

Supplemental Tables for:  
Development and validation of a clinical score for cardiovascular risk stratification of long-term childhood cancer survivors  
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**Table S1. STROBE Statement—Checklist of items that should be included in reports of cohort studies**

	Item No	Recommendation	Included (yes/no)
<b>Title and abstract</b>	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	yes
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	yes
<b>Introduction</b>			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	yes
Objectives	3	State specific objectives, including any prespecified hypotheses	yes
<b>Methods</b>			
Study design	4	Present key elements of study design early in the paper	yes
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	yes
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	yes
		(b) For matched studies, give matching criteria and number of exposed and unexposed	no
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	yes
Data sources/measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	yes
Bias	9	Describe any efforts to address potential sources of bias	no
Study size	10	Explain how the study size was arrived at	yes
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	yes
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	yes
		(b) Describe any methods used to examine subgroups and interactions	
		(c) Explain how missing data were addressed	
		(d) If applicable, explain how loss to follow-up was addressed	
		(e) Describe any sensitivity analyses	
<b>Results</b>			
Participants	13	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	yes
		(b) Give reasons for non-participation at each stage	yes
		(c) Consider use of a flow diagram	yes
Descriptive data	14	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	yes
		(b) Indicate number of participants with missing data for each variable of interest	yes
		(c) Summarise follow-up time (eg, average and total amount)	yes
Outcome data	15	Report numbers of outcome events or summary measures over time	yes
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted	yes

		estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	
		(b) Report category boundaries when continuous variables were categorized	yes
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	yes
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	no
<b>Discussion</b>			
Key results	18	Summarise key results with reference to study objectives	yes
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	yes
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	yes
Generalisability	21	Discuss the generalisability (external validity) of the study results	yes
<b>Other information</b>			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	yes

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at <http://www.strobe-statement.org>.

**Table S2. Cancer classification according to the International Classification of Childhood Cancer (ICCC) site recode ICD-O-3 (International Classification of Diseases for Oncology) /WHO (World Health Organization) 2008**

<b>CLASSIFICATION</b>	<b>Total n</b>	<b>Overall percentage (%)</b>
<b>I LEUKEMIA</b>		
I(a) Lymphoid leukemia	17,500	19.8
I(b) Acute myeloid leukemia	4,053	4.6
I(c) Chronic myeloproliferative disease	865	1.0
I(d) Myelodysplastic syndrome and other myeloproliferative disease	416	0.5
I(e) Unspecified and other specified leukemia	776	0.9
<b>II LYMPHOMA</b>		
II(a) Hodgkin lymphoma	6,752	7.6
II(b) Non-Hodgkin lymphoma (except Burkitt lymphoma)	4,332	4.9
II(c) Burkitt lymphoma	1,205	1.3
II(d) Miscellaneous lymphoreticular neoplasm	790	0.9
II(e) Unspecified lymphoma	293	0.3
<b>III CENTRAL NERVOUS SYSTEM</b>		
III(a) Ependymoma and choroid plexus tumor	1,324	1.5
III(b) Astrocytoma	7,488	8.5
III(c) Intracranial and intraspinal embryonal tumor	3,171	3.6
III(d) Other glioma	2,608	3.0
III(e) Other specified intracranial/intraspinal neoplasm	255	0.3
III(f) Unspecified intracranial and intraspinal neoplasm	189	0.2
<b>IV NEUROBLASTOMA AND PERIPHERAL NERVOUS CELL TUMOR</b>		
IV(a) Neuroblastoma and ganglioneuroblastoma	4,189	4.7
IV(b) Other peripheral nervous cell tumor	124	0.1
<b>V RETINOBLASTOMA</b>		
	1,737	2.0
<b>VI RENAL TUMOR</b>		
VI(a) Nephroblastoma and other nonepithelial renal tumor	3,207	3.6
VI(b) Renal carcinoma	241	0.3
VI(c) Unspecified malignant renal tumor	8	0.0
<b>VII LIVER TUMOR</b>		
VII(a) Hepatoblastoma	812	0.9
VII(b) Hepatic carcinoma	302	0.3
VII(c) Unspecified malignant hepatic tumor	7	0.0
<b>VIII BONE TUMOR</b>		
VIII(a) Osteosarcoma	2,562	3.0
VIII(b) Chondrosarcoma	206	0.2
VIII(c) Ewing tumor and related sarcomas of bone	1,477	1.7
VIII(d) Other specified malignant bone tumor	221	0.3
VIII(e) Unspecified malignant bone tumor	77	0.1
<b>IX SOFT TISSUE SARCOMA (INCLUDING HEART TUMOR)</b>		
IX(a) Rhabdomyosarcoma	2,455	2.8
IX(b) Fibrosarcoma, peripheral nerve & other fibrous	677	0.8
IX(c) Kaposi sarcoma	24	0.0
IX(d) Other specified soft tissue sarcoma	2,390	2.7
IX(e) Unspecified soft tissue sarcoma	592	0.7
<b>X GERM CELL TUMOR</b>		
X(a) Intracranial & intraspinal germ cell tumor	883	1.0
X(b) Extracranial & extragonadal germ cell tumor	884	1.0
X(c) Malignant gonadal germ cell tumor	3916	4.4
X(d) Gonadal carcinoma	240	0.3
X(e) Other and unspecified malignant gonadal tumor	126	0.1
<b>XI ENDOCRINE</b>		

XI(a) Adrenocortical carcinoma	116	0.1
XI(b) Thyroid carcinoma	3,449	3.9
XI(c) Nasopharyngeal carcinoma	299	0.3
XI(d) Malignant melanoma	2,574	2.9
XI(e) Skin carcinoma	34	0.0
XI(f) Other and unspecified carcinoma	2,133	2.4
<b>XII OTHER SPECIFIED OR UNSPECIFIED MALIGNANT TUMOR</b>		
XII(a) Other specified malignant tumor	153	0.2
XII(b) Other unspecified malignant tumor	161	0.2
<b>Total</b>	<b>88,418</b>	<b>100.0</b>

**Table S3. Mortality incidence rates per type of malignancy.**

Malignancy type	Mortality incidence rate (per 1000 person-years) [95% confidence interval]					
	First 5 years after cancer diagnosis			Long-term cancer survivors (≥5 years)		
	All-cause	Cancer-specific	CV	All-cause	Cancer-specific	CV
Leukemias	64.9 [63.2-66.6]	57.3 [55.8-59.0]	0.5 [0.4-0.7]	7.2 [6.7-7.7]	5.1 [4.7-5.5]	0.2 [0.2-0.3]
Lymphomas	32.3 [30.7-33.8]	26.4 [25.1-27.9]	0.6 [0.4-0.8]	8.1 [7.6-8.8]	3.2 [2.8-3.5]	1.2 [1.0-1.4]
CNS	83.3 [80.8-85.9]	77.5 [75.1-80.0]	0.5 [0.3-0.7]	10.3 [9.6-11.1]	7.6 [7.0-8.3]	0.4 [0.3-0.6]
Peripheral nervous cell <sup>a</sup>	80.5 [76.0-85.2]	74.7 [70.5-79.3]	0.4 [0.2-0.9]	5.2 [4.4-6.3]	3.6 [2.9-4.5]	0.3 [0.1-0.7]
Retinoblastoma	9.8 [7.8-12.4]	7.7 [5.9-10.0]	0.1 [0.02-1.0]	1.6 [1.1-2.5]	0.5 [0.2-1.1]	0.1 [0.01-0.5]
Renal	29.0 [26.3-32.0]	25.9 [23.3-28.7]	0.3 [0.1-0.8]	2.9 [2.3-3.6]	1.5 [1.1-2.0]	0.2 [0.1-0.5]
Liver	126.9 [115.1-139.8]	116.5 [105.3-129.0]	0.6 [0.2-2.5]	5.9 [3.8-9.0]	4.5 [2.7-7.3]	0 [-]
Bone	90.8 [86.3-95.6]	85.8 [81.3-90.5]	0.4 [0.2-0.8]	11.7 [10.4-13.3]	7.7 [6.6-8.9]	0.5 [0.3-1.0]
Soft tissue (incl. heart)	75.0 [71.4-78.7]	70.0 [66.5-73.6]	0.4 [0.2-0.8]	6.8 [6.0-7.7]	4.5 [3.9-5.3]	0.4 [0.2-0.7]
Germ cell tumors	28.0 [26.0-30.3]	23.9 [22.0-26.0]	0.3 [0.1-0.6]	3.8 [3.3-4.5]	1.7 [1.3-2.1]	0.4 [0.2-0.6]
Endocrine	5.6 [4.5-7.0]	4.8 [3.8-6.1]	0.1 [0.03-0.6]	2.3 [1.8-3.0]	0.5 [0.3-0.9]	0.3 [0.2-0.6]
Skin & melanoma	15.2 [13.0-17.7]	13.8 [11.7-16.2]	0 [-]	4.4 [3.5-5.4]	2.8 [2.1-3.6]	0.2 [0.05-0.5]
Miscellaneous	60.2 [55.3-65.6]	55.2 [50.4-60.3]	0.8 [0.4-1.7]	5.5 [4.5-6.8]	2.9 [2.2-3.9]	0.2 [0.1-0.6]
<b>Average</b>	<b>55.9 [55.0-56.7]</b>	<b>50.3 [49.6-51.1]</b>	<b>0.44 [0.38-0.52]</b>	<b>6.9 [6.6-7.1]</b>	<b>4.1 [4.0-4.3]</b>	<b>0.46 [0.41-0.53]</b>

CI: confidence interval; CNS: central nervous system tumors; CV: cardiovascular

<sup>a</sup>Includes neuroblastoma.

**Table S4. Basic demographics of the derivation and validation groups.**

		N (%) or median [range]	
		Derivation set	Validation set
<b>Total n</b>		22,374	6,437
<b>Age at diagnosis</b>		11 [0-19]	10 [0-19]
<b>Male sex</b>		11,607 (51.9)	3,384 (52.6)
<b>Year of diagnosis</b>		1993 [1973-2008]	1994 [1973-2008]
<b>Race</b>			
	<i>White</i>	19,104 (85.0)	4,466 (69.4)
	<i>Black</i>	1,613 (7.2)	1,193 (18.5)
	<i>Other</i>	1,593 (7.1)	651 (10.1)
	<i>Unknown</i>	154 (0.7)	127 (2.0)
<b>History of radiation<sup>a</sup></b>		6,789 (30.8)	1,944 (30.5)
<b>Lymphoma diagnosis</b>			
	<i>Leukemia</i>	5,046 (22.6)	1,526 (23.7)
	<i>Lymphoma</i>	3,932 (17.6)	1,072 (16.7)
	<i>CNS tumor</i>	3,613 (16.2)	947 (14.7)
	<i>Peripheral nervous cell tumor<sup>b</sup></i>	1,016 (4.5)	321 (5.0)
	<i>Retinoblastoma</i>	520 (2.3)	173 (2.7)
	<i>Renal tumor</i>	1,057 (4.7)	347 (5.4)
	<i>Liver tumor</i>	173 (0.8)	55 (0.9)
	<i>Bone tumor</i>	1,010 (4.5)	278 (4.3)
	<i>Soft tissue sarcoma</i>	1,538 (6.9)	441 (6.9)
	<i>Germ cell tumor</i>	1,717 (7.7)	491 (7.6)
	<i>Endocrine tumor</i>	1,104 (4.9)	313 (4.9)
	<i>Skin and melanoma</i>	899 (4.0)	240 (3.7)
	<i>Miscellaneous</i>	749 (3.4)	233 (3.6)

SEER: Surveillance, Epidemiology and End Results program

<sup>a</sup>available in 22,065 individuals (98.6%) in the derivation and 6,367 individuals (98.9%) in the validation set<sup>b</sup>includes neuroblastoma

