|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Supporting Table 2: Five-year relative survival of malignant cancer by International Classification of Childhood Cancers group in individuals <20 years by age, United States, cases diagnosed during 2001–2015** | | | | | |
|  | 2001–2007 | |  | 2008–2015 | |
| **ICCC Group** | Count | Relative survival  (95% CI) |  | Count | Relative survival  (95% CI) |
| *Age 0–14* | | | | |  |
| I Leukemias, myeloproliferative & myelodysplastic diseases | 19,370 | 84.0 (83.5–84.5) |  | 20,618 | **87.7 (87.2–88.2)** |
| I(a) Lymphoid leukemias | 14,790 | 89.1 (88.6–89.6) |  | 15,892 | **91.6 (91.1–92.1)** |
| I(b) Acute myeloid leukemias | 2,897 | 62.3 (60.5–64.0) |  | 2,831 | **68.9 (67.0–70.7)** |
| I(c) Chronic myeloproliferative diseases | 625 | 86.9 (84.0–89.4) |  | 707 | **95.0 (92.9–96.5)** |
| I(d) Myelodysplastic syndrome and other myeloproliferative | 591 | 70.6 (66.7–74.1) |  | 588 | 71.2 (67.1–74.8) |
| I(e) Unspecified and other specified leukemias | 467 | 69.5 (65.1–73.5) |  | 600 | **80.7 (76.8–84.0)** |
| II Lymphomas and reticuloendothelial neoplasms | 6,321 | 89.8 (89.1–90.6) |  | 7,829 | **93.8 (93.2–94.3)** |
| II(a) Hodgkin lymphomas | 2,260 | 96.2 (95.3–96.9) |  | 2,189 | 97.6 (96.8–98.3) |
| II(b) Non-Hodgkin lymphomas (except Burkitt lymphoma) | 2,486 | 84.5 (83.0–85.9) |  | 2,777 | **88.5 (87.1–89.7)** |
| II(c) Burkitt lymphoma | 989 | 89.7 (87.6–91.4) |  | 970 | **93.4 (91.7–94.9)** |
| II(d) Miscellaneous lymphoreticular neoplasms | 509 | 88.7 (85.6–91.2) |  | 1,801 | **97.7 (96.9–98.4)** |
| II(e) Unspecified lymphomas | 77 | 84.5 (74.2–90.9) |  | 92 | 90.6 (80.3–95.6) |
| III CNS and misc intracranial and intraspinal neoplasms | 13,000 | 72.9 (72.2–73.7) |  | 13,879 | **75.7 (74.9–76.5)** |
| III(a) Ependymomas and choroid plexus tumor | 1,171 | 72.5 (69.8–74.9) |  | 1,183 | **79.6 (76.8–82.1)** |
| III(b) Astrocytomas | 6,392 | 85.7 (84.8–86.5) |  | 7,087 | 85.4 (84.5–86.3) |
| III(c) Intracranial and intraspinal embryonal tumors | 2,878 | 60.3 (58.5–62.1) |  | 2,889 | **64.3 (62.4–66.2)** |
| III(d) Other gliomas | 2,142 | 54.1 (52.0–56.2) |  | 2,305 | **60.0 (57.9–62.1)** |
| III(e) Other specified intracranial/intraspinal neoplasms | 262 | 69.6 (63.6–74.8) |  | 250 | 69.4 (62.5–75.2) |
| III(f) Unspecified intracranial and intraspinal neoplasms | 155 | 50.4 (42.3–58.0) |  | 165 | 57.5 (49.4–64.7) |
| IV Neuroblastoma and other peripheral nervous cell tumors | 4,346 | 76.7 (75.4–77.9) |  | 4,470 | **81.3 (80.0–82.6)** |
| IV(a) Neuroblastoma and ganglioneuroblastoma | 4,287 | 76.6 (75.3–77.8) |  | 4,386 | **81.2 (79.9–82.5)** |
| IV(b) Other peripheral nervous cell tumors | 59 | 86.6 (74.8–93.1) |  | 84 | 86.3 (75.5–92.5) |
| V Retinoblastoma | 1,640 | 97.2 (96.2–98.0) |  | 1,761 | 97.2 (96.1–97.9) |
| VI Renal tumors | 3,273 | 88.7 (87.5–89.7) |  | 3,537 | **92.5 (91.4–93.4)** |
| VI(a) Nephroblastoma and other nonepithelial renal tumors | 3,137 | 89.3 (88.2–90.4) |  | 3,388 | **93.0 (92.0–93.9)** |
| VI(b) Renal carcinomas | 125 | 72.1 (63.3–79.1) |  | 138 | 79.0 (70.2–85.5) |
| VII Hepatic tumors | 920 | 68.7 (65.6–71.6) |  | 1,130 | **75.8 (73.0–78.4)** |
| **Supporting Table 2. (continued)**  VII(a) Hepatoblastoma | 774 | 74.2 (70.9–77.1) |  | 963 | 79.4 (76.5–82.0) |
| VII(b) Hepatic carcinomas | 137 | 37.3 (29.2–45.3) |  | 158 | **56.5 (47.7–64.4)** |
| VIII Malignant bone tumors | 2,614 | 72.3 (70.5–74.0) |  | 2,698 | 73.4 (71.4–75.3) |
| VIII(a) Osteosarcomas | 1,440 | 68.6 (66.2–71.0) |  | 1,486 | 69.2 (66.3–71.8) |
| VIII(b) Chondrosarcomas | 68 | 92.8 (83.3–97.0) |  | 64 | 96.6 (87.0–99.2) |
| VIII(c) Ewing tumor and related sarcomas of bone | 936 | 74.9 (72.0–77.5) |  | 967 | 75.8 (72.3–78.8) |
| VIII(d) Other specified malignant bone tumors | 112 | 81.3 (72.8–87.4) |  | 134 | 89.5 (80.9–94.3) |
| VIII(e) Unspecified malignant bone tumors | 58 | 79.4 (66.5–87.8) |  | 47 | 83.8 (68.8–92.0) |
| IX Soft tissue and other extraosseous sarcomas | 4,051 | 75.2 (73.9–76.5) |  | 4,261 | 77.2 (75.8–78.6) |
| IX(a) Rhabdomyosarcomas | 1,966 | 72.3 (70.3–74.2) |  | 1,977 | 71.9 (69.7–74.1) |
| IX(b) Fibrosarcomas, peripheral nerve & other fibrous | 426 | 81.7 (77.7–85.1) |  | 407 | 87.4 (83.2–90.6) |
| IX(c) Kaposi sarcoma | – |  |  | – |  |
| IX(d) Other specified soft tissue sarcomas | 1,283 | 78.1 (75.7–80.3) |  | 1,428 | 80.6 (78.3–82.8) |
| IX(e) Unspecified soft tissue sarcomas | 368 | 73.0 (68.1–77.2) |  | 441 | 80.4 (76.0–84.1) |
| X Germ cell & trophoblastic tumors & neoplasms of gonads | 2,069 | 91.3 (90.0–92.4) |  | 2,185 | 92.0 (90.7–93.2) |
| X(a) Intracranial & intraspinal germ cell tumors | 524 | 85.7 (82.3–88.4) |  | 599 | 87.7 (84.5–90.3) |
| X(b) Extracranial & extragonadal germ cell tumors | 555 | 88.4 (85.4–90.8) |  | 542 | 88.2 (84.9–90.8) |
| X(c) Malignant gonadal germ cell tumors | 895 | 97.6 (96.3–98.5) |  | 935 | 98.2 (96.8–98.9) |
| X(d) Gonadal carcinomas | 42 | 81.0 (65.5–90.0) |  | 46 | 65.2 (48.6–77.6) |
| X(e) Other and unspecified malignant gonadal tumors | 53 | 77.5 (63.6–86.5) |  | 63 | 92.8 (81.5–97.3) |
| XI Other malignant epithelial neoplasms and melanomas | 2,621 | 93.3 (92.2–94.2) |  | 3,001 | 93.2 (92.1–94.1) |
| XI(a) Adrenocortical carcinomas | 82 | 75.7 (64.9–83.7) |  | 90 | 60.8 (48.0–71.4) |
| XI(b) Thyroid carcinomas | 901 | 98.9 (97.9–99.4) |  | 1,224 | 98.9 (97.8–99.4) |
| XI(c) Nasopharyngeal carcinomas | 109 | 90.0 (82.6–94.4) |  | 118 | 93.7 (85.8–97.3) |
| XI(d) Malignant melanomas | 862 | 95.2 (93.5–96.4) |  | 781 | 93.7 (91.6–95.3) |
| XI(e) Skin carcinomas | 26 | 96.2 (75.6–99.5) |  | 20 | 94.2 (64.7–99.2) |
| XI(f) Other and unspecified carcinomas | 641 | 85.5 (82.5–88.0) |  | 768 | 87.2 (84.4–89.6) |
| XII Other and unspecified malignant neoplasms | 237 | 80.3 (74.6–84.9) |  | 231 | 80.3 (73.9–85.2) |
| XII(a) Other specified malignant tumors | 137 | 77.5 (69.5–83.7) |  | 142 | 88.1 (80.8–92.8) |
| XII(b) Other unspecified malignant tumors | 100 | 84.2 (75.3–90.0) |  | 89 | 67.9 (56.0–77.2) |
| Not classified by ICCC or in situ | 85 | 59.0 (47.7–68.6) |  | 96 | 62.9 (51.9–72.1) |
|  |  |  |  |  |  |
| **Supporting Table 2. (continued)**  *Age 15–19* | | | | |  |
| I Leukemias, myeloproliferative & myelodysplastic diseases | 4,142 | 68.0 (66.6–69.4) |  | 4,499 | **76.3 (74.9–77.6)** |
| I(a) Lymphoid leukemias | 2,169 | 69.7 (67.7–71.6) |  | 2,280 | **77.4 (75.4–79.3)** |
| I(b) Acute myeloid leukemias | 1,120 | 54.1 (51.2–57.0) |  | 1,212 | **66.5 (63.5–69.3)** |
| I(c) Chronic myeloproliferative diseases | 582 | 91.6 (89.0–93.6) |  | 659 | 94.8 (92.3–96.5) |
| I(d) Myelodysplastic syndrome and other myeloproliferative | 134 | 66.7 (57.9–74.0) |  | 170 | 69.6 (61.1–76.6) |
| I(e) Unspecified and other specified leukemias | 137 | 55.7 (46.9–63.6) |  | 178 | 66.9 (58.7–73.8) |
| II Lymphomas and reticuloendothelial neoplasms | 6,746 | 90.1 (89.4–90.8) |  | 7,071 | **93.7 (93.0–94.3)** |
| II(a) Hodgkin lymphomas | 4,343 | 94.9 (94.1–95.5) |  | 4,450 | **96.3 (95.5–96.9)** |
| II(b) Non-Hodgkin lymphomas (except Burkitt lymphoma) | 1,956 | 80.9 (79.1–82.6) |  | 2,057 | **89.0 (87.4–90.4)** |
| II(c) Burkitt lymphoma | 317 | 83.5 (78.9–87.2) |  | 293 | 84.8 (79.6–88.8) |
| II(d) Miscellaneous lymphoreticular neoplasms | 42 | 88.3 (73.8–95.1) |  | 177 | 97.2 (93.2–98.8) |
| II(e) Unspecified lymphomas | 88 | 84.3 (74.8–90.5) |  | 94 | 93.5 (85.9–97.1) |
| III CNS and misc intracranial and intraspinal neoplasms | 2,920 | 77.0 (75.4–78.5) |  | 3,080 | 79.3 (77.7–80.8) |
| III(a) Ependymomas and choroid plexus tumor | 236 | 87.2 (82.1–90.9) |  | 217 | 90.4 (84.7–94.1) |
| III(b) Astrocytomas | 1,630 | 76.7 (74.6–78.7) |  | 1,786 | 78.0 (75.8–80.0) |
| III(c) Intracranial and intraspinal embryonal tumors | 392 | 70.7 (65.9–75.0) |  | 321 | 72.3 (66.3–77.3) |
| III(d) Other gliomas | 538 | 78.7 (75.0–82.0) |  | 625 | 82.8 (79.3–85.8) |
| III(e) Other specified intracranial/intraspinal neoplasms | 82 | 73.5 (62.4–81.8) |  | 86 | 80.4 (68.5–88.1) |
| III(f) Unspecified intracranial and intraspinal neoplasms | 42 | 74.1 (57.9–84.8) |  | 45 | 77.6 (62.3–87.3) |
| IV Neuroblastoma and other peripheral nervous cell tumors | 102 | 72.8 (63.0–80.4) |  | 112 | 76.1 (64.2–84.6) |
| IV(a) Neuroblastoma and ganglioneuroblastoma | 52 | 63.7 (49.0–75.1) |  | 54 | 61.0 (40.8–76.1) |
| IV(b) Other peripheral nervous cell tumors | 50 | 82.2 (68.4–90.4) |  | 58 | 88.5 (73.4–95.3) |
| V Retinoblastoma | – |  |  | – |  |
| VI Renal tumors | 216 | 79.9 (73.8–84.7) |  | 251 | 79.5 (73.2–84.5) |
| VI(a) Nephroblastoma and other nonepithelial renal tumors | 48 | 83.6 (69.5–91.5) |  | 52 | 87.2 (73.4–94.1) |
| VI(b) Renal carcinomas | 164 | 78.9 (71.8–84.4) |  | 198 | 77.4 (70.0–83.2) |
| VII Hepatic tumors | 173 | 40.0 (32.7–47.3) |  | 172 | 49.1 (40.7–57.0) |
| VII(a) Hepatoblastoma | – |  |  | – |  |
| VII(b) Hepatic carcinomas | 168 | 39.4 (32.0–46.8) |  | 162 | 47.8 (39.1–56.1) |
| VIII Malignant bone tumors | 2,017 | 67.2 (65.1–69.2) |  | 1,884 | 68.5 (66.0–70.9) |
| VIII(a) Osteosarcomas | 1,170 | 66.4 (63.6–69.0) |  | 1,081 | 64.6 (61.1–67.8) |
| **Supporting Table 2. (continued)**  VIII(b) Chondrosarcomas | 113 | 93.3 (86.6–96.7) |  | 115 | 96.1 (89.2–98.6) |
| VIII(c) Ewing tumor and related sarcomas of bone | 584 | 58.5 (54.3–62.3) |  | 543 | 65.3 (60.4–69.8) |
| VIII(d) Other specified malignant bone tumors | 119 | 90.3 (83.2–94.5) |  | 107 | 92.4 (84.3–96.5) |
| VIII(e) Unspecified malignant bone tumors | 31 | 77.8 (58.5–88.9) |  | 38 | 74.5 (53.1–87.2) |
| IX Soft tissue and other extraosseous sarcomas | 2,135 | 70.4 (68.4–72.3) |  | 2,049 | 69.2 (66.9–71.4) |
| IX(a) Rhabdomyosarcomas | 493 | 51.1 (46.6–55.5) |  | 477 | 50.5 (45.2–55.4) |
| IX(b) Fibrosarcomas, peripheral nerve & other fibrous | 245 | 70.9 (64.7–76.2) |  | 238 | 71.2 (64.5–76.9) |
| IX(c) Kaposi sarcoma | – |  |  | 23 | 82.7 (60.1–93.1) |
| IX(d) Other specified soft tissue sarcomas | 1,151 | 78.6 (76.1–80.9) |  | 1,041 | 76.6 (73.6–79.4) |
| IX(e) Unspecified soft tissue sarcomas | 233 | 69.8 (63.4–75.3) |  | 270 | 72.3 (66.0–77.6) |
| X Germ cell & trophoblastic tumors & neoplasms of gonads | 3,629 | 92.4 (91.5–93.3) |  | 3,956 | 93.3 (92.4–94.2) |
| X(a) Intracranial & intraspinal germ cell tumors | 304 | 85.9 (81.4–89.4) |  | 333 | **93.8 (90.2–96.1)** |
| X(b) Extracranial & extragonadal germ cell tumors | 220 | 76.2 (69.9–81.3) |  | 236 | 75.0 (68.6–80.3) |
| X(c) Malignant gonadal germ cell tumors | 2,821 | 95.8 (95.0–96.5) |  | 3,076 | 96.1 (95.2–96.8) |
| X(d) Gonadal carcinomas | 167 | 78.6 (71.5–84.1) |  | 201 | 79.6 (72.3–85.2) |
| X(e) Other and unspecified malignant gonadal tumors | 117 | 77.1 (68.4–83.8) |  | 110 | 78.0 (67.1–85.6) |
| XI Other malignant epithelial neoplasms and melanomas | 6,404 | 93.2 (92.5–93.8) |  | 7,088 | 93.4 (92.7–94.0) |
| XI(a) Adrenocortical carcinomas | 21 | 47.7 (25.8–66.8) |  | 35 | 24.9 (10.9–41.7) |
| XI(b) Thyroid carcinomas | 2,451 | 99.5 (99.0–99.8) |  | 3,616 | 99.5 (99.0–99.8) |
| XI(c) Nasopharyngeal carcinomas | 194 | 80.9 (74.5–85.8) |  | 189 | 85.0 (77.8–90.0) |
| XI(d) Malignant melanomas | 2,257 | 96.4 (95.5–97.2) |  | 1,495 | 95.4 (93.9–96.5) |
| XI(e) Skin carcinomas | 18 | 94.5 (66.3–99.2) |  | 22 | 100.0 |
| XI(f) Other and unspecified carcinomas | 1,463 | 79.7 (77.5–81.7) |  | 1,731 | 81.0 (78.9–83.0) |
| XII Other and unspecified malignant neoplasms | 196 | 80.3 (74.0–85.3) |  | 134 | 84.0 (76.4–89.3) |
| XII(a) Other specified malignant tumors | 74 | 73.2 (61.4–81.8) |  | 58 | 84.3 (71.8–91.5) |
| XII(b) Other unspecified malignant tumors | 122 | 84.7 (76.9–90.0) |  | 76 | 83.6 (72.7–90.4) |
| Not classified by ICCC or in situ | 44 | 70.7 (54.7–81.9) |  | 44 | 75.1 (58.3–85.8) |
|  |  |  |  |  |  |
| Source: CDC’s National Program of Cancer Registries. |  |  |  |  |  |
| Abbreviations: CI=confidence interval, ICCC=International Classification of Childhood Cancers. | | |  |  |  |
| Bold indicates nonoverlapping 95% CIs when comparing 2001–2007 to 2008–2015. | |  |  |  |  |
| – indicates suppressed cell due to case count <16. |  |  |  |  |  |
| **Supporting Table 2. (continued)**  Suppressed ICCC groups VI(c) Unspecified malignant renal tumors and VII(c) Unspecified malignant hepatic tumors due to cell counts <16. | | | | | |