Supplementary Materials: Focal Adhesion Genes Refine the Intermediate-Risk Cytogenetic Classification of Acute Myeloid Leukemia

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| Parameter | Cohort Total | Parameter | Cohort Total |
|--|-----------------|--|-----------------|
| A as modian (range) | (N = 324) | \mathbf{D} | (N = 324) |
| Age, median (range) | <u> </u> | Protein mutations, (%) | 220 ((8) |
| \leq 50 years (%) | 121(37) | | 220 (68) |
| >50 years (%) | 203 (63) | FL13/IID [*] | 96 (30) |
| Sex, (%) | 150 (50) | | |
| Male | 172 (53) | NPMI ⁻ | 157 (48) |
| Female | 152 (47) | NPM1 ⁺ | 155 (48) |
| WBC, median (range) | 20 (0.03–325) | | |
| ≤20 × 10 ⁹ /L (%) | 161 (50) | FLT3-/NPM1+ | 92 (28) |
| >20 × 10 ⁹ /L (%) | 160 (50) | FLT3-/NPM1- | 125 (39) |
| Unknown | 3 (<1) | FLT3+/NPM1- | 31 (10) |
| FAB Classification, (%) | | Unknown | 13 (4) |
| M0 | 27 (8) | | |
| M1 | 80 (25) | FLT3 ⁻ + NPM1 ⁺ (Fav.) | 92 (28) |
| M2 | 58 (18) | Others (Non-fav.) | 219 (68) |
| M4 | 59 (18) | Unknown | 13 (4) |
| M4E | 2 (<1) | | |
| M5 | 74 (23) | CEBPA ⁻ | 156 (49) |
| M6 | 8 (2) | CEBPA ⁺ | 15 (5) |
| M7 | 1 (<1) | Unknown | 148 (46) |
| Unknown | 15 (5) | | |
| WHO Classification, (%) | | MLL Rearranged | 5 (1) |
| AML with recurrent genetic abnormalities | 121 (37) | Unknown | 226 (70) |
| AML with myelodysplasia-related changes | 10 (3) | | |
| AML with minimal differentiation | 19 (6) | | |
| AML without maturation | 45 (14) | Patient status, (%) | |
| AML with maturation | 28 (9) | Alive | 156 (48) |
| Acute myelomonocytic leukemia | 32 (10) | Death | 168 (52) |
| Acute monoblastic/monocytic leukemia | 43 (13) | | |
| Acute erythroid leukemia | 3 (1) | Recurrences, (%) | |
| Acute megakaryoblastic leukemia | 1 (0) | Non-relapsed | 211 (65) |
| Therapy-related myeloid neoplasms | 4(1) | Relapsed | 97 (30) |
| Non-classifiable AML | 11(3) | Missing | 16 (5) |
| Missing | 7 (2) | 0 | |
| Karvotype, (%) | × / | Complete Remission | 258 (80) |
| Normal | 247 (76) | Resistance or death | 59 (18) |
| Abnormal | 72 (22) | Missing | 7 (2) |
| Unknown | 5 (2) | | - (-/ |

Table S1. Main clinical characteristics of the studied cytogenetic IR-AML patient cohort.

Results are presented as the number of patients for each characteristic. The percentage of the patients is indicated in brackets for each condition. WBC; White blood cells. FAB; French-American-British. WHO; World Health Organization. Fav; Favorable. Non-fav; Non-favorable.

| the cytogenetic IR-AML cohort of our study. | | | | | |
|---|------------------|------------------|------------------|--|--|
| Parameter | OS | DFS | CIR | | |
| | N = 324 | N = 282 | N = 282 | | |
| Median follow-up in months | | | | | |
| Alive, (Range) | 55 (1.7–154) | | | | |
| Alive and CR patients, (Range) | | 47 (0.3–153) | 47 (0.3–153) | | |
| Survival or CIR at 5 years, percent | 45.4 ± 2.9 | 44.9 ± 3.2 | 36.7 ± 3.1 | | |
| Patient status, patient number | | | | | |
| Alive (%) | 156 (48) | 153 (54) | 153 (54) | | |
| Death (%) | 168 (52) | 129 (46) | 129 (46) | | |
| Relapsed (%) | 97 (30) | 96 (34) | 96 (34) | | |
| Age, percent | <i>p</i> < 0.001 | <i>p</i> = 0.005 | | | |
| ≤50 years | 58.3±4.7 | 54.3±5.0 | NS | | |
| >50 years | 32.9±4.5 | 32.2±4.9 | NS | | |
| FLT3/NPM1 Combination, percent | <i>p</i> = 0.013 | <i>p</i> = 0.013 | <i>p</i> = 0.008 | | |
| FLT3 ⁻ + NPM1 ⁺ (Favorable) | 53.6 ± 7.1 | 48.7 ± 7.0 | 32.6 ± 6.9 | | |
| Others (Non-favorable) | 39.0 ± 3.7 | 38.5 ± 4.2 | 42.1 ± 4.0 | | |

Table S2. Time-dependent endpoints analyses regarding clinical characteristics and molecular alterations of

Patient follow up is presented as median and range in months for each condition; patient status as the number and percent of patients; and for the other parameters as the estimates in percentage \pm the standard error. Log-rank test was used to analyze the statistical significance for each variable. p < 0.05was considered statistically significant (Bold values). NS represents not significant differences, and the estimates were not included in the table. CR; Complete remission. OS; Overall survival. DFS; Disease-free survival. CIR; Cumulative incidence of relapse.

Table S3. Time-dependent endpoints analyses regarding clinical characteristics of the cytogenetic IR-AML with non-favorable FLT3/NPM combination included in our patient cohort.

| Parameter | OS | DFS | CIR |
|-------------------------------------|----------------|------------------|--------------|
| | N = 219 | N = 188 | N = 188 |
| Median follow-up in months | | | |
| Alive, (Range) | 55 (1.7–154) | | |
| Alive and CR patients, (Range) | | 50 (0.3–153) | 50 (0.3–153) |
| Survival or CIR at 5 years, percent | 40.4 ± 3.5 | 41.9 ± 3.8 | 40.4 ± 3.8 |
| Patient status, patient number | | | |
| Alive (%) | 96 (44) | 93 (50) | 93 (50) |
| Death (%) | 123 (56) | 95 (50) | 95 (50) |
| Relapsed (%) | 73 (33) | 72 (40) | 72 (40) |
| Age, percent | p < 0.001 | <i>p</i> = 0.007 | |
| ≤50 years | 51.3 ± 5.4 | 50.7 ± 5.6 | NS |
| >50 years | 29.0 ± 5.0 | 27.4 ± 5.9 | NS |

Patient follow up is presented as median and range in months for each condition; patient status as the number and percent of patients; and for the other parameters as the estimates in percentage \pm the standard error. Log-rank test was used to analyze the statistical significance for each variable. p < 0.05was considered statistically significant (Bold values). NS represents not significant differences, and the estimates were not included in the table. CR; Complete remission. OS; Overall survival. DFS; Disease-free survival. CIR; Cumulative incidence of relapse.



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