

**Table S1.** Frequency distribution, International Classification of Diseases for Oncology (third edition) codes, median age, and relative survival of AML subgroups/subtypes of adults (ages  $\geq 20$  years at AML diagnosis) with diagnostically confirmed first primary AML who were diagnosed 2001-2018 (followed through 2019) and reported to have received initial chemotherapy for AML, SEER-17

| Subgroup/subtype  | ICD-O-3 morphology/<br>behavior codes | N      | Median age at diagnosis,<br>years (IQR) | Relative survival (%) according to time since AML diagnosis |                  |                  |                  |
|---|---------------------------------------|--------|---|---|------------------|------------------|------------------|
|   |                                       |        |   | 1-month   | 1-year           | 3-year           | 5-year           |
|   |                                       |        |   | % (95% CI)  | % (95% CI)       | % (95% CI)       | % (95% CI)       |
| APL (AML with t(15;17)(q22;q12))                                    | 9866/3                                | 3,141  | 47 (35-59)                              | 90.2 (89.1-91.2)  | 85.0 (83.7-86.2) | 82.1 (80.6-83.5) | 79.9 (78.2-81.4) |
| CBF AML   | *                                     | 1,085  | 49 (35-62)                              | 95.3 (93.8-96.4)  | 76.3 (73.6-78.8) | 58.7 (55.5-61.7) | 54.4 (51.2-57.6) |
| AML, t(8;21)(q22;q22)   | 9896/3                                | 597    | 50 (35-63)                              | 96.4 (94.5-97.6)  | 73.3 (69.5-76.7) | 52.6 (48.3-56.8) | 48.0 (43.6-52.2) |
| AML with inv(16)(p13.1q22) or t(16;16)(p13.1;q22)                   | 9871/3                                | 488    | 47 (36-60)                              | 93.9 (91.4-95.7)  | 79.9 (76.0-83.3) | 66.1 (61.4-70.3) | 62.2 (57.3-66.7) |
| AML with antecedent condition/therapy                               | *                                     | 1,983  | 67 (57-74)                              | 92.6 (91.4-93.7)  | 45.6 (43.3-47.8) | 19.4 (17.6-21.3) | 15.5 (13.8-17.3) |
| AML with myelodysplasia-related changes                             | 9895/3                                | 1,848  | 67 (57-75)                              | 92.3 (91.0-93.5)  | 44.8 (42.5-47.1) | 19.1 (17.2-21.0) | 15.3 (13.6-17.2) |
| Therapy-related myeloid neoplasm                                    | 9920/3                                | 52     | 62 (54-72)                              | 92.5 (80.8-97.2)  | 52.7 (38.1-65.3) | 29.8 (17.9-42.7) | 26.3 (14.9-39.2) |
| Therapy-related MDS, NOS <sup>†</sup>                               | 9987/3                                | 28     | 58 (49-71)                              | 100   | —                | 65.2 (44.2-79.9) | 18.6 (6.7-35.1)  |
| Refractory anemia with excess blasts in transformation <sup>‡</sup> | 9984/3                                | 52     | 66 (53-73)                              | 98.3 (85.9-99.8)  | 53.0 (38.4-65.7) | 19.1 (9.4-31.4)  | 10.8 (4.0-21.6)  |
| Myeloid leukemia associated with Down syndrome                      | 9898/3                                | <25    | 22 (21-38)                              | —   | —                | —                | —                |
| All other AML   | *                                     | 22,264 | 62 (49-72)                              | 89.3 (88.9-89.7)  | 51.6 (51.0-52.3) | 29.7 (29.1-30.4) | 25.4 (24.8-26.0) |
| AML, NOS  | 9861/3                                | 14,223 | 63 (50-72)                              | 89.4 (88.8-89.9)  | 51.2 (50.4-52.0) | 29.0 (28.2-29.8) | 24.5 (23.8-25.3) |
| Myeloid sarcoma   | 9930/3                                | 197    | 53 (39-66)                              | 98.6 (95.3-99.6)  | 57.4 (50.1-64.0) | 44.0 (36.8-51.0) | 38.4 (31.2-45.6) |
| Acute panmyelosis with myelofibrosis                                | 9931/3                                | 109    | 62 (54-72)                              | 98.3 (92.6-99.6)  | 72.9 (63.2-80.5) | 41.1 (31.3-50.5) | 24.1 (15.8-33.5) |
| AML with minimal differentiation                                    | 9872/3                                | 617    | 62 (48-72)                              | 88.5 (85.6-90.8)  | 49.6 (45.5-53.5) | 30.0 (26.3-33.8) | 24.6 (21.1-28.4) |
| AML without maturation  | 9873/3                                | 1,115  | 59 (45-69)                              | 89.9 (88.0-91.5)  | 53.2 (50.2-56.1) | 31.8 (29.0-34.7) | 28.2 (25.4-31.0) |
| AML with maturation   | 9874/3                                | 1,153  | 60 (48-71)                              | 93.1 (91.5-94.5)  | 57.2 (54.3-60.1) | 33.4 (30.6-36.2) | 28.1 (25.4-30.9) |
| Acute myelomonocytic leukemia                                       | 9867/3                                | 2,305  | 59 (47-70)                              | 87.3 (85.9-88.6)  | 51.6 (49.5-53.7) | 30.9 (28.9-32.8) | 26.9 (25.0-28.9) |
| Acute monoblastic and monocytic leukemia                            | 9891/3                                | 1,739  | 59 (46-69)                              | 85.4 (83.7-87.0)  | 50.5 (48.1-52.9) | 29.9 (27.7-32.2) | 27.0 (24.8-29.2) |
| Acute erythroid leukemia  | 9840/3                                | 384    | 63 (52-71)                              | 94.2 (91.3-96.1)  | 45.2 (40.1-50.2) | 21.0 (17.0-25.4) | 16.8 (13.0-21.0) |
| Acute megakaryoblastic leukemia                                     | 9910/3                                | 92     | 57 (44-67)                              | 89.3 (80.8-94.1)  | 27.5 (18.8-36.9) | 13.1 (7.0-21.0)  | 11.8 (6.1-19.6)  |
| Acute basophilic leukemia   | 9870/3                                | <25    | 64 (47-82)                              | —   | —                | —                | —                |
| AML with t(9;11)(p22;q23)   | 9897/3                                | 222    | 53 (38-66)                              | 92.9 (88.6-95.6)  | 58.6 (51.7-64.8) | 32.3 (26.1-38.7) | 27.8 (21.7-34.3) |
| AML (megakaryoblastic) with t(1;22)(p13;q13)                        | 9911/3                                | <25    | 58 (43-69)                              | —   | —                | —                | —                |
| AML with t(6;9)(p23;q34)  | 9865/3                                | 46     | 61 (45-66)                              | 93.6 (81.1-97.9)  | 66.0 (50.2-77.9) | 34.4 (20.2-49.1) | 23.3 (10.4-39.1) |
| AML, inv(3)(q21;q26.2) or t(3;3)(q21;q26.2)                         | 9869/3                                | 35     | 60 (42-70)                              | 97.3 (80.7-99.6)  | 36.7 (20.9-52.5) | 23.1 (10.2-38.9) | 23.1 (10.2-38.9) |

Abbreviations: AML, acute myeloid leukemia; APL, acute promyelocytic leukemia; CBF, core binding factor; CI, confidence interval; ICD-O-3, International Classification of Diseases for Oncology (third edition); IQR, interquartile range; MDS, myelodysplastic syndrome; NOS, not otherwise specified; SEER-17, 17 cancer registry areas of the Surveillance, Epidemiology, and End Results Program; <25, data points with fewer than 25 cases are suppressed to protect patient confidentiality; —, not applicable.

\* Includes ICD-O-3 codes for subtypes listed below the respective subgroup.

<sup>†</sup> Code became obsolete in 2010 and entity coded as 9920/3.

<sup>‡</sup> Code obsolete in 2010 and entity coded as 9983/3.