

Table 29.6

5-Year Relative Survival (Percent), 2010-2016<sup>a</sup>By International Classification of Childhood Cancer (ICCC)<sup>b</sup> Selected Group and Subgroup<sup>c</sup> and Sex and Age  
Excluding benign brain and myelodysplastic syndromes

ICCC Group & Subgroup	Ages 0-19 by Sex			Both Sexes by Age					
	Total	Male	Female	<1	1-4	5-9	10-14	15-19	0-14
All ICCC Groups Combined	84.5	83.6	85.5	78.1	86.0	84.7	83.3	85.3	84.1
I Leukemia	84.6	84.3	85.1	60.7	91.5	90.9	80.2	72.8	87.2
I(a) Lymphoid leukemia	88.7	87.9	89.6	56.5	94.2	93.2	84.2	74.6	90.9
I(b) Acute myeloid leukemia	67.4	67.7	67.0	67.0	71.9	68.3	63.5	66.2	67.9
II Lymphomas and reticuloendothelial neo.	93.6	93.7	93.4	-	88.5	95.7	92.9	94.0	93.1
II(a) Hodgkin lymphoma	98.0	97.8	98.1	-	100.0	100.0	98.4	97.5	98.9
II(b,c,e) Non-Hodgkin lymphoma	89.7	90.7	87.7	-	87.1	94.3	88.6	88.7	90.4
III CNS & misc intracranial & intraspinal neo.	74.2	73.9	74.7	57.7	75.5	71.2	79.2	76.0	73.9
III(a) Ependymomas and choroid plexus tumor	81.8	80.3	83.6	72.1 <sup>d</sup>	79.4	84.9	85.0 <sup>d</sup>	87.6	80.7
III(b) Astrocytoma	80.6	80.1	81.2	76.4 <sup>d</sup>	90.0	77.6	80.9	74.5	82.4
III(c) Intracranial and intraspinal embryonal tumors	65.9	65.4	66.8	28.6 <sup>d</sup>	59.5	77.7	76.6	67.1 <sup>d</sup>	65.8
III(d) Other gliomas	61.6	63.6	59.5	-	55.9	43.1	74.3	81.9	56.3
IV Neuroblastoma and other peripheral nervous cell tumors	80.4	79.7	81.1	90.5	76.0	74.8	91.1	63.0 <sup>d</sup>	81.0
IV(a) Neuroblastoma and ganglioneuroblastoma	80.3	79.5	81.1	90.5	75.9	74.2 <sup>d</sup>	91.2	-	80.8
V Retinoblastoma	96.2	96.0	96.3	97.0	96.0	-	-	-	96.2
VI Renal tumors	91.3	88.9	93.4	84.3	94.0	93.0	86.1	79.8	92.2
VI(a) Nephroblastoma and other nonepithelial renal tumor	92.7	91.5	93.6	84.1	94.3	93.9	88.8 <sup>d</sup>	-	92.8
VII Hepatic tumors	76.9	77.1	76.7	85.6	79.8	80.3 <sup>d</sup>	65.2 <sup>d</sup>	51.9 <sup>d</sup>	79.5
VII(a) Hepatoblastoma	82.5	81.8	83.3	85.4	79.5	96.6	-	-	82.6
VIII Malignant bone tumors	70.8	70.0	71.7	-	82.1 <sup>d</sup>	78.7	69.4	67.5	72.8
VIII(a) Osteosarcoma	67.7	64.8	71.2	-	-	75.7	65.2	66.6	68.4
VIII(c) Ewing tumor and related sarcomas of bone	69.2	71.4	66.0	-	92.9	78.2 <sup>d</sup>	70.3	57.6	75.2
IX Soft tissue and other extraosseous sarcomas	73.9	72.0	76.2	71.6	78.7	78.4	74.9	69.0	76.5
IX(a) Rhabdomyosarcoma	65.4	66.8	63.6	79.3 <sup>d</sup>	74.2	77.2	53.8	45.7	70.0
X Germ cell & trophoblastic tumors & neo. of gonads	92.2	92.7	91.2	84.3	89.0	98.1	90.9	93.1	90.4
X(a) Intracranial and intraspinal germ-cell tumor	90.2	90.5	89.2	-	-	98.2	90.7	91.9	89.3
X(c) Malignant gonadal germ cell tumor	96.4	96.5	96.3	92.0 <sup>d</sup>	100.0	100.0	95.7	96.3	97.1
XI Other malignant epithelial neo. and melanomas <sup>f</sup>	93.9	90.9	95.3	-	88.9	95.7	94.1	93.9	94.0
XI(b) Thyroid carcinoma	99.6	99.7	99.6	-	-	100.0	99.4	99.7	99.5
XI(d) Malignant melanoma	94.4	92.7	95.7	-	89.4 <sup>d</sup>	98.6	95.9	93.7	95.9

<sup>a</sup> SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). [Expected survival rates](#) are derived from life tables by socio-economic status, geography and race developed by the SEER program.

<sup>b</sup> Based on follow-up of patients into 2016.  
International Classification of Childhood Cancer is based on ICD-O-3. International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Colombet M, Ries LAG, Moreno F, Dolya A, Shin HY, Hesselting P, Stiller CA. International Incidence of Childhood Cancer, Volume III. Lyon: International Agency for Research on Cancer, In press.

<sup>c</sup> Classifications are shown for invasive cases only. For ICCC groups and subgroups that include *in situ* behavior, only invasive cases are shown except as noted.

<sup>d</sup> The standard error is between 5 and 10 percentage points.

<sup>e</sup> The standard error is greater than 10 percentage points.

<sup>f</sup> Includes *in situ* urinary bladder tumors.

- Statistic could not be calculated due to fewer than 25 cases during the time period.  
Neoplasms are abbreviated as neo.