,857 (8.8%)	3,667 (37.2%)	3,488 (35.4%)	1,415 (14.4%)	838 (8.5%)	449 (4.6%)
Prostate	8,587 (7.7%)	1,480 (17.2%)	3,772 (43.9%)	779 (9.1%)	1,738 (20.2%)	818 (9.5%)
Other solid tumour	8,051 (7.2%)	431 (5.4%)	490 (6.1%)	436 (5.4%)	634 (7.9%)	6,060 (75.3%)
Bladder	6,963 (6.2%)	171 (2.5%)	368 (5.3%)	108 (1.6%)	364 (5.2%)	5,952 (85.5%)
Thyroid	5,944 (5.3%)	1,431 (24.1%)	219 (3.7%)	236 (4.0%)	167 (2.8%)	3,891 (65.5%)
Kidney	5,272 (4.7%)	524 (9.9%)	103 (2.0%)	299 (5.7%)	596 (11.3%)	3,750 (71.1%)
Pancreas	5,195 (4.6%)	198 (3.8%)	598 (11.5%)	369 (7.1%)	1,320 (25.4%)	2,710 (52.2%)
Endometrium	4,500 (4.0%)	2,050 (45.6%)	270 (6.0%)	394 (8.8%)	273 (6.1%)	1,513 (33.6%)
Stomach	3,365 (3.0%)	172 (5.1%)	218 (6.5%)	271 (8.1%)	698 (20.7%)	2,006 (59.6%)
Head and neck	3,160 (2.8%)	363 (11.5%)	344 (10.9%)	427 (13.5%)	1,305 (41.3%)	721 (22.8%)
Ovary	3,085 (2.7%)	461 (14.9%)	190 (6.2%)	1,014 (32.9%)	411 (13.3%)	1,009 (32.7%)
Melanoma	2,815 (2.5%)	714 (25.4%)	460 (16.3%)	224 (8.0%)	152 (5.4%)	1,265 (44.9%)
Brain	2,563 (2.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2,563 (100.0%)
Other GI	1,726 (1.5%)	74 (4.3%)	185 (10.7%)	246 (14.3%)	303 (17.6%)	918 (53.2%)
Esophagus	1,483 (1.3%)	49 (3.3%)	142 (9.6%)	218 (14.7%)	409 (27.6%)	665 (44.8%)
Testis	990 (0.9%)	512 (51.7%)	116 (11.7%)	81 (8.2%)	0 (0.0%)	281 (28.4%)
Cervix	833 (0.7%)	316 (37.9%)	143 (17.2%)	164 (19.7%)	154 (18.5%)	56 (6.7%)

**Table S11.** Cancer-specific mortality rates and hazard ratios by baseline platelet count category (exposure definition 1), for all cancers.

Cancer	Platelet category	Person-years	Cancer-specific deaths	Rate (% per year)	Unadjusted		Patient variable adjustment*		Patient variable and cancer stage adjustment**	
					HR (95% CI)	P-value	HR (95% CI)	P-value	HR (95% CI)	P-value
All cancers	1 - Low ( $\leq$ 25th pctl)	76,425.8	8,666	11.3	0.91 (0.88–0.93)	<0.0001	0.84 (0.82–0.86)	<0.0001	0.91 (0.88–0.94)	<0.0001
	2 - Medium ( $>25$ to $<75$ th pctl)	153,022.0	18,845	12.3	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq$ 75th pctl)	65,811.5	12,818	19.5	1.52 (1.48–1.55)	<0.0001	1.55 (1.52–1.59)	<0.0001	1.23 (1.20–1.26)	<0.0001
Colon	1 - Low ( $\leq$ 25th pctl)	13,656.9	926	6.8	0.70 (0.65–0.76)	<0.0001	0.69 (0.64–0.75)	<0.0001	0.92 (0.84–0.99)	0.0334
	2 - Medium ( $>25$ to $<75$ th pctl)	26,021.7	2,510	9.6	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq$ 75th pctl)	10,913.0	1,884	17.3	1.70 (1.60–1.80)	<0.0001	1.71 (1.61–1.81)	<0.0001	1.32 (1.24–1.40)	<0.0001
Lung	1 - Low ( $\leq$ 25th pctl)	8,415.3	2,798	33.2	0.80 (0.77–0.84)	<0.0001	0.75 (0.72–0.79)	<0.0001	0.93 (0.89–0.97)	0.0024
	2 - Medium ( $>25$ to $<75$ th pctl)	14,959.1	6,504	43.5	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq$ 75th pctl)	4,977.9	3,872	77.8	1.55 (1.48–1.61)	<0.0001	1.57 (1.51–1.63)	<0.0001	1.35 (1.29–1.40)	<0.0001
Breast	1 - Low ( $\leq$ 25th pctl)	9,436.4	298	3.2	1.19 (1.03–1.37)	0.0193	1.05 (0.91–1.21)	0.5042	1.11 (0.96–1.30)	0.1654
	2 - Medium ( $>25$ to $<75$ th pctl)	19,744.7	516	2.6	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq$ 75th pctl)	9,377.9	428	4.6	1.73 (1.52–1.97)	<0.0001	1.80 (1.58–2.04)	<0.0001	1.23 (1.07–1.41)	0.0028
Prostate	1 - Low ( $\leq$ 25th pctl)	7,499.3	365	4.9	1.66 (1.45–1.90)	<0.0001	1.39 (1.21–1.60)	<0.0001	1.30 (1.11–1.51)	0.0009
	2 - Medium ( $>25$ to $<75$ th pctl)	16,960.5	474	2.8	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq$ 75th pctl)	8,034.9	434	5.4	1.91 (1.68–2.17)	<0.0001	1.87 (1.64–2.13)	<0.0001	1.39 (1.21–1.61)	<0.0001
Ovary	1 - Low ( $\leq$ 25th pctl)	2,161.7	226	10.5	0.65 (0.56–0.76)	<0.0001	0.63 (0.54–0.74)	<0.0001	0.78 (0.64–0.95)	0.0143
	2 - Medium ( $>25$ to $<75$ th pctl)	4,017.9	650	16.2	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq$ 75th pctl)	1,699.2	459	27.0	1.60 (1.42–1.80)	<0.0001	1.60 (1.42–1.81)	<0.0001	1.27 (1.10–1.48)	0.0016
Stomach	1 - Low ( $\leq$ 25th pctl)	1,441.4	478	33.2	0.88 (0.79–0.99)	0.0265	0.87 (0.78–0.97)	0.0111	1.08 (0.91–1.28)	0.3949
	2 - Medium ( $>25$ to $<75$ th pctl)	2,745.4	1,035	37.7	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq$ 75th pctl)	1,191.1	574	48.2	1.25 (1.13–1.38)	<0.0001	1.23 (1.11–1.36)	0.0001	1.03 (0.88–1.21)	0.6992
Pancreas	1 - Low ( $\leq$ 25th pctl)	1,133.3	1,060	93.5	1.12 (1.04–1.20)	0.0033	1.08 (1.00–1.16)	0.0542	0.94 (0.84–1.05)	0.3046
	2 - Medium ( $>25$ to $<75$ th pctl)	2,581.5	2,028	78.6	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	

Kidney	3 - High ( $\geq 75$ th pctl)	1,084.5	1,104	101.8	1.26 (1.17–1.35)	<0.0001	1.27 (1.18–1.37)	<0.0001	1.23 (1.10–1.37)	0.0002
	1 - Low ( $\leq 25$ th pctl)	4,253.6	157	3.7	0.89 (0.74–1.08)	0.2417	0.76 (0.63–0.92)	0.005	0.83 (0.63–1.10)	0.1919
	2 - Medium ( $>25$ to $<75$ th pctl)	8,437.8	346	4.1	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
Bladder	3 - High ( $\geq 75$ th pctl)	3,212.7	533	16.6	3.79 (3.31–4.34)	<0.0001	3.72 (3.25–4.27)	<0.0001	1.64 (1.36–1.98)	<0.0001
	1 - Low ( $\leq 25$ th pctl)	5,285.2	230	4.4	1.03 (0.88–1.20)	0.7431	0.88 (0.75–1.03)	0.122	0.72 (0.55–0.94)	0.0159
	2 - Medium ( $>25$ to $<75$ th pctl)	10,633.9	446	4.2	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
Esophagus	3 - High ( $\geq 75$ th pctl)	4,677.0	477	10.2	2.41 (2.12–2.75)	<0.0001	2.46 (2.16–2.80)	<0.0001	1.29 (1.05–1.59)	0.0166
	1 - Low ( $\leq 25$ th pctl)	478.8	264	55.1	1.02 (0.88–1.19)	0.7678	0.99 (0.85–1.15)	0.8641	0.99 (0.80–1.22)	0.9321
	2 - Medium ( $>25$ to $<75$ th pctl)	962.8	516	53.6	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
Other GI	3 - High ( $\geq 75$ th pctl)	363.9	292	80.3	1.45 (1.26–1.68)	<0.0001	1.49 (1.29–1.72)	<0.0001	1.09 (0.89–1.32)	0.4196
	1 - Low ( $\leq 25$ th pctl)	985.7	132	13.4	0.94 (0.76–1.15)	0.5527	0.89 (0.72–1.09)	0.2591	0.75 (0.53–1.06)	0.108
	2 - Medium ( $>25$ to $<75$ th pctl)	2,127.7	291	13.7	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
Thyroid	3 - High ( $\geq 75$ th pctl)	837.9	217	25.9	1.77 (1.48–2.11)	<0.0001	1.84 (1.54–2.19)	<0.0001	1.79 (1.35–2.37)	<0.0001
	1 - Low ( $\leq 25$ th pctl)	5,984.2	24	0.4	1.25 (0.75–2.09)	0.3856	1.06 (0.63–1.77)	0.8212	0.50 (0.21–1.18)	0.1135
	2 - Medium ( $>25$ to $<75$ th pctl)	12,113.1	38	0.3	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
Cervix	3 - High ( $\geq 75$ th pctl)	6,172.7	48	0.8	2.49 (1.63–3.82)	<0.0001	3.31 (2.15–5.10)	<0.0001	1.27 (0.74–2.19)	0.3913
	1 - Low ( $\leq 25$ th pctl)	748.2	32	4.3	0.58 (0.39–0.86)	0.0065	0.50 (0.33–0.75)	0.0007	0.73 (0.47–1.14)	0.168
	2 - Medium ( $>25$ to $<75$ th pctl)	1,346.7	100	7.4	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
Testis	3 - High ( $\geq 75$ th pctl)	535.7	110	20.5	2.61 (1.99–3.42)	<0.0001	2.63 (2.00–3.46)	<0.0001	1.88 (1.40–2.53)	<0.0001
	1 - Low ( $\leq 25$ th pctl)	*SS*	*SS*	0.3	0.97 (0.24–3.86)	0.9607	0.69 (0.17–2.88)	0.6135	1.47 (0.13–16.20)	0.7513
	2 - Medium ( $>25$ to $<75$ th pctl)	*SS*	*SS*	0.3	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
Endometrium	3 - High ( $\geq 75$ th pctl)	*SS*	*SS*	1.5	4.76 (1.83–12.39)	0.0014	4.92 (1.83–13.25)	0.0016	1.52 (0.46–5.04)	0.4895
	1 - Low ( $\leq 25$ th pctl)	3,988.2	135	3.4	1.13 (0.91–1.40)	0.2571	0.94 (0.76–1.16)	0.5428	1.18 (0.92–1.52)	0.2011
	2 - Medium ( $>25$ to $<75$ th pctl)	7,996.6	239	3.0	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
Brain	3 - High ( $\geq 75$ th pctl)	3,496.7	259	7.4	2.42 (2.03–2.89)	<0.0001	2.69 (2.25–3.21)	<0.0001	1.91 (1.53–2.38)	<0.0001
	1 - Low ( $\leq 25$ th pctl)	868.5	468	53.9	1.11 (0.99–1.24)	0.074	0.91 (0.81–1.02)	0.1236	NA	
	2 - Medium ( $>25$ to $<75$ th pctl)	1,910.8	887	46.4	1.00 (Reference)		1.00 (Reference)		NA	
Melanoma	3 - High ( $\geq 75$ th pctl)	1,038.2	461	44.4	1.01 (0.90–1.13)	0.9181	1.05 (0.94–1.18)	0.3669	NA	
	1 - Low ( $\leq 25$ th pctl)	2,672.7	86	3.2	0.99 (0.76–1.28)	0.9398	0.90 (0.69–1.17)	0.434	0.79 (0.56–1.12)	0.1815

	2 - Medium (>25 to <75th pctl)	5,219.7	170	3.3	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High (≥75th pctl)	2,421.2	168	6.9	2.16 (1.74–2.67)	<0.0001	2.25 (1.82–2.79)	<0.0001	1.30 (0.99–1.72)	0.0627
Head and neck	1 - Low (≤25th pctl)	2,394.6	129	5.4	0.91 (0.74–1.12)	0.3731	0.79 (0.64–0.98)	0.0303	0.91 (0.72–1.16)	0.4479
	2 - Medium (>25 to <75th pctl)	5,158.0	291	5.6	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High (≥75th pctl)	2,154.6	222	10.3	1.73 (1.46–2.06)	<0.0001	1.79 (1.50–2.13)	<0.0001	1.52 (1.24–1.86)	<0.0001
	1 - Low (≤25th pctl)	4,023.6	855	21.2	0.96 (0.88–1.04)	0.2931	0.86 (0.80–0.94)	0.0005	0.92 (0.77–1.09)	0.331
Other solid tu- mour	2 - Medium (>25 to <75th pctl)	8,195.0	1,798	21.9	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High (≥75th pctl)	2,661.3	1,262	47.4	1.79 (1.67–1.92)	<0.0001	1.78 (1.66–1.92)	<0.0001	1.31 (1.12–1.53)	0.0008

HR = Hazard ratio; pctl = percentile; NA = Not applicable; \*SS\* = data suppressed due to small number of observations/events. \* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), and common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes). \*\* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes), and cancer stage. Only subjects with known cancer stage were included.

**Table S12.** Cancer-specific mortality rates and hazard ratios by baseline platelet count category (exposure definition 2), for all cancers.

Cancer	Platelet category	Person- years	Cancer- specific deaths	Rate (% per year)	Unadjusted		Patient variable adjust- ment*		Patient variable and can- cer stage adjustment**	
					HR (95% CI)	P-value	HR (95% CI)	P-value	HR (95% CI)	P-value
All	1 - Very low (≤10th pctl)	29,043.6	3,624	12.5	0.97 (0.94–1.01)	0.1193	0.86 (0.83–0.90)	<0.0001	0.94 (0.90–0.98)	0.0064
	2 - Low (>10 to ≤25th pctl)	47,382.2	5,042	10.6	0.86 (0.84–0.89)	<0.0001	0.82 (0.79–0.84)	<0.0001	0.90 (0.86–0.93)	<0.0001
	3 - Medium (>25 to <75th pctl)	153,022.0	18,845	12.3	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High (≥75 to <90th pctl)	41,977.2	7,129	17.0	1.35 (1.31–1.39)	<0.0001	1.38 (1.34–1.42)	<0.0001	1.19 (1.16–1.23)	<0.0001
	5 - Very high (≥90th pctl)	23,834.3	5,689	23.9	1.79 (1.74–1.85)	<0.0001	1.84 (1.79–1.90)	<0.0001	1.28 (1.23–1.33)	<0.0001
Colon	1 - Very low (≤10th pctl)	5,313.0	362	6.8	0.70 (0.63–0.78)	<0.0001	0.67 (0.60–0.75)	<0.0001	0.92 (0.81–1.04)	0.1619
	2 - Low (>10 to ≤25th pctl)	8,343.8	564	6.8	0.70 (0.64–0.77)	<0.0001	0.71 (0.64–0.77)	<0.0001	0.91 (0.83–1.01)	0.0672
	3 - Medium (>25 to <75th pctl)	26,021.7	2,510	9.6	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High (≥75 to <90th pctl)	6,899.5	1,046	15.2	1.51 (1.41–1.63)	<0.0001	1.51 (1.40–1.62)	<0.0001	1.24 (1.15–1.34)	<0.0001
	5 - Very high (≥90th pctl)	4,013.5	838	20.9	2.01 (1.86–2.17)	<0.0001	2.06 (1.90–2.22)	<0.0001	1.44 (1.32–1.56)	<0.0001
Lung	1 - Very low (≤10th pctl)	3,126.0	1,149	36.8	0.87 (0.82–0.92)	<0.0001	0.79 (0.74–0.84)	<0.0001	1.02 (0.95–1.09)	0.6681
	2 - Low (>10 to ≤25th pctl)	5,289.3	1,649	31.2	0.76 (0.72–0.80)	<0.0001	0.73 (0.69–0.77)	<0.0001	0.88 (0.83–0.93)	<0.0001
	3 - Medium (>25 to <75th pctl)	14,959.1	6,504	43.5	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	

	4 - High ( $\geq 75$ to $< 90$ th pctl)	3,220.3	2,282	70.9	1.44 (1.37–1.51)	<0.0001	1.45 (1.39–1.53)	<0.0001	1.29 (1.23–1.35)	<0.0001
	5 - Very high ( $\geq 90$ th pctl)	1,757.6	1,590	90.5	1.73 (1.64–1.83)	<0.0001	1.78 (1.68–1.88)	<0.0001	1.44 (1.36–1.53)	<0.0001
Breast	1 - Very low ( $\leq 10$ th pctl)	3,556.0	154	4.3	1.60 (1.34–1.91)	<0.0001	1.39 (1.16–1.67)	0.0003	1.27 (1.04–1.54)	0.018
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	5,880.4	144	2.4	0.93 (0.77–1.12)	0.4298	0.83 (0.69–1.00)	0.0545	0.99 (0.81–1.21)	0.9388
	3 - Medium ( $> 25$ to $< 75$ th pctl)	19,744.7	516	2.6	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	5,853.6	207	3.5	1.35 (1.14–1.58)	0.0003	1.41 (1.20–1.66)	<0.0001	1.17 (0.98–1.38)	0.0788
	5 - Very high ( $\geq 90$ th pctl)	3,524.2	221	6.3	2.36 (2.01–2.76)	<0.0001	2.42 (2.06–2.83)	<0.0001	1.30 (1.10–1.54)	0.0021
Prostate	1 - Very low ( $\leq 10$ th pctl)	2,792.8	189	6.8	2.24 (1.89–2.65)	<0.0001	1.76 (1.49–2.09)	<0.0001	1.44 (1.18–1.75)	0.0003
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	4,706.4	176	3.7	1.30 (1.09–1.54)	0.003	1.14 (0.96–1.36)	0.1392	1.19 (0.98–1.44)	0.073
	3 - Medium ( $> 25$ to $< 75$ th pctl)	16,960.5	474	2.8	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	5,113.0	213	4.2	1.50 (1.28–1.76)	<0.0001	1.50 (1.28–1.77)	<0.0001	1.25 (1.05–1.49)	0.0141
	5 - Very high ( $\geq 90$ th pctl)	2,921.9	221	7.6	2.59 (2.21–3.04)	<0.0001	2.43 (2.07–2.85)	<0.0001	1.58 (1.32–1.89)	<0.0001
Ovary	1 - Very low ( $\leq 10$ th pctl)	826.6	90	10.9	0.66 (0.53–0.82)	0.0002	0.58 (0.46–0.72)	<0.0001	0.78 (0.57–1.06)	0.1063
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	1,335.1	136	10.2	0.65 (0.54–0.78)	<0.0001	0.68 (0.56–0.82)	<0.0001	0.78 (0.61–0.99)	0.0407
	3 - Medium ( $> 25$ to $< 75$ th pctl)	4,017.9	650	16.2	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	1,035.6	271	26.2	1.55 (1.34–1.79)	<0.0001	1.55 (1.34–1.79)	<0.0001	1.29 (1.08–1.53)	0.0053
	5 - Very high ( $\geq 90$ th pctl)	663.6	188	28.3	1.67 (1.42–1.97)	<0.0001	1.69 (1.44–2.00)	<0.0001	1.25 (1.03–1.53)	0.0268
Stomach	1 - Very low ( $\leq 10$ th pctl)	554.7	188	33.9	0.89 (0.76–1.04)	0.1543	0.87 (0.74–1.01)	0.0736	1.02 (0.79–1.33)	0.8614
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	886.7	290	32.7	0.88 (0.77–1.00)	0.0522	0.87 (0.76–0.99)	0.0353	1.11 (0.91–1.37)	0.3003
	3 - Medium ( $> 25$ to $< 75$ th pctl)	2,745.4	1,035	37.7	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	734.9	338	46.0	1.19 (1.05–1.34)	0.0061	1.16 (1.02–1.31)	0.0199	1.11 (0.92–1.35)	0.2836
	5 - Very high ( $\geq 90$ th pctl)	456.2	236	51.7	1.35 (1.17–1.55)	<0.0001	1.34 (1.16–1.54)	<0.0001	0.93 (0.75–1.17)	0.5454
Pancreas	1 - Very low ( $\leq 10$ th pctl)	445.9	424	95.1	1.15 (1.04–1.28)	0.009	1.07 (0.97–1.19)	0.1868	0.89 (0.76–1.05)	0.1731
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	687.3	636	92.5	1.10 (1.00–1.20)	0.0398	1.08 (0.99–1.18)	0.1019	0.97 (0.85–1.11)	0.7063
	3 - Medium ( $> 25$ to $< 75$ th pctl)	2,581.5	2,028	78.6	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	710.0	642	90.4	1.16 (1.06–1.26)	0.0013	1.16 (1.06–1.26)	0.0013	1.15 (1.01–1.31)	0.0408
	5 - Very high ( $\geq 90$ th pctl)	374.5	462	123.4	1.43 (1.29–1.58)	<0.0001	1.47 (1.33–1.63)	<0.0001	1.40 (1.19–1.64)	<0.0001
Kidney	1 - Very low ( $\leq 10$ th pctl)	1,685.5	72	4.3	1.03 (0.80–1.32)	0.834	0.84 (0.65–1.08)	0.1777	1.03 (0.69–1.55)	0.8689
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	2,568.0	85	3.3	0.80 (0.63–1.02)	0.0725	0.71 (0.56–0.90)	0.0046	0.74 (0.53–1.03)	0.0753
	3 - Medium ( $> 25$ to $< 75$ th pctl)	8,437.8	346	4.1	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	2,202.3	233	10.6	2.51 (2.13–2.97)	<0.0001	2.51 (2.13–2.97)	<0.0001	1.39 (1.11–1.76)	0.0046
	5 - Very high ( $\geq 90$ th pctl)	1,010.5	300	29.7	6.30 (5.40–7.36)	<0.0001	6.03 (5.16–7.05)	<0.0001	1.89 (1.53–2.35)	<0.0001

Bladder	1 - Very low ( $\leq 10$ th pctl)	2,049.9	98	4.8	1.11 (0.89–1.38)	0.3672	0.90 (0.72–1.12)	0.3265	0.64 (0.42–0.98)	0.0409
	2 - Low ( $>10$ to $\leq 25$ th pctl)	3,235.3	132	4.1	0.98 (0.80–1.18)	0.8016	0.87 (0.72–1.06)	0.1676	0.76 (0.55–1.04)	0.0831
	3 - Medium ( $>25$ to $<75$ th pctl)	10,633.9	446	4.2	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $<90$ th pctl)	3,046.2	231	7.6	1.83 (1.56–2.14)	$<0.0001$	1.90 (1.62–2.23)	$<0.0001$	1.13 (0.87–1.46)	0.3501
	5 - Very high ( $\geq 90$ th pctl)	1,630.8	246	15.1	3.46 (2.96–4.04)	$<0.0001$	3.41 (2.91–3.99)	$<0.0001$	1.47 (1.15–1.88)	0.0022
Esophagus	1 - Very low ( $\leq 10$ th pctl)	173.3	102	58.9	1.03 (0.83–1.28)	0.7762	0.98 (0.79–1.21)	0.8322	0.96 (0.70–1.32)	0.783
	2 - Low ( $>10$ to $\leq 25$ th pctl)	305.5	162	53.0	1.02 (0.85–1.21)	0.85	0.99 (0.83–1.19)	0.9338	1.01 (0.79–1.29)	0.9368
	3 - Medium ( $>25$ to $<75$ th pctl)	962.8	516	53.6	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $<90$ th pctl)	220.3	167	75.8	1.35 (1.13–1.60)	0.0009	1.36 (1.14–1.62)	0.0007	1.09 (0.86–1.37)	0.4916
	5 - Very high ( $\geq 90$ th pctl)	143.5	125	87.1	1.63 (1.34–1.98)	$<0.0001$	1.71 (1.40–2.08)	$<0.0001$	1.09 (0.81–1.45)	0.5746
Other GI	1 - Very low ( $\leq 10$ th pctl)	358.5	58	16.2	1.10 (0.83–1.45)	0.5182	1.05 (0.79–1.39)	0.7385	0.96 (0.60–1.53)	0.8502
	2 - Low ( $>10$ to $\leq 25$ th pctl)	627.2	74	11.8	0.84 (0.65–1.09)	0.1944	0.79 (0.61–1.02)	0.0745	0.63 (0.40–0.98)	0.0425
	3 - Medium ( $>25$ to $<75$ th pctl)	2,127.7	291	13.7	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $<90$ th pctl)	543.7	114	21.0	1.46 (1.18–1.82)	0.0006	1.53 (1.23–1.90)	0.0001	1.58 (1.13–2.22)	0.0077
	5 - Very high ( $\geq 90$ th pctl)	294.2	103	35.0	2.31 (1.84–2.89)	$<0.0001$	2.37 (1.89–2.97)	$<0.0001$	2.15 (1.49–3.12)	$<0.0001$
Thyroid	1 - Very low ( $\leq 10$ th pctl)	2,307.3	13	0.6	1.71 (0.91–3.21)	0.0959	1.27 (0.68–2.40)	0.455	0.39 (0.14–1.09)	0.0733
	2 - Low ( $>10$ to $\leq 25$ th pctl)	3,676.9	11	0.3	0.95 (0.49–1.87)	0.8914	0.88 (0.45–1.72)	0.7062	0.74 (0.24–2.34)	0.6129
	3 - Medium ( $>25$ to $<75$ th pctl)	12,113.1	38	0.3	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $<90$ th pctl)	3,818.5	15	0.4	1.28 (0.71–2.33)	0.4138	1.80 (0.99–3.29)	0.056	1.09 (0.50–2.36)	0.8242
	5 - Very high ( $\geq 90$ th pctl)	2,354.2	33	1.4	4.37 (2.74–6.97)	$<0.0001$	5.37 (3.33–8.68)	$<0.0001$	1.38 (0.75–2.54)	0.2969
Cervix	1 - Very low ( $\leq 10$ th pctl)	299.6	14	4.7	0.63 (0.36–1.10)	0.1028	0.49 (0.28–0.87)	0.0155	0.68 (0.37–1.26)	0.219
	2 - Low ( $>10$ to $\leq 25$ th pctl)	448.6	18	4.0	0.54 (0.33–0.89)	0.0163	0.50 (0.30–0.83)	0.0069	0.78 (0.45–1.36)	0.3781
	3 - Medium ( $>25$ to $<75$ th pctl)	1,346.7	100	7.4	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $<90$ th pctl)	358.0	64	17.9	2.37 (1.73–3.24)	$<0.0001$	2.28 (1.66–3.13)	$<0.0001$	1.81 (1.29–2.55)	0.0006
	5 - Very high ( $\geq 90$ th pctl)	177.7	46	25.9	3.04 (2.14–4.32)	$<0.0001$	3.38 (2.36–4.85)	$<0.0001$	1.99 (1.35–2.94)	0.0006
Testis	1 - Very low ( $\leq 10$ th pctl)	*SS*	*SS*	0.6	1.66 (0.33–8.21)	0.5361	0.95 (0.17–5.41)	0.9547	2.40 (0.23–25.37)	0.4675
	2 - Low ( $>10$ to $\leq 25$ th pctl)	*SS*	*SS*	0.2	0.53 (0.06–4.37)	0.5515	0.39 (0.05–3.35)	0.3933	NA	
	3 - Medium ( $>25$ to $<75$ th pctl)	1,889.0	6	0.3	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $<90$ th pctl)	*SS*	*SS*	0.6	2.19 (0.62–7.76)	0.2248	1.93 (0.51–7.23)	0.3315	0.55 (0.09–3.18)	0.5006
	5 - Very high ( $\geq 90$ th pctl)	327.4	10	3.1	8.97 (3.26–24.69)	$<0.0001$	11.23 (3.84–32.88)	$<0.0001$	2.74 (0.79–9.43)	0.1105
Endometrium	1 - Very low ( $\leq 10$ th pctl)	1,595.4	62	3.9	1.27 (0.96–1.68)	0.0964	0.96 (0.72–1.27)	0.7744	1.31 (0.94–1.84)	0.1138
	2 - Low ( $>10$ to $\leq 25$ th pctl)	2,392.7	73	3.1	1.03 (0.80–1.34)	0.8005	0.91 (0.70–1.19)	0.4891	1.09 (0.80–1.49)	0.5826

	3 - Medium (>25 to <75th pctl)	7,996.6	239	3.0	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High (≥75 to <90th pctl)	2,272.1	117	5.1	1.71 (1.37–2.13)	<0.0001	1.80 (1.44–2.25)	<0.0001	1.79 (1.37–2.34)	<0.0001
	5 - Very high (≥90th pctl)	1,224.6	142	11.6	3.71 (3.02–4.57)	<0.0001	4.62 (3.74–5.71)	<0.0001	2.04 (1.56–2.68)	<0.0001
Brain	1 - Very low (≤10th pctl)	331.1	188	56.8	1.15 (0.98–1.35)	0.0803	0.83 (0.70–0.97)	0.0204	NA	
	2 - Low (>10 to ≤25th pctl)	537.3	280	52.1	1.08 (0.94–1.24)	0.2603	0.98 (0.86–1.12)	0.767	NA	
	3 - Medium (>25 to <75th pctl)	1,910.8	887	46.4	1.00 (Reference)		1.00 (Reference)		NA	
	4 - High (≥75 to <90th pctl)	630.0	276	43.8	0.99 (0.87–1.14)	0.9201	1.05 (0.91–1.20)	0.4974	NA	
	5 - Very high (≥90th pctl)	408.1	185	45.3	1.03 (0.88–1.20)	0.754	1.06 (0.91–1.25)	0.4571	NA	
Melanoma	1 - Very low (≤10th pctl)	989.7	45	4.5	1.33 (0.96–1.85)	0.0874	1.12 (0.80–1.57)	0.4969	1.06 (0.69–1.62)	0.7834
	2 - Low (>10 to ≤25th pctl)	1,683.0	41	2.4	0.77 (0.55–1.09)	0.1379	0.75 (0.53–1.05)	0.0965	0.58 (0.36–0.94)	0.0267
	3 - Medium (>25 to <75th pctl)	5,219.7	170	3.3	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High (≥75 to <90th pctl)	1,521.5	82	5.4	1.67 (1.29–2.18)	0.0001	1.79 (1.37–2.33)	<0.0001	1.45 (1.04–2.02)	0.029
	5 - Very high (≥90th pctl)	899.8	86	9.6	2.97 (2.29–3.85)	<0.0001	2.99 (2.30–3.88)	<0.0001	1.15 (0.81–1.63)	0.4196
Head and neck	1 - Very low (≤10th pctl)	904.8	60	6.6	1.11 (0.84–1.46)	0.4656	0.91 (0.69–1.21)	0.5207	1.04 (0.74–1.47)	0.8045
	2 - Low (>10 to ≤25th pctl)	1,489.8	69	4.6	0.79 (0.61–1.02)	0.0746	0.72 (0.55–0.93)	0.0129	0.84 (0.63–1.12)	0.2408
	3 - Medium (>25 to <75th pctl)	5,158.0	291	5.6	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High (≥75 to <90th pctl)	1,437.1	112	7.8	1.35 (1.09–1.68)	0.0065	1.41 (1.13–1.75)	0.0023	1.20 (0.94–1.55)	0.145
	5 - Very high (≥90th pctl)	717.5	110	15.3	2.43 (1.95–3.03)	<0.0001	2.49 (2.00–3.10)	<0.0001	2.13 (1.64–2.76)	<0.0001
Other solid tu- mour	1 - Very low (≤10th pctl)	1,370.5	354	25.8	1.10 (0.98–1.23)	0.1036	0.98 (0.87–1.10)	0.7386	1.04 (0.79–1.37)	0.7902
	2 - Low (>10 to ≤25th pctl)	2,653.1	501	18.9	0.88 (0.79–0.97)	0.0095	0.80 (0.72–0.88)	<0.0001	0.86 (0.70–1.06)	0.1678
	3 - Medium (>25 to <75th pctl)	8,195.0	1,798	21.9	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High (≥75 to <90th pctl)	1,726.9	715	41.4	1.61 (1.48–1.76)	<0.0001	1.58 (1.45–1.72)	<0.0001	1.34 (1.11–1.62)	0.0021
	5 - Very high (≥90th pctl)	934.4	547	58.5	2.10 (1.91–2.31)	<0.0001	2.15 (1.95–2.36)	<0.0001	1.26 (1.01–1.58)	0.0408

HR = Hazard ratio; pctl = percentile; NA = Not applicable; \*SS\* = data suppressed due to small number of observations/events. \* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), and common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes). \*\* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes), and cancer stage. Only subjects with known cancer stage were included.

**Table S13.** Cancer-specific mortality rates and hazard ratios by baseline platelet count category, by cancer site and stage.

Cancer	Stage	Platelet category	Person-years	Cancer-specific deaths	Rate (% per year)	Unadjusted		Patient variable adjustment*	
						HR (95% CI)	P-value	HR (95% CI)	P-value
Colon	Stage I/II	1 - Low ( $\leq$ 25th pctl)	7,903.0	174	2.2	0.84 (0.70–1.00)	0.0525	0.83 (0.69–1.00)	0.0481
		2 - Medium (>25 to <75th pctl)	13,884.1	359	2.6	1.00 (Reference)		1.00 (Reference)	
		3 - High ( $\geq$ 75th pctl)	5,339.5	235	4.4	1.69 (1.43–1.99)	<0.0001	1.64 (1.39–1.93)	<0.0001
	Stage III/IV	1 - Low ( $\leq$ 25th pctl)	4,713.3	628	13.3	0.76 (0.69–0.83)	<0.0001	0.75 (0.68–0.82)	<0.0001
		2 - Medium (>25 to <75th pctl)	10,837.4	1,890	17.4	1.00 (Reference)		1.00 (Reference)	
		3 - High ( $\geq$ 75th pctl)	5,211.6	1,457	28.0	1.52 (1.42–1.63)	<0.0001	1.55 (1.45–1.66)	<0.0001
Lung	Stage I/II	1 - Low ( $\leq$ 25th pctl)	5,134.4	367	7.1	0.85 (0.74–0.96)	0.0113	0.77 (0.68–0.88)	0.0001
		2 - Medium (>25 to <75th pctl)	7,166.3	598	8.3	1.00 (Reference)		1.00 (Reference)	
		3 - High ( $\geq$ 75th pctl)	1,615.8	217	13.4	1.61 (1.38–1.88)	<0.0001	1.58 (1.35–1.84)	<0.0001
	Stage III/IV	1 - Low ( $\leq$ 25th pctl)	2,855.5	2,105	73.7	0.98 (0.93–1.03)	0.5141	0.92 (0.87–0.97)	0.0013
		2 - Medium (>25 to <75th pctl)	7,040.7	5,319	75.5	1.00 (Reference)		1.00 (Reference)	
		3 - High ( $\geq$ 75th pctl)	3,072.5	3,298	107.3	1.31 (1.26–1.37)	<0.0001	1.33 (1.28–1.39)	<0.0001
Breast	Stage I/II	1 - Low ( $\leq$ 25th pctl)	7,604.1	91	1.2	1.54 (1.17–2.02)	0.002	1.35 (1.03–1.78)	0.0297
		2 - Medium (>25 to <75th pctl)	15,684.7	122	0.8	1.00 (Reference)		1.00 (Reference)	
		3 - High ( $\geq$ 75th pctl)	6,960.8	80	1.1	1.48 (1.12–1.96)	0.0063	1.54 (1.16–2.05)	0.0027
	Stage III/IV	1 - Low ( $\leq$ 25th pctl)	1,452.0	166	11.4	1.10 (0.92–1.33)	0.2955	1.02 (0.85–1.23)	0.8266
		2 - Medium (>25 to <75th pctl)	3,434.2	348	10.1	1.00 (Reference)		1.00 (Reference)	
		3 - High ( $\geq$ 75th pctl)	2,073.0	306	14.8	1.43 (1.22–1.67)	<0.0001	1.43 (1.23–1.67)	<0.0001
Prostate	Stage I/II	1 - Low ( $\leq$ 25th pctl)	5,334.1	48	0.9	1.41 (0.99–2.03)	0.0603	1.26 (0.88–1.82)	0.205
		2 - Medium (>25 to <75th pctl)	11,967.9	77	0.6	1.00 (Reference)		1.00 (Reference)	
		3 - High ( $\geq$ 75th pctl)	5,276.6	58	1.1	1.70 (1.21–2.39)	0.0023	1.77 (1.26–2.49)	0.0011
	Stage III/IV	1 - Low ( $\leq$ 25th pctl)	1,586.4	243	15.3	1.68 (1.42–1.99)	<0.0001	1.33 (1.12–1.58)	0.0009
		2 - Medium (>25 to <75th pctl)	3,675.6	318	8.7	1.00 (Reference)		1.00 (Reference)	
		3 - High ( $\geq$ 75th pctl)	2,019.5	305	15.1	1.68 (1.44–1.97)	<0.0001	1.57 (1.34–1.84)	<0.0001
Ovary	Stage I/II	1 - Low ( $\leq$ 25th pctl)	864.7	14	1.6	0.73 (0.38–1.38)	0.3267	0.70 (0.37–1.34)	0.2818
		2 - Medium (>25 to <75th pctl)	1,315.1	29	2.2	1.00 (Reference)		1.00 (Reference)	
		3 - High ( $\geq$ 75th pctl)	314.4	21	6.7	3.01 (1.71–5.30)	0.0001	3.10 (1.74–5.52)	0.0001
	Stage III/IV	1 - Low ( $\leq$ 25th pctl)	634.0	116	18.3	0.82 (0.67–1.01)	0.0617	0.76 (0.62–0.94)	0.0124
		2 - Medium (>25 to <75th pctl)	1,751.5	392	22.4	1.00 (Reference)		1.00 (Reference)	
		3 - High ( $\geq$ 75th pctl)	1,028.4	289	28.1	1.25 (1.08–1.46)	0.0034	1.30 (1.12–1.52)	0.0007
Stomach	Stage I/II	1 - Low ( $\leq$ 25th pctl)	321.7	37	11.5	1.07 (0.71–1.60)	0.7404	0.92 (0.60–1.41)	0.7021
		2 - Medium (>25 to <75th pctl)	649.7	65	10.0	1.00 (Reference)		1.00 (Reference)	



Stage III/IV	3 - High ( $\geq 75$ th pctl)	249.2	21	8.4	0.92 (0.56–1.50)	0.7321	0.73 (0.44–1.21)	0.2161
	1 - Low ( $\leq 25$ th pctl)	259.6	150	57.8	1.03 (0.86–1.25)	0.7246	1.03 (0.85–1.25)	0.7462
	2 - Medium ( $> 25$ to $< 75$ th pctl)	668.1	382	57.2	1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	329.9	218	66.1	1.14 (0.96–1.34)	0.1316	1.16 (0.98–1.37)	0.0881

\* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), and common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes).

**Table S14.** Cancer-specific mortality rates and hazard ratios by time-dependent platelet count category, for select cancers.

Cancer	Platelet category	Person-years	Cancer-specific deaths	Rate (% per year)	Unadjusted		Patient variable adjustment *		Patient variable, cancer stage, and cancer treatment adjustment**	
					HR (95% CI)	P-value	HR (95% CI)	P-value	HR (95% CI)	P-value
All cancers	1 - Low ( $\leq 25$ th pctl)	102,159.7	10,826	10.6	1.01 (0.98–1.03)	0.5642	0.95 (0.92–0.97)	<0.0001	NA	
	2 - Medium ( $> 25$ to $< 75$ th pctl)	141,620.0	16,661	11.8	1.00 (Reference)		1.00 (Reference)		NA	
	3 - High ( $\geq 75$ th pctl)	51,479.6	12,842	24.9	1.79 (1.75–1.83)	<0.0001	1.83 (1.79–1.88)	<0.0001	NA	
Colon	1 - Low ( $\leq 25$ th pctl)	24,233.9	1,330	5.5	0.61 (0.57–0.65)	<0.0001	0.61 (0.57–0.65)	<0.0001	0.57 (0.52–0.62)	<0.0001
	2 - Medium ( $> 25$ to $< 75$ th pctl)	21,480.1	2,312	10.8	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	4,877.6	1,678	34.4	2.30 (2.16–2.45)	<0.0001	2.32 (2.18–2.48)	<0.0001	1.76 (1.62–1.92)	<0.0001
Lung	1 - Low ( $\leq 25$ th pctl)	9,957.4	3,252	32.7	0.86 (0.83–0.90)	<0.0001	0.83 (0.79–0.87)	<0.0001	0.90 (0.86–0.95)	<0.0001
	2 - Medium ( $> 25$ to $< 75$ th pctl)	14,057.4	5,943	42.3	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	4,337.5	3,979	91.7	1.72 (1.65–1.79)	<0.0001	1.75 (1.68–1.83)	<0.0001	1.48 (1.41–1.54)	<0.0001
Breast	1 - Low ( $\leq 25$ th pctl)	12,565.1	405	3.2	1.46 (1.27–1.67)	<0.0001	1.36 (1.18–1.55)	<0.0001	1.30 (1.12–1.51)	0.0006
	2 - Medium ( $> 25$ to $< 75$ th pctl)	18,594.0	426	2.3	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	7,399.9	411	5.6	2.29 (2.00–2.63)	<0.0001	2.35 (2.05–2.69)	<0.0001	1.85 (1.59–2.15)	<0.0001
Prostate	1 - Low ( $\leq 25$ th pctl)	8,582.4	396	4.6	1.84 (1.60–2.11)	<0.0001	1.60 (1.39–1.84)	<0.0001	1.69 (1.43–2.00)	<0.0001
	2 - Medium ( $> 25$ to $< 75$ th pctl)	16,723.2	418	2.5	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	7,189.0	459	6.4	2.45 (2.15–2.80)	<0.0001	2.40 (2.10–2.74)	<0.0001	1.93 (1.65–2.27)	<0.0001
Ovary	1 - Low ( $\leq 25$ th pctl)	4,054.0	416	10.3	0.63 (0.55–0.71)	<0.0001	0.60 (0.52–0.68)	<0.0001	0.58 (0.48–0.70)	<0.0001
	2 - Medium ( $> 25$ to $< 75$ th pctl)	3,046.8	548	18.0	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	778.0	371	47.7	2.22 (1.94–2.54)	<0.0001	2.29 (2.00–2.62)	<0.0001	2.39 (1.93–2.95)	<0.0001
Stomach	1 - Low ( $\leq 25$ th pctl)	2,266.9	603	26.6	0.85 (0.77–0.94)	0.0022	0.84 (0.76–0.93)	0.0012	0.87 (0.73–1.04)	0.1174

2 - Medium (>25 to <75th pctl)	2,416.1	908	37.6	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
3 - High (≥75th pctl)	694.9	576	82.9	1.62 (1.46–1.80)	<0.0001	1.61 (1.45–1.79)	<0.0001	1.28 (1.07–1.53)	0.0077

HR = Hazard ratio; pctl = percentile. \* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), and common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes). \*\* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes), cancer stage, chemotherapy, and radiotherapy. Time-dependent confounding adjustment using marginal structural models. Only subjects with known cancer stage were included.

**Table S15.** Cancer-specific mortality rates and hazard ratios by time-dependent platelet count category (exposure definition 1).

Cancer	Platelet category	Unadjusted		Patient variable adjustment*		Patient variable and cancer stage adjustment**		Patient variable, cancer stage, and cancer treatment adjustment***	
		HR (95% CI)	P-value	HR (95% CI)	P-value	HR (95% CI)	P-value	HR (95% CI)	P-value
All cancers	1 - Low (≤25th pctl)	1.01 (0.98–1.03)	0.5642	0.95 (0.92–0.97)	<0.0001	0.89 (0.86–0.92)	<0.0001	NA	
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		NA	
	3 - High (≥75th pctl)	1.79 (1.75–1.83)	<0.0001	1.83 (1.79–1.88)	<0.0001	1.51 (1.47–1.56)	<0.0001	NA	
Colon	1 - Low (≤25th pctl)	0.61 (0.57–0.65)	<0.0001	0.61 (0.57–0.65)	<0.0001	0.63 (0.59–0.68)	<0.0001	0.57 (0.52–0.62)	<0.0001
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High (≥75th pctl)	2.30 (2.16–2.45)	<0.0001	2.32 (2.18–2.48)	<0.0001	1.72 (1.61–1.84)	<0.0001	1.76 (1.62–1.92)	<0.0001
Lung	1 - Low (≤25th pctl)	0.86 (0.83–0.90)	<0.0001	0.83 (0.79–0.87)	<0.0001	0.91 (0.87–0.95)	<0.0001	0.90 (0.86–0.95)	<0.0001
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High (≥75th pctl)	1.72 (1.65–1.79)	<0.0001	1.75 (1.68–1.83)	<0.0001	1.48 (1.42–1.55)	<0.0001	1.48 (1.41–1.54)	<0.0001
Breast	1 - Low (≤25th pctl)	1.46 (1.27–1.67)	<0.0001	1.36 (1.18–1.55)	<0.0001	1.32 (1.14–1.52)	0.0002	1.30 (1.12–1.51)	0.0006
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High (≥75th pctl)	2.29 (2.00–2.63)	<0.0001	2.35 (2.05–2.69)	<0.0001	1.87 (1.62–2.16)	<0.0001	1.85 (1.59–2.15)	<0.0001
Prostate	1 - Low (≤25th pctl)	1.84 (1.60–2.11)	<0.0001	1.60 (1.39–1.84)	<0.0001	1.69 (1.45–1.97)	<0.0001	1.69 (1.43–2.00)	<0.0001
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High (≥75th pctl)	2.45 (2.15–2.80)	<0.0001	2.40 (2.10–2.74)	<0.0001	1.98 (1.70–2.29)	<0.0001	1.93 (1.65–2.27)	<0.0001
Ovary	1 - Low (≤25th pctl)	0.63 (0.55–0.71)	<0.0001	0.60 (0.52–0.68)	<0.0001	0.61 (0.52–0.72)	<0.0001	0.58 (0.48–0.70)	<0.0001
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High (≥75th pctl)	2.22 (1.94–2.54)	<0.0001	2.29 (2.00–2.62)	<0.0001	2.18 (1.83–2.59)	<0.0001	2.39 (1.93–2.95)	<0.0001
Stomach	1 - Low (≤25th pctl)	0.85 (0.77–0.94)	0.0022	0.84 (0.76–0.93)	0.0012	0.89 (0.76–1.05)	0.1696	0.87 (0.73–1.04)	0.1174
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High (≥75th pctl)	1.62 (1.46–1.80)	<0.0001	1.61 (1.45–1.79)	<0.0001	1.29 (1.09–1.53)	0.0026	1.28 (1.07–1.53)	0.0077
Pancreas	1 - Low (≤25th pctl)	1.08 (1.00–1.16)	0.0474	1.08 (1.00–1.16)	0.0418	0.91 (0.82–1.02)	0.1014	0.87 (0.77–0.99)	0.0335
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High (≥75th pctl)	1.15 (1.07–1.24)	0.0002	1.20 (1.11–1.29)	<0.0001	1.21 (1.08–1.35)	0.0008	1.17 (1.04–1.32)	0.0112
Kidney	1 - Low (≤25th pctl)	1.11 (0.93–1.31)	0.2464	0.98 (0.82–1.16)	0.8091	0.99 (0.78–1.25)	0.9354	0.95 (0.73–1.25)	0.7255
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High (≥75th pctl)	3.94 (3.42–4.54)	<0.0001	3.82 (3.31–4.40)	<0.0001	2.31 (1.89–2.82)	<0.0001	2.42 (1.94–3.02)	<0.0001

Bladder	1 - Low ( $\leq 25$ th pctl)	1.01 (0.85–1.20)	0.9057	0.87 (0.73–1.04)	0.1177	0.79 (0.60–1.06)	0.1125	0.78 (0.57–1.08)	0.1308
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	3.45 (3.03–3.93)	<0.0001	3.49 (3.06–3.98)	<0.0001	2.29 (1.84–2.85)	<0.0001	2.21 (1.76–2.78)	<0.0001
Esophagus	1 - Low ( $\leq 25$ th pctl)	0.99 (0.85–1.14)	0.865	0.97 (0.84–1.12)	0.6723	0.85 (0.69–1.03)	0.0998	0.87 (0.70–1.08)	0.1979
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	1.74 (1.50–2.01)	<0.0001	1.79 (1.55–2.07)	<0.0001	1.38 (1.13–1.69)	0.0014	1.42 (1.13–1.78)	0.0025
Other GI	1 - Low ( $\leq 25$ th pctl)	0.97 (0.80–1.18)	0.7651	0.95 (0.78–1.15)	0.5731	0.85 (0.62–1.16)	0.2995	0.71 (0.51–1.00)	0.0505
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	2.13 (1.77–2.56)	<0.0001	2.17 (1.81–2.61)	<0.0001	1.86 (1.38–2.51)	<0.0001	1.76 (1.26–2.45)	0.0009
Thyroid	1 - Low ( $\leq 25$ th pctl)	1.47 (0.89–2.41)	0.13	1.22 (0.74–2.01)	0.4353	0.62 (0.30–1.26)	0.1842	0.58 (0.24–1.41)	0.2319
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	2.36 (1.53–3.64)	<0.0001	2.82 (1.82–4.36)	<0.0001	1.43 (0.82–2.47)	0.2074	1.41 (0.76–2.62)	0.2804
Cervix	1 - Low ( $\leq 25$ th pctl)	0.70 (0.50–0.99)	0.0418	0.64 (0.45–0.91)	0.0119	0.67 (0.47–0.96)	0.0313	0.62 (0.33–1.16)	0.1353
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	3.41 (2.55–4.56)	<0.0001	3.43 (2.56–4.58)	<0.0001	2.15 (1.57–2.95)	<0.0001	1.90 (1.20–3.02)	0.0062
Testis	1 - Low ( $\leq 25$ th pctl)	1.10 (0.38–3.17)	0.861	0.94 (0.32–2.77)	0.9119	0.41 (0.11–1.57)	0.1925	1.56 (0.61–4.01)	0.3574
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	2.72 (1.05–7.06)	0.0396	2.53 (0.95–6.71)	0.0623	0.46 (0.13–1.69)	0.245	0.30 (0.05–1.74)	0.1801
Endometrium	1 - Low ( $\leq 25$ th pctl)	1.52 (1.22–1.88)	0.0002	1.31 (1.05–1.63)	0.0155	1.24 (0.96–1.60)	0.1048	1.21 (0.86–1.69)	0.2725
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	4.56 (3.77–5.52)	<0.0001	4.89 (4.04–5.92)	<0.0001	3.45 (2.73–4.37)	<0.0001	3.96 (2.90–5.41)	<0.0001
Brain	1 - Low ( $\leq 25$ th pctl)	1.44 (1.30–1.60)	<0.0001	1.29 (1.16–1.43)	<0.0001	NA		NA	
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		NA		NA	
	3 - High ( $\geq 75$ th pctl)	1.16 (1.02–1.32)	0.0227	1.20 (1.05–1.36)	0.0071	NA		NA	
Melanoma	1 - Low ( $\leq 25$ th pctl)	1.07 (0.82–1.41)	0.6191	0.97 (0.74–1.28)	0.8508	0.84 (0.58–1.20)	0.337	0.78 (0.53–1.16)	0.222
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	3.10 (2.50–3.84)	<0.0001	3.22 (2.60–4.00)	<0.0001	2.34 (1.79–3.06)	<0.0001	2.28 (1.68–3.08)	<0.0001
Head and neck	1 - Low ( $\leq 25$ th pctl)	0.84 (0.68–1.03)	0.0991	0.76 (0.61–0.94)	0.0106	0.74 (0.58–0.94)	0.0146	0.70 (0.54–0.91)	0.0071
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	2.32 (1.95–2.76)	<0.0001	2.36 (1.98–2.81)	<0.0001	2.18 (1.78–2.66)	<0.0001	2.12 (1.71–2.62)	<0.0001
Other solid tumour	1 - Low ( $\leq 25$ th pctl)	1.05 (0.97–1.13)	0.2735	0.97 (0.89–1.05)	0.3829	0.96 (0.81–1.14)	0.6603	0.95 (0.79–1.14)	0.5781
	2 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	3 - High ( $\geq 75$ th pctl)	2.09 (1.94–2.25)	<0.0001	2.10 (1.95–2.26)	<0.0001	1.90 (1.62–2.22)	<0.0001	1.88 (1.57–2.24)	<0.0001

HR = Hazard ratio; pctl = percentile; NA = Not applicable; \*SS\* = data suppressed due to small number of observations/events. \* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), and common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes). \*\* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes), and cancer stage. Only subjects with known cancer stage were included in the analysis. \*\*\* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes), cancer stage, chemotherapy, and radiotherapy. Only subjects with known cancer stage were included in the analysis. Time-dependent confounding adjustment using marginal structural models.

**Table S16.** Cancer-specific mortality rates and hazard ratios by time-dependent platelet count category (exposure definition 2).

Cancer	Platelet category	Unadjusted		Patient variable adjustment*		Patient variable and cancer stage adjustment**		Patient variable, cancer stage, and cancer treatment adjustment***	
		HR (95% CI)	P-value	HR (95% CI)	P-value	HR (95% CI)	P-value	HR (95% CI)	P-value
All cancers	1 - Very low ( $\leq 10$ th pctl)	1.20 (1.17–1.24)	<0.0001	1.11 (1.08–1.15)	<0.0001	0.99 (0.95–1.02)	0.4335	NA	
	2 - Low ( $>10$ to $\leq 25$ th pctl)	0.85 (0.82–0.88)	<0.0001	0.81 (0.78–0.84)	<0.0001	0.80 (0.77–0.84)	<0.0001	NA	
	3 - Medium ( $>25$ to $<75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		NA	
	4 - High ( $\geq 75$ to $<90$ th pctl)	1.51 (1.46–1.55)	<0.0001	1.54 (1.50–1.58)	<0.0001	1.37 (1.32–1.41)	<0.0001	NA	
	5 - Very high ( $\geq 90$ th pctl)	2.23 (2.17–2.30)	<0.0001	2.31 (2.24–2.38)	<0.0001	1.71 (1.65–1.77)	<0.0001	NA	
Colon	1 - Very low ( $\leq 10$ th pctl)	0.67 (0.62–0.73)	<0.0001	0.67 (0.61–0.72)	<0.0001	0.65 (0.59–0.71)	<0.0001	0.63 (0.57–0.70)	<0.0001
	2 - Low ( $>10$ to $\leq 25$ th pctl)	0.55 (0.51–0.61)	<0.0001	0.55 (0.50–0.60)	<0.0001	0.61 (0.56–0.67)	<0.0001	0.61 (0.55–0.67)	<0.0001
	3 - Medium ( $>25$ to $<75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $<90$ th pctl)	2.01 (1.86–2.17)	<0.0001	2.00 (1.85–2.16)	<0.0001	1.60 (1.47–1.74)	<0.0001	1.59 (1.46–1.74)	<0.0001
	5 - Very high ( $\geq 90$ th pctl)	2.80 (2.57–3.04)	<0.0001	2.90 (2.67–3.15)	<0.0001	1.90 (1.74–2.08)	<0.0001	1.89 (1.70–2.11)	<0.0001
Lung	1 - Very low ( $\leq 10$ th pctl)	1.00 (0.95–1.06)	0.9609	0.95 (0.89–1.00)	0.0491	1.02 (0.96–1.08)	0.5627	1.01 (0.95–1.08)	0.6733
	2 - Low ( $>10$ to $\leq 25$ th pctl)	0.76 (0.72–0.81)	<0.0001	0.74 (0.70–0.78)	<0.0001	0.82 (0.78–0.87)	<0.0001	0.82 (0.77–0.87)	<0.0001
	3 - Medium ( $>25$ to $<75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $<90$ th pctl)	1.56 (1.49–1.64)	<0.0001	1.58 (1.50–1.66)	<0.0001	1.37 (1.30–1.44)	<0.0001	1.37 (1.29–1.44)	<0.0001
	5 - Very high ( $\geq 90$ th pctl)	1.96 (1.86–2.07)	<0.0001	2.03 (1.93–2.15)	<0.0001	1.65 (1.56–1.75)	<0.0001	1.65 (1.55–1.75)	<0.0001
Breast	1 - Very low ( $\leq 10$ th pctl)	2.07 (1.77–2.42)	<0.0001	1.88 (1.60–2.20)	<0.0001	1.66 (1.40–1.96)	<0.0001	1.62 (1.37–1.93)	<0.0001
	2 - Low ( $>10$ to $\leq 25$ th pctl)	1.01 (0.84–1.21)	0.8956	0.96 (0.80–1.15)	0.6489	1.01 (0.83–1.22)	0.9447	1.00 (0.82–1.21)	0.967
	3 - Medium ( $>25$ to $<75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $<90$ th pctl)	1.47 (1.23–1.77)	<0.0001	1.52 (1.27–1.82)	<0.0001	1.41 (1.16–1.71)	0.0005	1.38 (1.13–1.68)	0.0013
	5 - Very high ( $\geq 90$ th pctl)	3.62 (3.09–4.24)	<0.0001	3.65 (3.12–4.28)	<0.0001	2.40 (2.03–2.84)	<0.0001	2.35 (1.94–2.84)	<0.0001
Prostate	1 - Very low ( $\leq 10$ th pctl)	2.99 (2.55–3.50)	<0.0001	2.46 (2.10–2.88)	<0.0001	2.48 (2.08–2.96)	<0.0001	2.37 (1.94–2.90)	<0.0001
	2 - Low ( $>10$ to $\leq 25$ th pctl)	1.12 (0.93–1.35)	0.2304	1.02 (0.85–1.23)	0.8208	1.15 (0.94–1.41)	0.1768	1.17 (0.95–1.45)	0.1431
	3 - Medium ( $>25$ to $<75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $<90$ th pctl)	1.75 (1.48–2.07)	<0.0001	1.74 (1.48–2.06)	<0.0001	1.51 (1.26–1.82)	<0.0001	1.45 (1.19–1.75)	0.0002
	5 - Very high ( $\geq 90$ th pctl)	3.73 (3.19–4.36)	<0.0001	3.53 (3.02–4.14)	<0.0001	2.71 (2.28–3.23)	<0.0001	2.68 (2.21–3.25)	<0.0001
Ovary	1 - Very low ( $\leq 10$ th pctl)	0.66 (0.57–0.77)	<0.0001	0.61 (0.52–0.71)	<0.0001	0.58 (0.48–0.71)	<0.0001	0.57 (0.46–0.71)	<0.0001
	2 - Low ( $>10$ to $\leq 25$ th pctl)	0.58 (0.49–0.69)	<0.0001	0.58 (0.49–0.69)	<0.0001	0.65 (0.52–0.80)	<0.0001	0.64 (0.52–0.80)	0.0001
	3 - Medium ( $>25$ to $<75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $<90$ th pctl)	2.13 (1.81–2.50)	<0.0001	2.13 (1.81–2.51)	<0.0001	2.12 (1.72–2.60)	<0.0001	2.09 (1.66–2.63)	<0.0001
	5 - Very high ( $\geq 90$ th pctl)	2.36 (1.98–2.82)	<0.0001	2.53 (2.12–3.03)	<0.0001	2.27 (1.81–2.86)	<0.0001	2.28 (1.75–2.96)	<0.0001
Stomach	1 - Very low ( $\leq 10$ th pctl)	0.88 (0.77–1.01)	0.0627	0.86 (0.76–0.99)	0.0301	0.93 (0.76–1.14)	0.4691	0.92 (0.75–1.12)	0.3972
	2 - Low ( $>10$ to $\leq 25$ th pctl)	0.82 (0.72–0.94)	0.0031	0.82 (0.72–0.93)	0.003	0.86 (0.70–1.06)	0.1488	0.86 (0.70–1.06)	0.1462
	3 - Medium ( $>25$ to $<75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	

	4 - High ( $\geq 75$ to $< 90$ th pctl)	1.57 (1.39–1.78)	$< 0.0001$	1.55 (1.37–1.77)	$< 0.0001$	1.42 (1.16–1.73)	0.0006	1.40 (1.13–1.74)	0.0018
	5 - Very high ( $\geq 90$ th pctl)	1.69 (1.47–1.95)	$< 0.0001$	1.69 (1.47–1.95)	$< 0.0001$	1.15 (0.91–1.44)	0.234	1.14 (0.88–1.47)	0.3184
Pancreas	1 - Very low ( $\leq 10$ th pctl)	1.16 (1.06–1.27)	0.0009	1.17 (1.07–1.28)	0.0008	0.93 (0.81–1.06)	0.2527	0.88 (0.74–1.05)	0.1465
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	0.99 (0.91–1.09)	0.9044	1.00 (0.91–1.09)	0.9333	0.90 (0.78–1.03)	0.1378	0.92 (0.79–1.08)	0.3202
	3 - Medium ( $> 25$ to $< 75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	1.11 (1.02–1.22)	0.0225	1.15 (1.04–1.26)	0.004	1.18 (1.03–1.35)	0.0198	1.15 (0.99–1.33)	0.0716
	5 - Very high ( $\geq 90$ th pctl)	1.20 (1.09–1.32)	0.0002	1.26 (1.15–1.39)	$< 0.0001$	1.25 (1.08–1.44)	0.0025	1.21 (1.04–1.41)	0.0158
Kidney	1 - Very low ( $\leq 10$ th pctl)	1.49 (1.22–1.82)	0.0001	1.29 (1.05–1.57)	0.0148	1.29 (0.98–1.69)	0.0733	1.24 (0.89–1.71)	0.1998
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	0.79 (0.63–1.00)	0.0542	0.72 (0.56–0.91)	0.0057	0.72 (0.52–1.00)	0.0492	0.73 (0.51–1.06)	0.0956
	3 - Medium ( $> 25$ to $< 75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	2.66 (2.24–3.17)	$< 0.0001$	2.61 (2.20–3.11)	$< 0.0001$	2.01 (1.58–2.55)	$< 0.0001$	2.15 (1.65–2.79)	$< 0.0001$
	5 - Very high ( $\geq 90$ th pctl)	6.42 (5.45–7.56)	$< 0.0001$	6.08 (5.16–7.17)	$< 0.0001$	2.65 (2.10–3.34)	$< 0.0001$	2.68 (2.06–3.50)	$< 0.0001$
Bladder	1 - Very low ( $\leq 10$ th pctl)	1.30 (1.05–1.61)	0.0166	1.07 (0.86–1.32)	0.5586	0.76 (0.51–1.11)	0.1579	0.82 (0.49–1.37)	0.4421
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	0.81 (0.64–1.01)	0.0622	0.72 (0.58–0.90)	0.0047	0.83 (0.58–1.16)	0.2746	0.83 (0.57–1.23)	0.3582
	3 - Medium ( $> 25$ to $< 75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	2.22 (1.88–2.61)	$< 0.0001$	2.27 (1.92–2.67)	$< 0.0001$	1.84 (1.40–2.41)	$< 0.0001$	1.84 (1.37–2.46)	$< 0.0001$
	5 - Very high ( $\geq 90$ th pctl)	5.58 (4.82–6.47)	$< 0.0001$	5.56 (4.80–6.45)	$< 0.0001$	2.71 (2.13–3.45)	$< 0.0001$	2.59 (1.99–3.36)	$< 0.0001$
Esophagus	1 - Very low ( $\leq 10$ th pctl)	0.94 (0.78–1.13)	0.5354	0.91 (0.75–1.09)	0.3039	0.78 (0.61–1.00)	0.054	0.82 (0.63–1.07)	0.1406
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	1.03 (0.86–1.24)	0.719	1.04 (0.86–1.24)	0.7127	0.93 (0.72–1.19)	0.5518	0.98 (0.74–1.31)	0.9019
	3 - Medium ( $> 25$ to $< 75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	1.52 (1.27–1.82)	$< 0.0001$	1.57 (1.31–1.88)	$< 0.0001$	1.22 (0.95–1.58)	0.1161	1.30 (0.98–1.71)	0.0645
	5 - Very high ( $\geq 90$ th pctl)	2.05 (1.71–2.47)	$< 0.0001$	2.12 (1.76–2.55)	$< 0.0001$	1.60 (1.24–2.06)	0.0003	1.57 (1.15–2.15)	0.0046
Other GI	1 - Very low ( $\leq 10$ th pctl)	1.22 (0.96–1.55)	0.0959	1.20 (0.94–1.52)	0.1408	1.10 (0.76–1.59)	0.6226	1.07 (0.73–1.57)	0.7339
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	0.78 (0.60–1.00)	0.0528	0.75 (0.58–0.97)	0.0312	0.63 (0.41–0.97)	0.0342	0.63 (0.41–0.96)	0.0325
	3 - Medium ( $> 25$ to $< 75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	1.89 (1.51–2.37)	$< 0.0001$	1.95 (1.55–2.44)	$< 0.0001$	1.97 (1.38–2.81)	0.0002	1.95 (1.32–2.88)	0.0009
	5 - Very high ( $\geq 90$ th pctl)	2.46 (1.96–3.09)	$< 0.0001$	2.47 (1.96–3.10)	$< 0.0001$	1.72 (1.16–2.54)	0.0066	1.70 (1.14–2.55)	0.0099
Thyroid	1 - Very low ( $\leq 10$ th pctl)	1.96 (1.07–3.57)	0.0281	1.46 (0.80–2.67)	0.2203	0.61 (0.26–1.41)	0.2469	0.54 (0.19–1.50)	0.2354
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	1.12 (0.58–2.14)	0.7395	1.01 (0.53–1.94)	0.9799	0.66 (0.25–1.79)	0.4152	0.73 (0.23–2.28)	0.5897
	3 - Medium ( $> 25$ to $< 75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	0.76 (0.37–1.58)	0.469	0.96 (0.46–1.99)	0.9061	0.56 (0.23–1.38)	0.2089	0.60 (0.23–1.53)	0.2802
	5 - Very high ( $\geq 90$ th pctl)	4.82 (3.05–7.60)	$< 0.0001$	5.51 (3.46–8.79)	$< 0.0001$	2.40 (1.33–4.33)	0.0037	2.35 (1.21–4.56)	0.0117
Cervix	1 - Very low ( $\leq 10$ th pctl)	0.77 (0.51–1.16)	0.2134	0.70 (0.46–1.06)	0.0926	0.69 (0.45–1.07)	0.0939	0.65 (0.40–1.07)	0.092
	2 - Low ( $> 10$ to $\leq 25$ th pctl)	0.62 (0.39–0.99)	0.0453	0.58 (0.36–0.92)	0.0203	0.65 (0.40–1.05)	0.078	0.65 (0.39–1.08)	0.0954
	3 - Medium ( $> 25$ to $< 75$ th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High ( $\geq 75$ to $< 90$ th pctl)	2.73 (1.94–3.85)	$< 0.0001$	2.73 (1.94–3.86)	$< 0.0001$	1.84 (1.27–2.67)	0.0014	1.80 (1.16–2.77)	0.0081
	5 - Very high ( $\geq 90$ th pctl)	4.73 (3.31–6.74)	$< 0.0001$	4.79 (3.35–6.87)	$< 0.0001$	2.66 (1.80–3.92)	$< 0.0001$	2.64 (1.68–4.13)	$< 0.0001$
Testis	1 - Very low ( $\leq 10$ th pctl)	1.59 (0.48–5.27)	0.4515	1.24 (0.35–4.41)	0.7409	0.41 (0.09–1.79)	0.2362	NA	

	2 - Low (>10 to ≤25th pctl)	0.68 (0.14–3.20)	0.6244	0.55 (0.12–2.65)	0.4593	0.34 (0.04–3.15)	0.3398	NA	
	3 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		NA	
	4 - High (≥75 to <90th pctl)	0.48 (0.06–3.84)	0.4889	0.37 (0.05–3.10)	0.3623	-		NA	
	5 - Very high (≥90th pctl)	6.61 (2.47–17.71)	0.0002	7.51 (2.74–20.59)	<0.0001	0.95 (0.25–3.66)	0.9399	NA	
Endometrium	1 - Very low (≤10th pctl)	1.82 (1.41–2.35)	<0.0001	1.49 (1.15–1.92)	0.0026	1.29 (0.95–1.76)	0.0985	1.30 (0.95–1.77)	0.1027
	2 - Low (>10 to ≤25th pctl)	1.25 (0.95–1.65)	0.1067	1.14 (0.86–1.50)	0.3552	1.17 (0.85–1.61)	0.3274	1.17 (0.83–1.65)	0.3724
	3 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High (≥75 to <90th pctl)	2.90 (2.30–3.66)	<0.0001	3.05 (2.41–3.85)	<0.0001	2.44 (1.83–3.23)	<0.0001	2.45 (1.83–3.28)	<0.0001
	5 - Very high (≥90th pctl)	7.80 (6.30–9.66)	<0.0001	8.73 (7.04–10.82)	<0.0001	5.21 (3.97–6.83)	<0.0001	5.20 (3.88–6.97)	<0.0001
Brain	1 - Very low (≤10th pctl)	1.69 (1.50–1.91)	<0.0001	1.43 (1.27–1.62)	<0.0001	NA		NA	
	2 - Low (>10 to ≤25th pctl)	1.20 (1.05–1.37)	0.0081	1.13 (0.99–1.30)	0.0635	NA		NA	
	3 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		NA		NA	
	4 - High (≥75 to <90th pctl)	1.10 (0.94–1.29)	0.2457	1.15 (0.97–1.35)	0.0984	NA		NA	
	5 - Very high (≥90th pctl)	1.24 (1.05–1.48)	0.0135	1.26 (1.06–1.49)	0.0095	NA		NA	
Melanoma	1 - Very low (≤10th pctl)	1.32 (0.93–1.87)	0.1221	1.14 (0.80–1.62)	0.4773	0.99 (0.63–1.57)	0.9707	0.92 (0.53–1.58)	0.7537
	2 - Low (>10 to ≤25th pctl)	0.91 (0.64–1.28)	0.5878	0.86 (0.61–1.22)	0.404	0.70 (0.43–1.14)	0.1517	0.69 (0.42–1.14)	0.1515
	3 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High (≥75 to <90th pctl)	1.84 (1.39–2.43)	<0.0001	1.95 (1.47–2.58)	<0.0001	1.52 (1.06–2.18)	0.0221	1.53 (1.03–2.26)	0.0334
	5 - Very high (≥90th pctl)	5.36 (4.21–6.82)	<0.0001	5.38 (4.22–6.85)	<0.0001	3.35 (2.47–4.54)	<0.0001	3.19 (2.23–4.56)	<0.0001
Head and neck	1 - Very low (≤10th pctl)	1.08 (0.83–1.41)	0.5494	0.95 (0.73–1.24)	0.7299	0.93 (0.68–1.26)	0.6262	0.97 (0.69–1.37)	0.8701
	2 - Low (>10 to ≤25th pctl)	0.66 (0.50–0.87)	0.0037	0.61 (0.46–0.81)	0.0006	0.61 (0.44–0.83)	0.0021	0.57 (0.41–0.80)	0.001
	3 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High (≥75 to <90th pctl)	1.61 (1.28–2.02)	<0.0001	1.64 (1.31–2.06)	<0.0001	1.58 (1.22–2.06)	0.0005	1.54 (1.17–2.02)	0.0018
	5 - Very high (≥90th pctl)	3.34 (2.73–4.08)	<0.0001	3.42 (2.79–4.19)	<0.0001	2.97 (2.35–3.75)	<0.0001	2.76 (2.14–3.56)	<0.0001
Other solid tumour	1 - Very low (≤10th pctl)	1.31 (1.18–1.45)	<0.0001	1.21 (1.09–1.34)	0.0002	1.13 (0.91–1.39)	0.2687	1.13 (0.90–1.43)	0.2911
	2 - Low (>10 to ≤25th pctl)	0.86 (0.78–0.95)	0.0044	0.80 (0.72–0.88)	<0.0001	0.83 (0.67–1.03)	0.0936	0.83 (0.66–1.05)	0.1201
	3 - Medium (>25 to <75th pctl)	1.00 (Reference)		1.00 (Reference)		1.00 (Reference)		1.00 (Reference)	
	4 - High (≥75 to <90th pctl)	1.80 (1.65–1.97)	<0.0001	1.78 (1.63–1.94)	<0.0001	1.59 (1.30–1.94)	<0.0001	1.58 (1.28–1.96)	<0.0001
	5 - Very high (≥90th pctl)	2.54 (2.32–2.79)	<0.0001	2.62 (2.39–2.88)	<0.0001	2.34 (1.92–2.85)	<0.0001	2.34 (1.86–2.94)	<0.0001

HR = Hazard ratio; pctl = percentile; NA = Not applicable; \*SS\* = data suppressed due to small number of observations/events. \* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), and common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes). \*\* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes), and cancer stage. Only subjects with known cancer stage were included in the analysis. \*\*\* Adjusted for age at diagnosis (cat.), year of diagnosis (cont.), common chronic conditions (asthma, congestive heart failure, chronic obstructive pulmonary disease, hypertension, and diabetes), cancer stage, chemotherapy, and radiotherapy. Only subjects with known cancer stage were included in the analysis. Time-dependent confounding adjustment using marginal structural models.

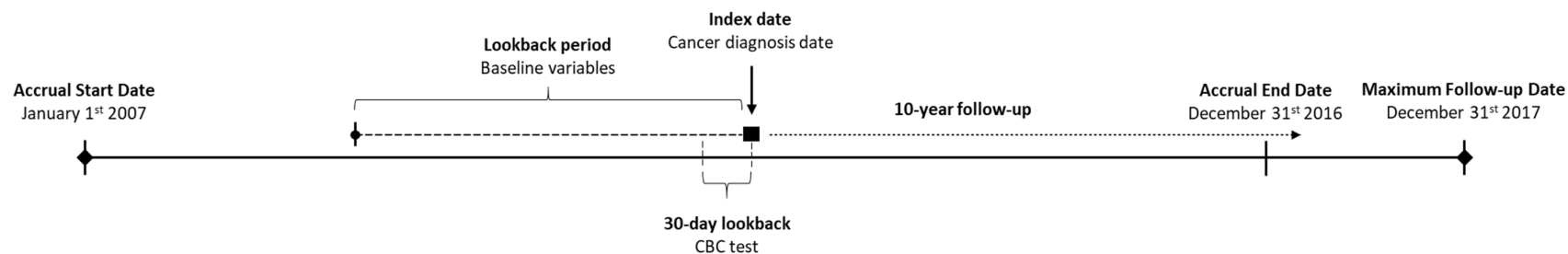


Figure S1. Study design and inclusion criteria among cancer patients.

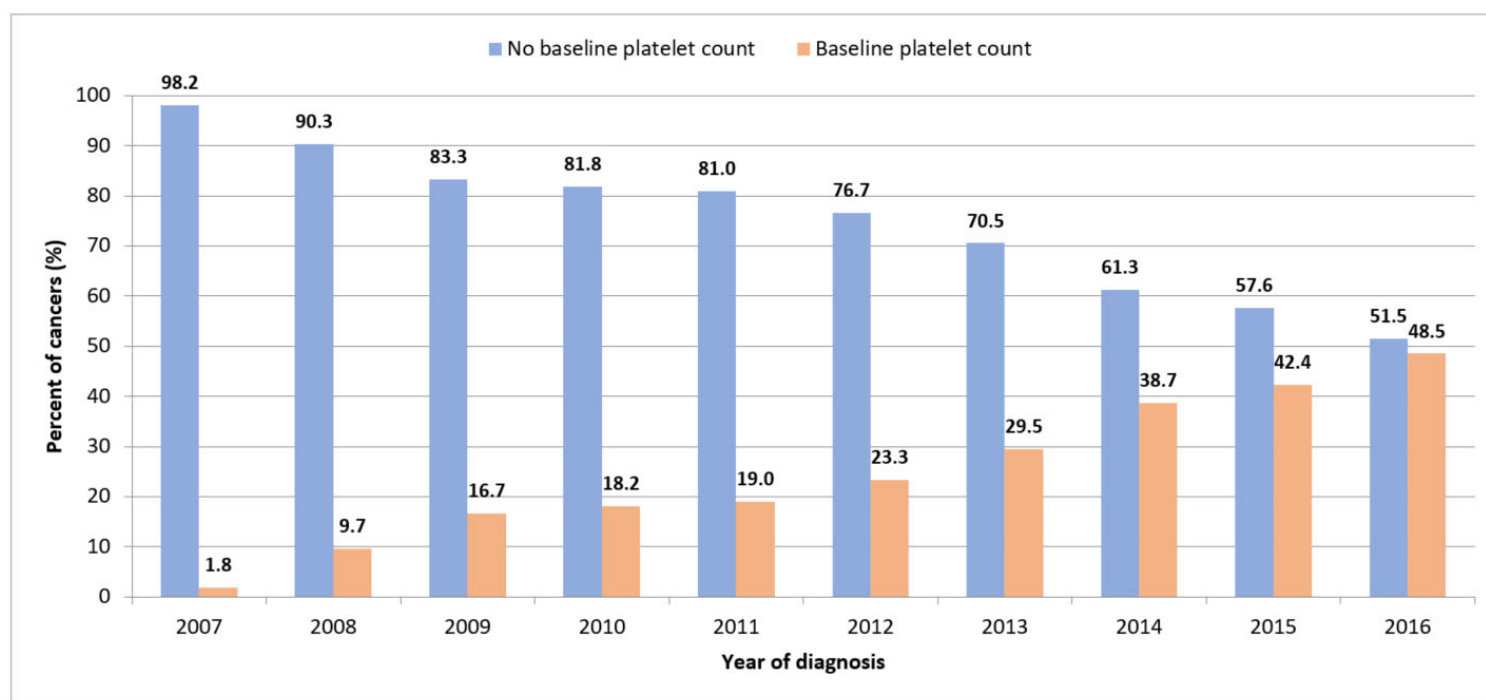
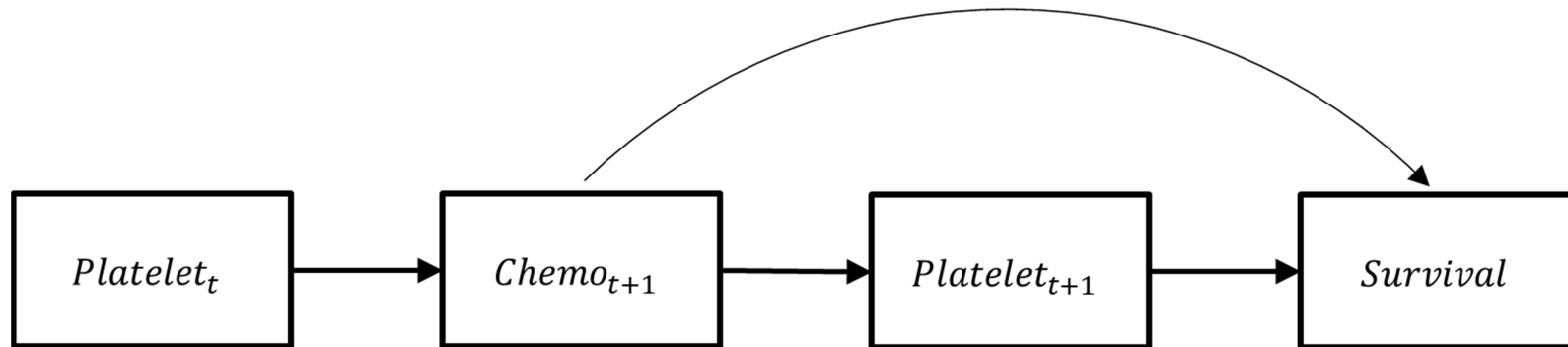


Figure S2. Proportion of cancer patients with a baseline platelet count (within 30 days of cancer diagnosis), by calendar year.



**Figure S3.** Schematic of time-dependent confounding that could occur between platelet count and cancer treatment.

- (1) Platelet count at time  $t$  may influence treatment decision for chemotherapy at time  $t+1$ .
- (2) Chemotherapy at  $t+1$  is causally associated with a higher cancer-specific survival.
- (3) Chemotherapy at time  $t+1$  influences platelet count at time  $t+1$ .
- (4) Platelet count at time  $t+1$  may be associated with survival.



### Exposure weight models:

#### *Numerator model*

$$\text{logit} \left( P(Y_i = y | \beta_0 + \sum \beta_j x_j) \right) = \beta_0 + \sum \beta_j x_j$$

Outcome: platelet count category (at time t)

Predictors: prior platelet count category (t-1), age at diagnosis, year of diagnosis, asthma, CHF, COPD, hypertension, diabetes, and cancer stage.

#### *Denominator model*

$$\text{logit} \left( P(Y_i = y | \beta_0 + \sum \beta_j x_j) \right) = \beta_0 + \sum \beta_j x_j$$

Outcome: platelet count category (at time t)

Predictors: prior platelet count category (t-1), chemotherapy use (at time t), radiotherapy use (at time t), age at diagnosis, year of diagnosis, asthma, CHF, COPD, hypertension, diabetes, and cancer stage.

### Censor weight models:

#### *Numerator model*

$$\text{logit} \left( P(Y = 1 | \beta_0 + \sum \beta_j x_j) \right) = \beta_0 + \sum \beta_j x_j$$

Outcome: Censoring event

Predictors: prior platelet count category (t-1), age at diagnosis, year of diagnosis, asthma, CHF, COPD, hypertension, diabetes, and cancer stage.

#### *Denominator model*

$$\text{logit}\left(P(Y = 1|\beta_0 + \sum \beta_j x_j)\right) = \beta_0 + \sum \beta_j x_j$$

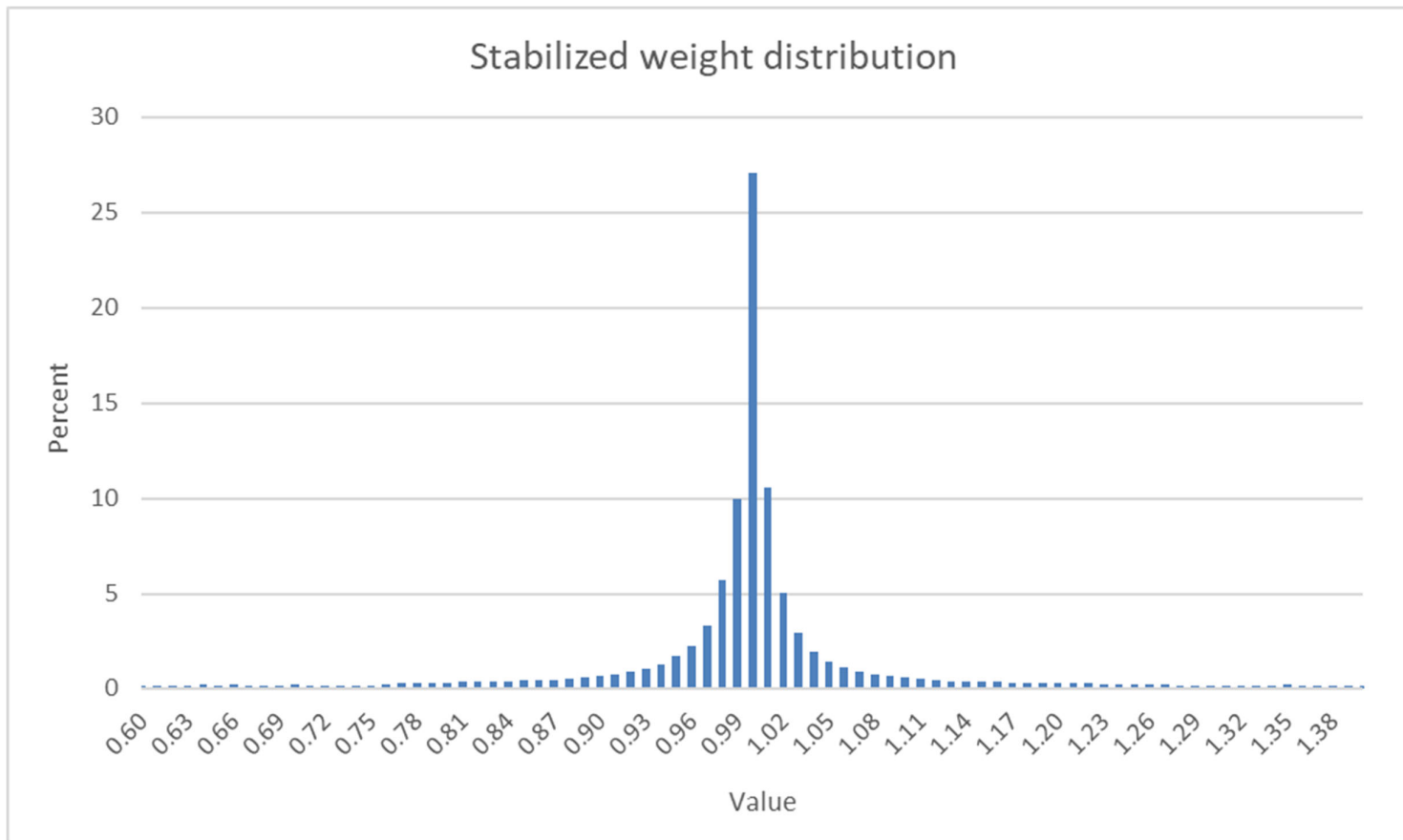
Outcome: Censoring event

Predictors: prior platelet count category (t-1), chemotherapy use (at time t), radiotherapy use (at time t), age at diagnosis, year of diagnosis, asthma, CHF, COPD, hypertension, diabetes, and cancer stage.

**Standardized weights calculations:**

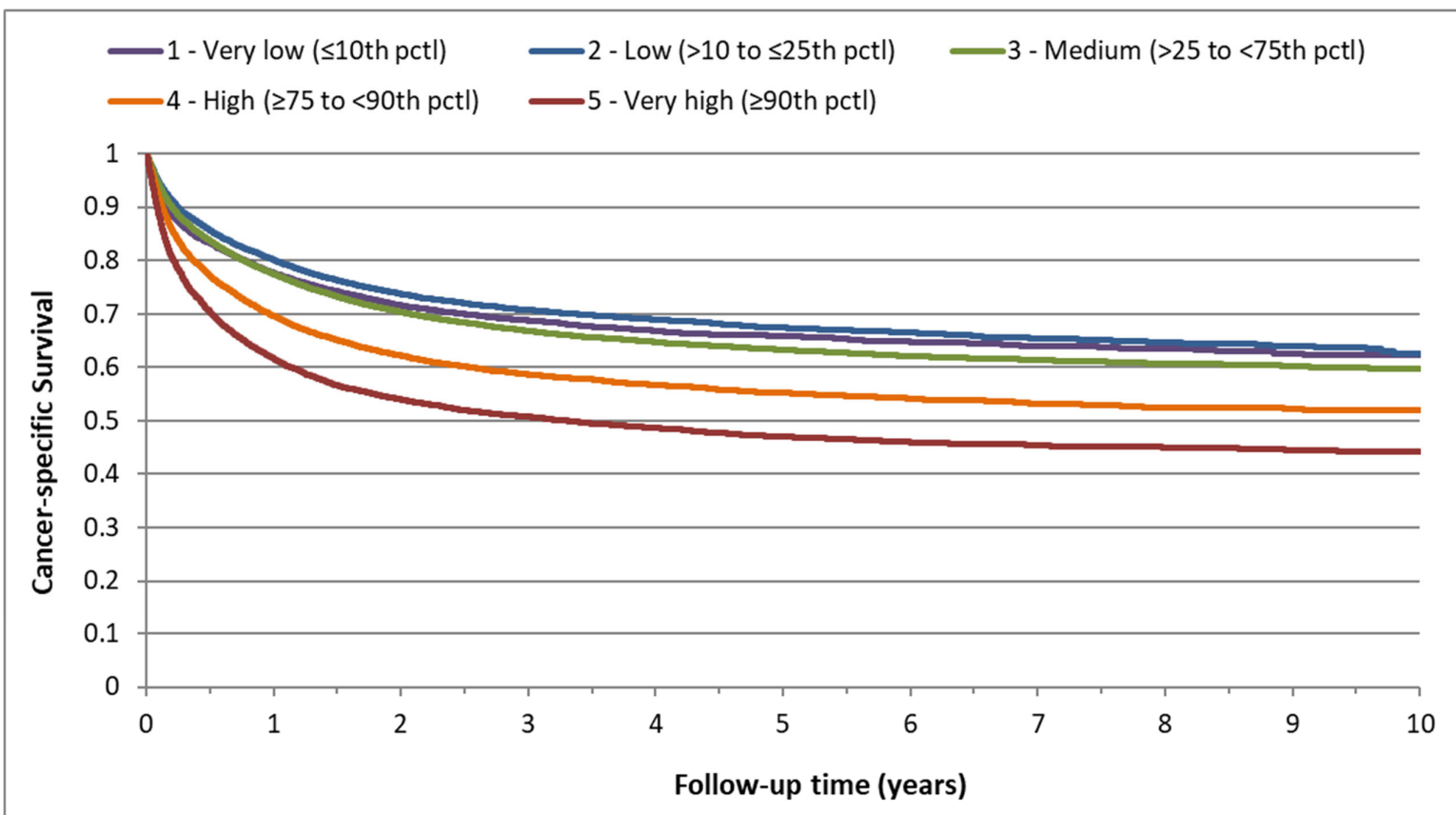
$$SW_t = \frac{\prod_{i=1}^t P_{treat}(Y_i = y)_{num} / P_{treat}(Y_i = y)_{denom}}{\prod_{i=1}^t [((Y_{cens} = 1) \times P_{cens}(Y = 1)_{num} + (Y_{cens} = 0) \times (1 - P_{cens}(Y = 1)_{num})) / ((Y_{cens} = 1) \times P_{cens}(Y = 1)_{denom} + (Y_{cens} = 0) \times (1 - P_{cens}(Y = 1)_{denom}))]}$$

$P_{treat}(Y_i = y)_{num}$	Probability of being in treatment class $y$ at time $t$ in the numerator model
$P_{treat}(Y_i = y)_{denom}$	Probability of being in the treatment class $y$ at time $t$ in the denominator model
$P_{cens}(Y = 1)_{num}$	Probability of being censored at time $t$ in the numerator model
$P_{cens}(Y = 1)_{denom}$	Probability of being censored at time $t$ in the denominator model

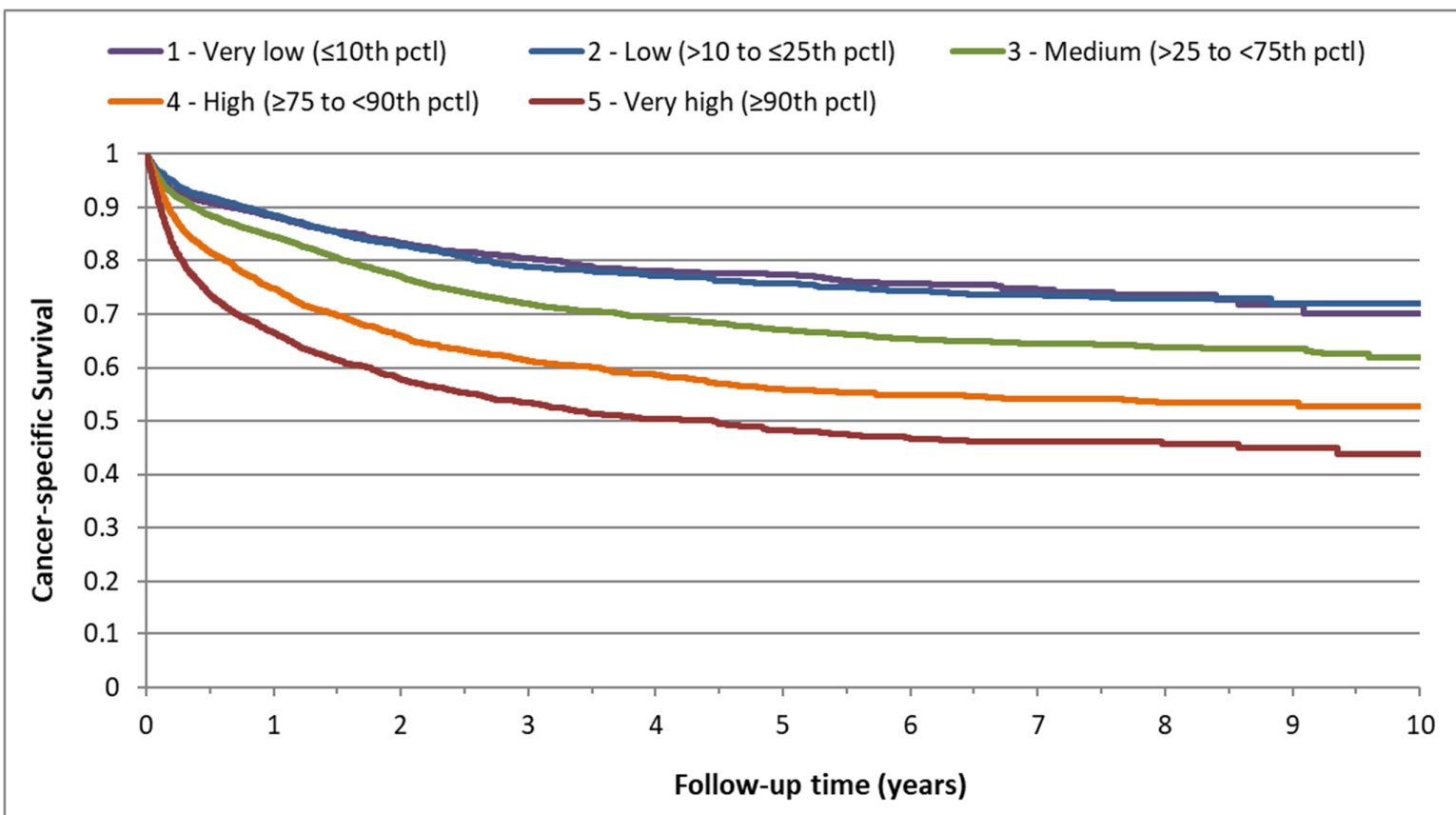


**Figure S4.** Distribution of stabilized weights among observations included in the marginal structural models (exposure definition 1).

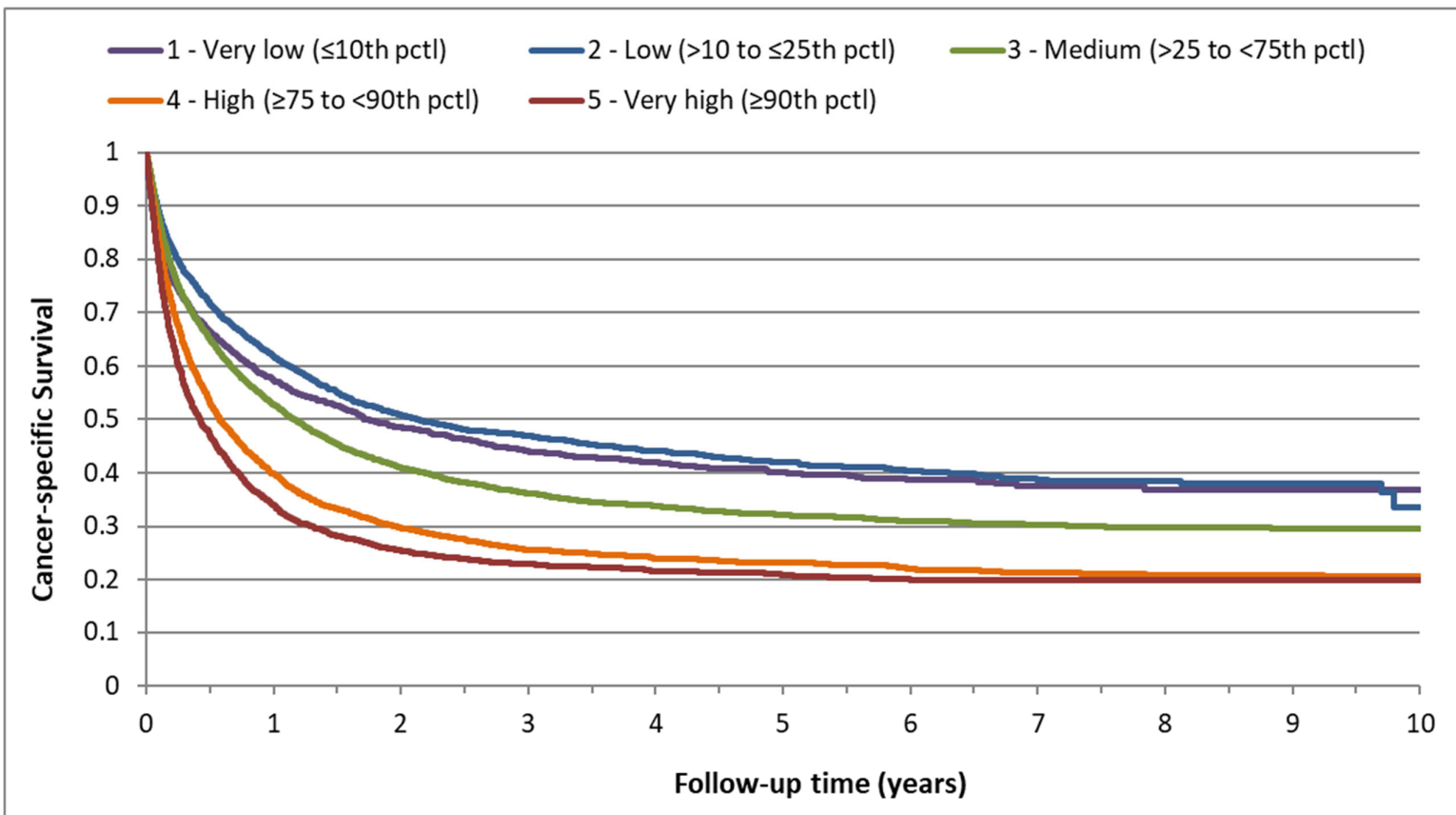
N	10,881,327
Mean	1.0099
Standard Deviation	0.3291
Minimum	0.0614
Maximum	14.1718



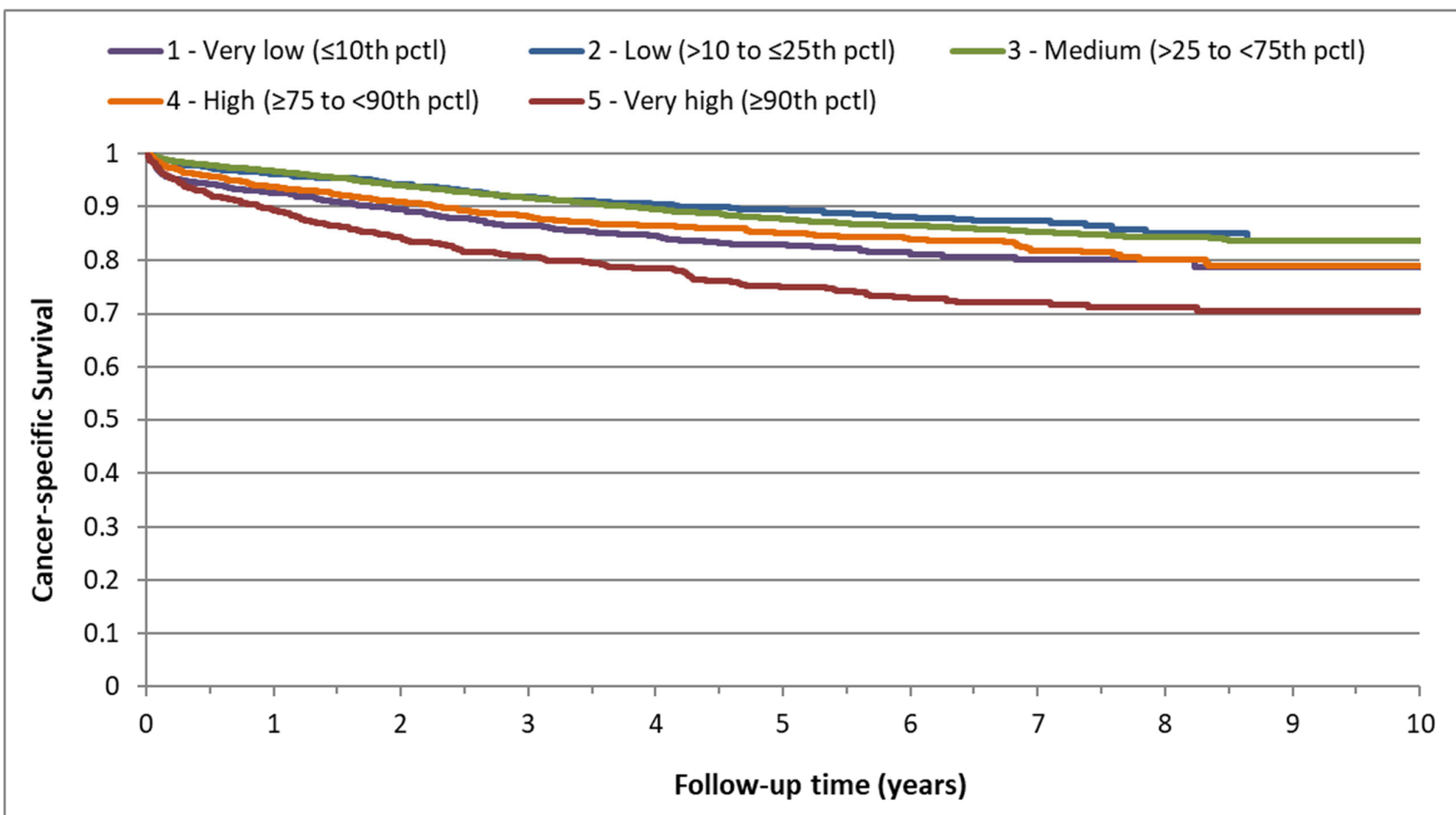
(A) All cancers (n = 112,231)



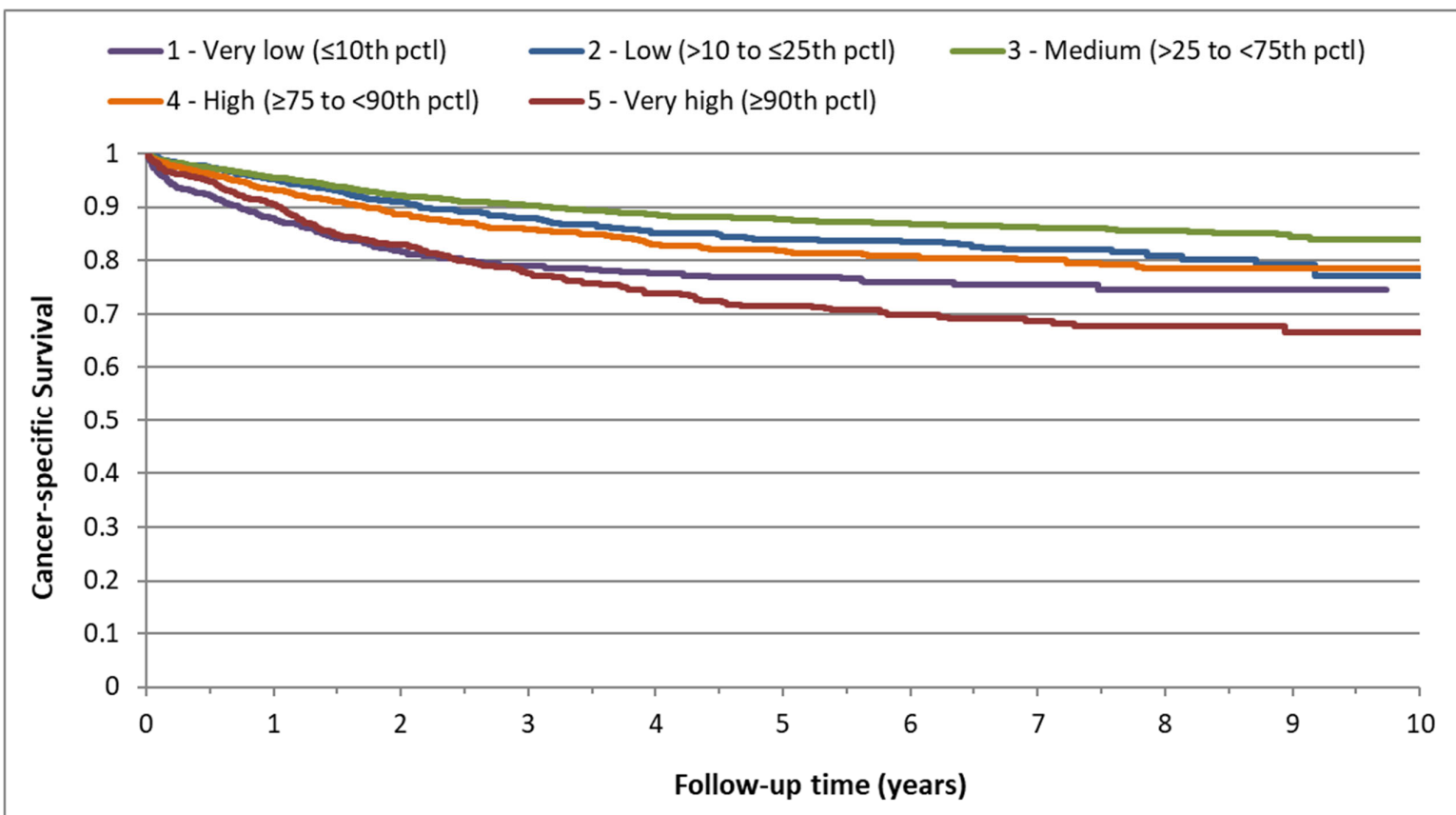
(B) Colon (n = 17,259)



(C) Lung (n = 20,583)

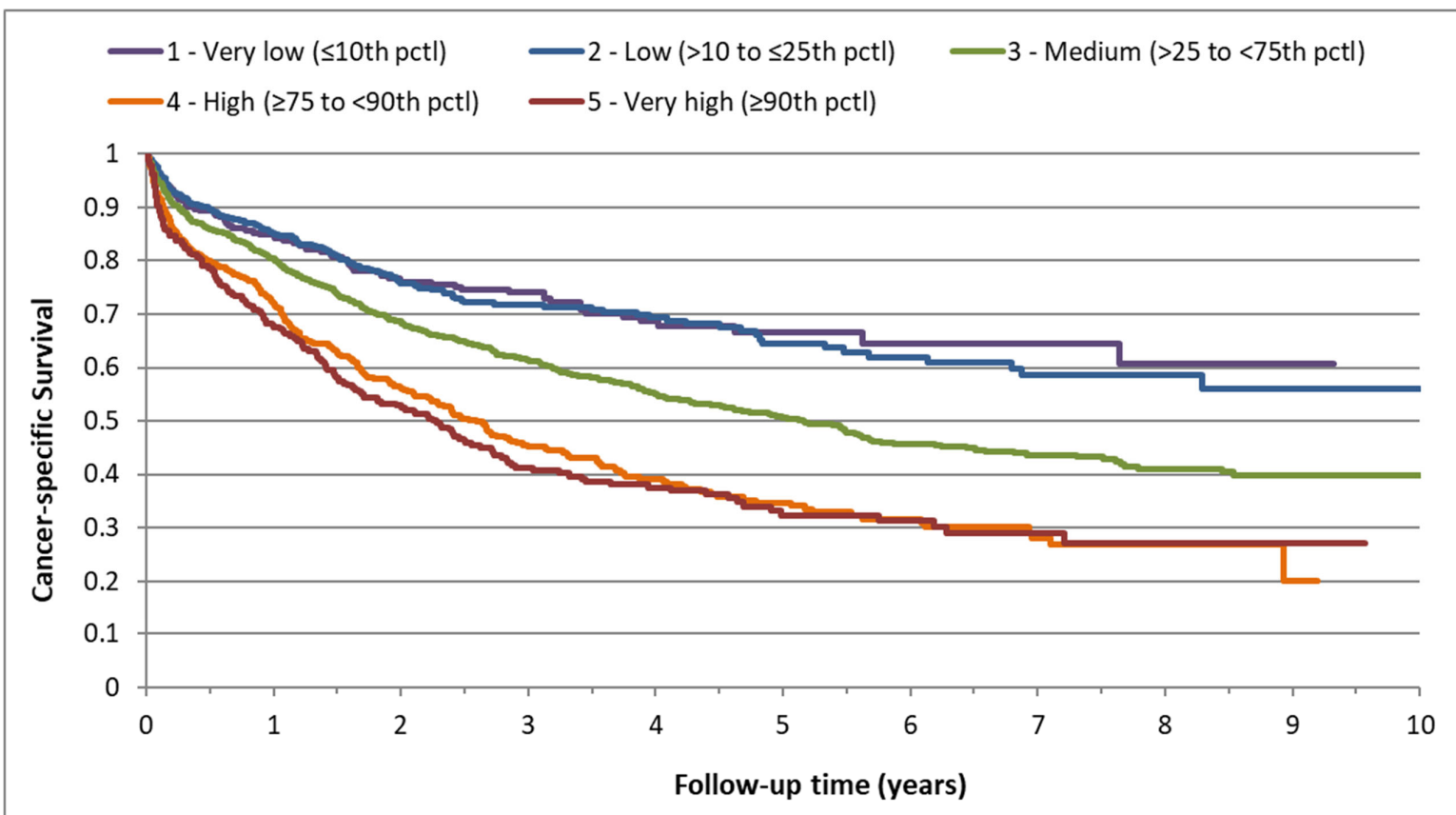


(D) Breast (n = 9,857)

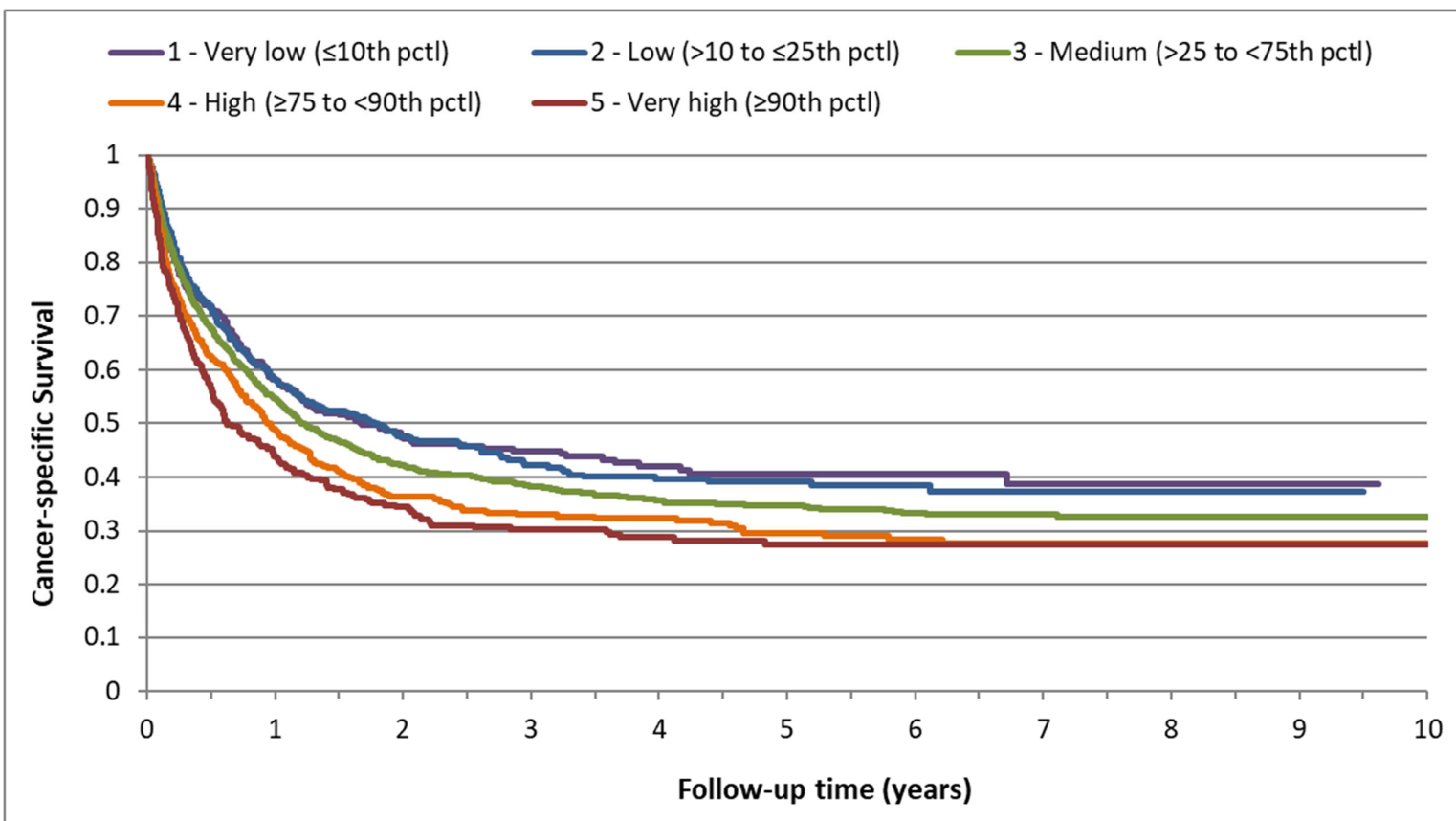


(E) Prostate (n = 8,587)



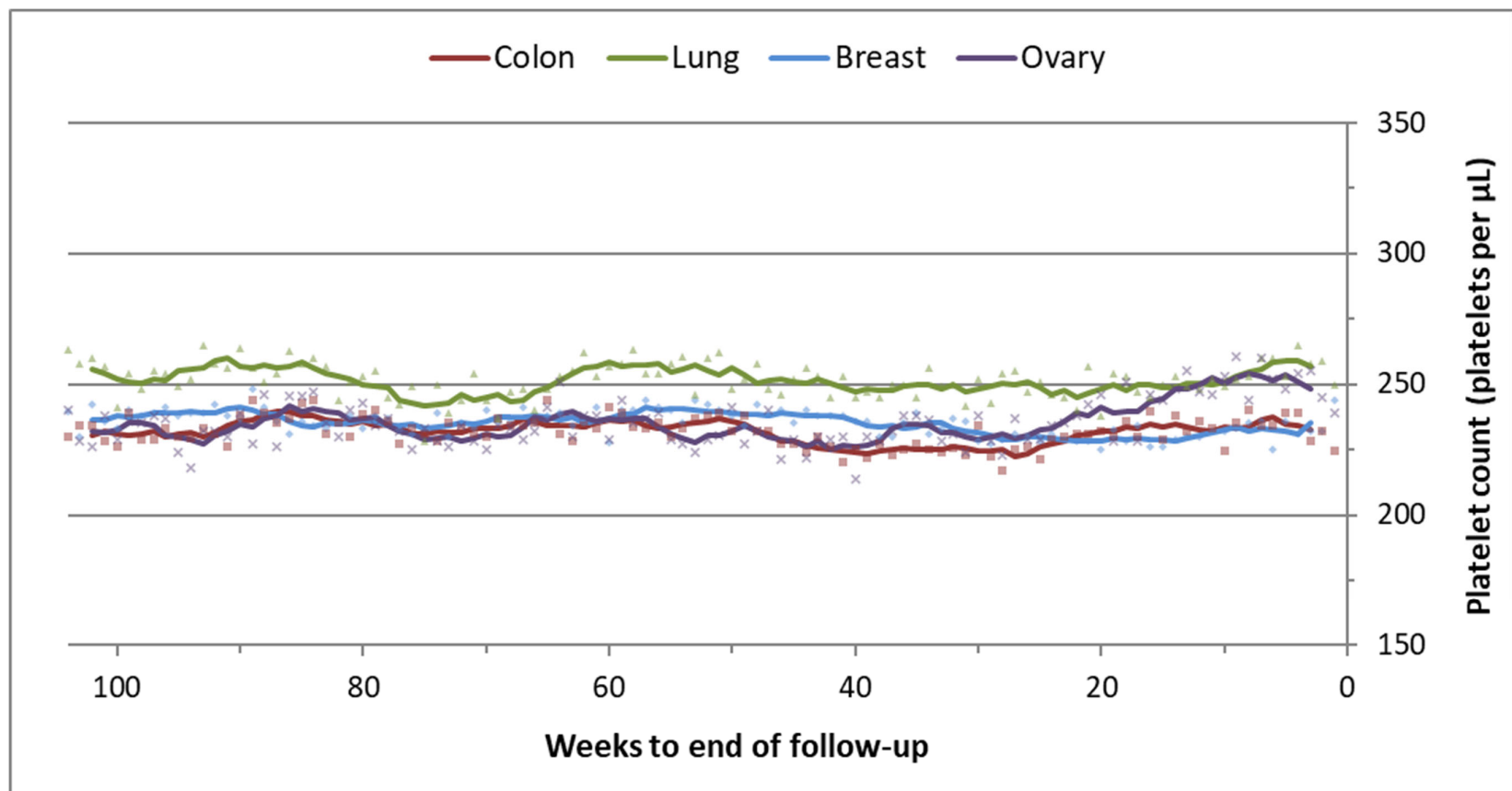


(F) Ovary (n = 3,085)

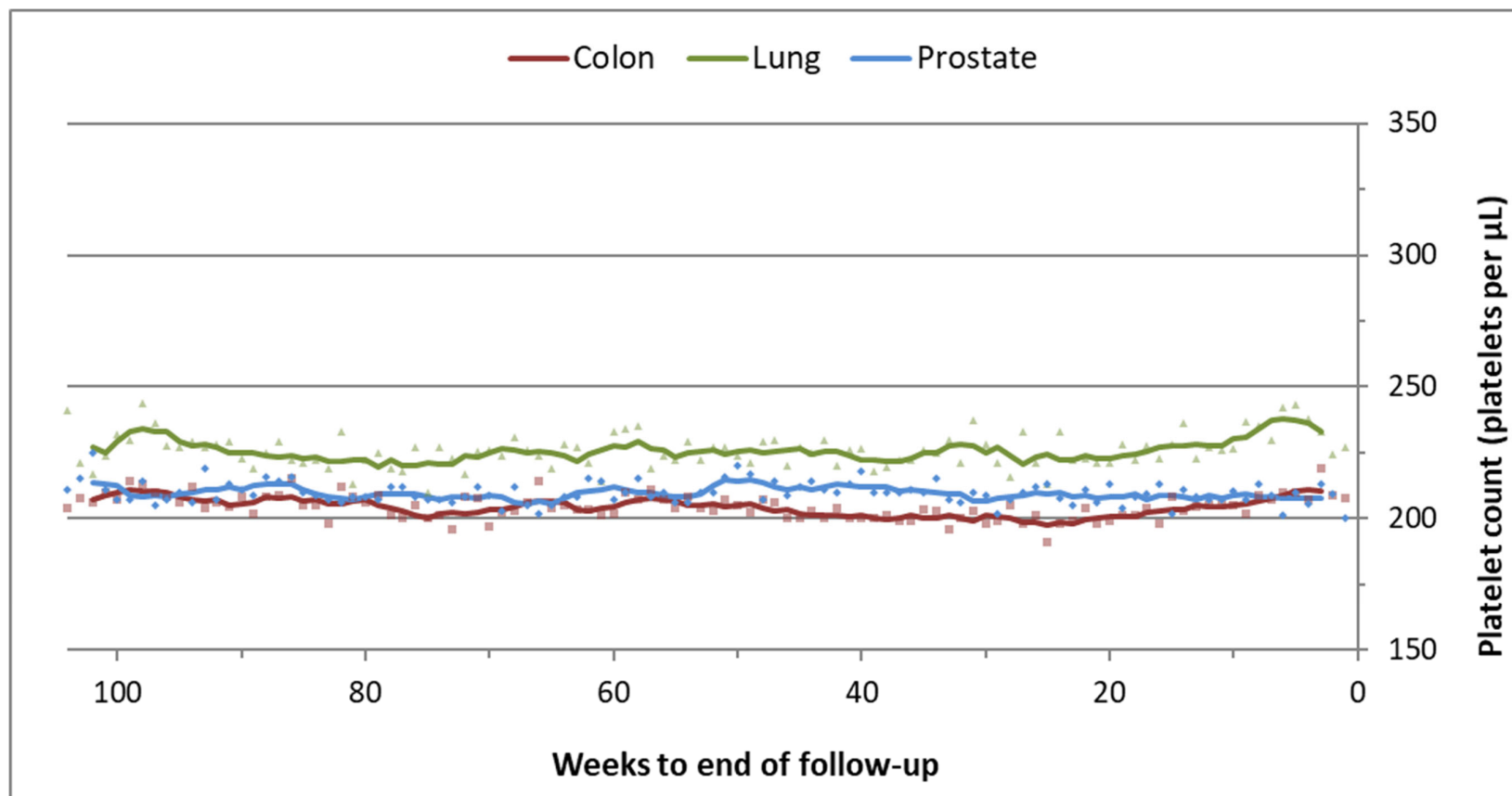


(G) Stomach (n = 3,365)

**Figure S5.** Cancer-specific survival by baseline platelet count category (exposure definition 2), for select cancers.

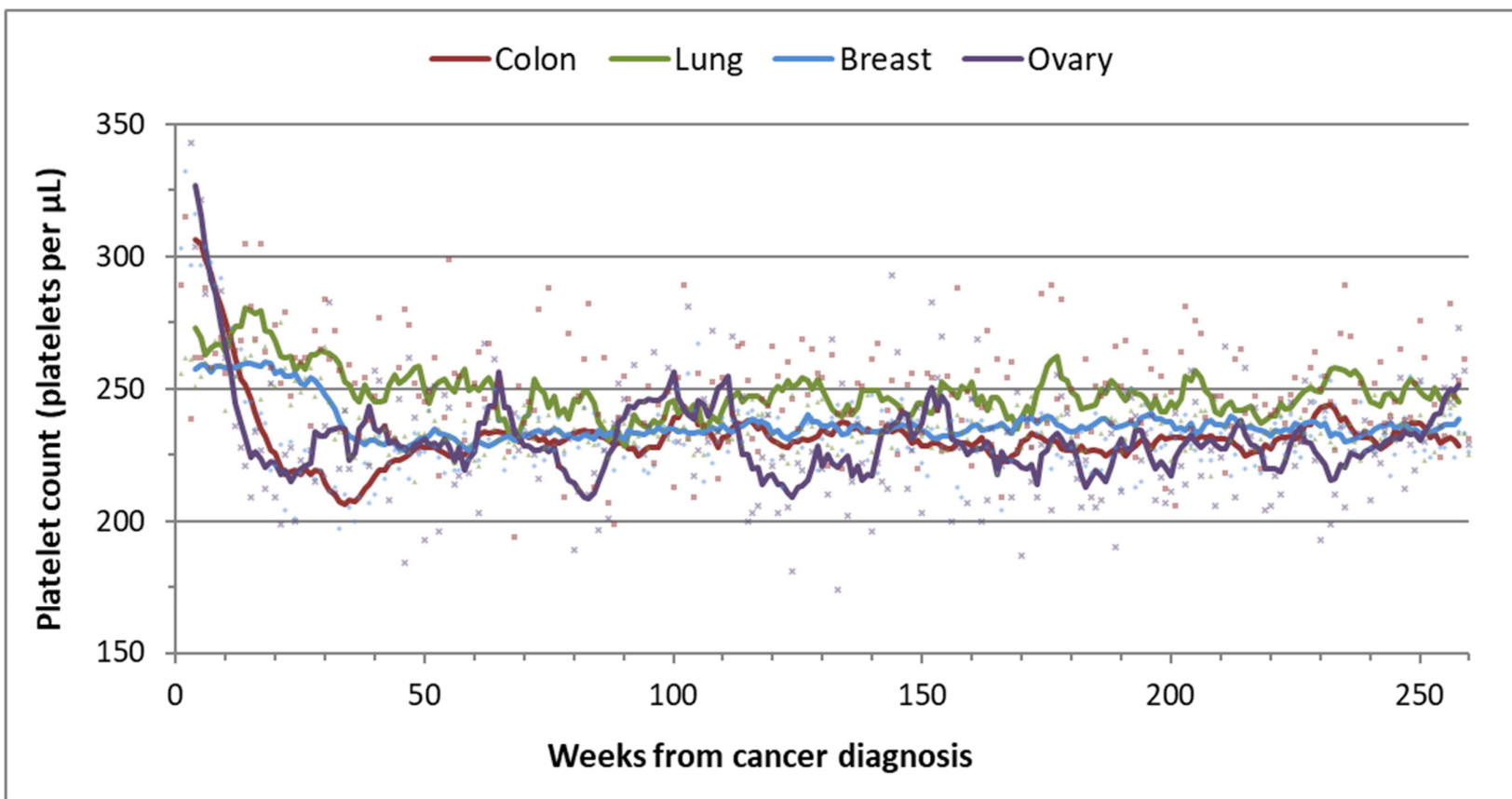


(A) Female patients

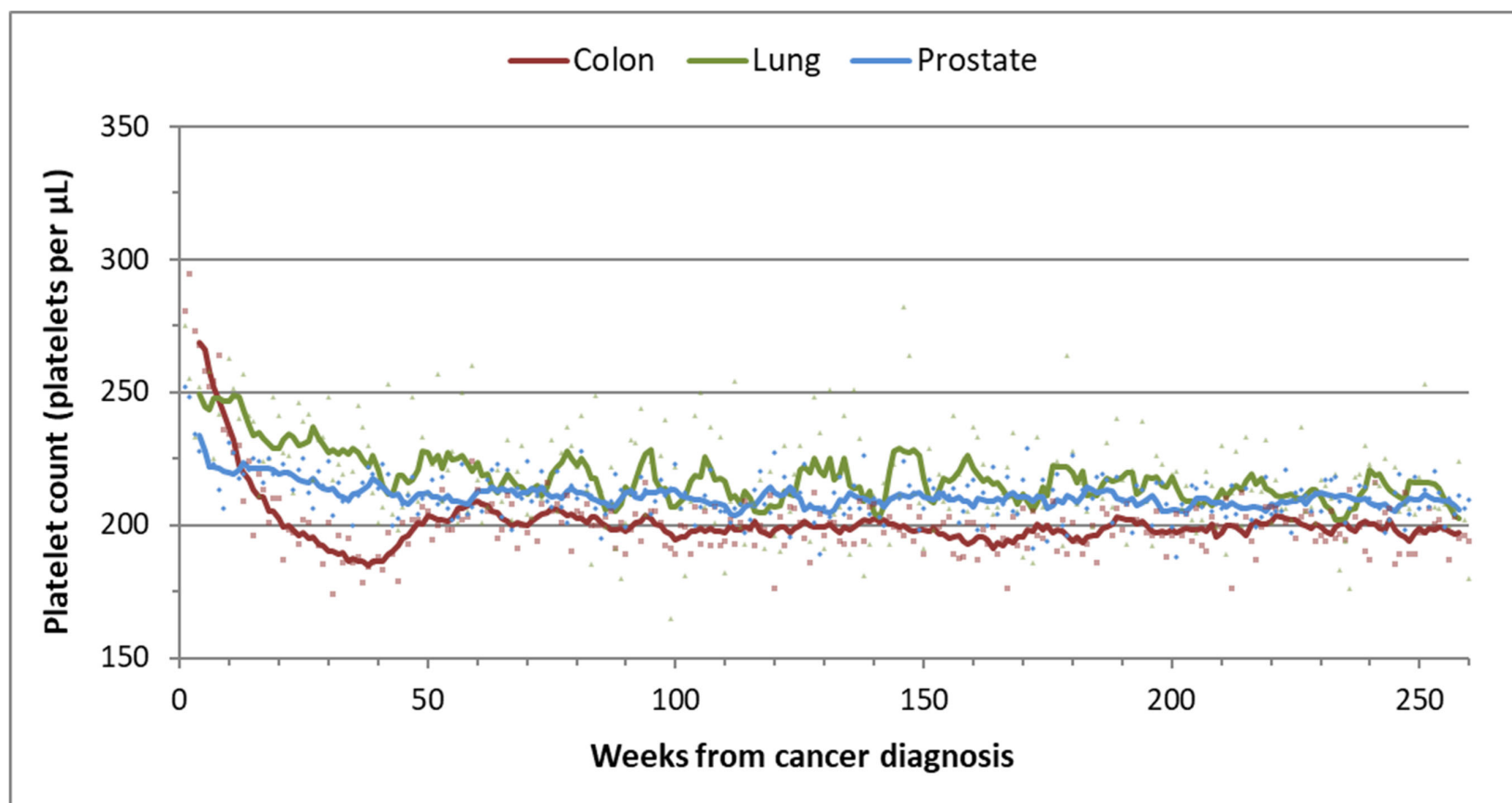


(B) Male patients

**Figure S6.** Median platelet count moving average (period of 5) in the 104 weeks (2 years) preceding end of follow-up, among patients that did not die from their index cancer.



(A) Female patients



(B) Male patients

**Figure S7.** Median platelet count moving average (period of 7) in the 260 weeks (5 years) following a cancer diagnosis, among patients with at least 5 years of follow-up and did not die from their index cancer.

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