

**Supplementary Table 1:** Intensive regimen backbone with dose ranges used in the induction treatment of AML patients in this study.

| Regimen                     | Dosing Ranges   |
|-----------------------------|---|
| 3+7                         | <p>Anthracycline:</p> <ul style="list-style-type: none"> <li>• Idarubicin 12 mg/m<sup>2</sup> x 3 days</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• Daunorubicin 45-90 mg/m<sup>2</sup> x 3 days</li> </ul> <p>PLUS</p> <p>Cytarabine 100-200 mg/m<sup>2</sup>/day continuous infusion x 7 days</p> <p>Cyclophosphamide 500 mg/m<sup>2</sup> every 12 hours x 3 days</p> |
| CAT [1]                     | <p>Cytarabine 2000 mg/m<sup>2</sup> x 5 days</p> <p>Topotecan 1.25 mg/m<sup>2</sup> continuous infusion x 5 days</p>  |
| CLIA [2]                    | <p>Cladribine 5 mg/m<sup>2</sup> x 5 days</p> <p>Idarubicin 10 mg/m<sup>2</sup> x 3 days</p> <p>Cytarabine 1000-2000 mg/m<sup>2</sup> x 5 days</p>  |
| Daunorubicin and cytarabine | <p>Daunorubicin 44 mg/m<sup>2</sup> and cytarabine 100 mg/m<sup>2</sup> (liposomal) on Days 1,3,5</p>   |
| FA [3]                      | <p>Fludarabine 30 mg/m<sup>2</sup> x 5 days</p> <p>Cytarabine 2000 mg/m<sup>2</sup> x 5 days</p> <p>Fludarabine 30 mg/m<sup>2</sup> x 5 days</p>  |
| FIA [4]                     | <p>Idarubicin 10 mg/m<sup>2</sup> x 3 days</p> <p>Cytarabine 1000 mg/m<sup>2</sup> x 5 days</p> <p>Fludarabine 30 mg/m<sup>2</sup> x 5 days</p> <p>Cytarabine 2000 mg/m<sup>2</sup> x 5 days</p>  |
| FLAG [3]                    | <p>Filgrastim 5 mcg/kg daily starting the day prior to chemotherapy and continued until count recovery (alternatively a single dose of pegfilgrastim 6 mg can be given the day following chemotherapy completion)</p>   |
| HiDAC [5]                   | <p>Cytarabine 3000 mg/m<sup>2</sup> every 12 hours on Days 1,3,5 OR on Days 1,2,3</p>   |
| IA                          | <p>Idarubicin 10-12 mg/m<sup>2</sup> x 3 days</p> <p>Cytarabine 1000-2000 mg/m<sup>2</sup> x 5 days</p>   |

**Supplementary Table 2.** Distribution of covariates among Non-poor and Poor cytogenetic risk groups

| Characteristic  | Overall, N = 130      | Non-poor, N = 101     | Poor, N = 29          | p-value <sup>1</sup> |
|---|-----------------------|-----------------------|-----------------------|----------------------|
| Age at diagnosis, Mean+/-SD; (Median)                   | 65.83+/-5.20; (64.15) | 66.00+/-5.48; (64.21) | 65.24+/-4.11; (64.02) | 0.8                  |
| Peripheral blood white cell counts, Mean+/-SD; (Median) | 25.77+/-43.76; (7.55) | 26.81+/-45.37; (8.30) | 22.16+/-38.13; (5.10) | 0.3                  |
| Gender, n/N (%)   | 60/130 (46%)          | 46/101 (46%)          | 14/29 (48%)           | 0.8                  |
| Frequency of secondary AML, n/N (%)                     | 30/130 (23%)          | 22/101 (22%)          | 8/29 (28%)            | 0.5                  |

| Characteristic                                  | Overall, N = 130 | Non-poor, N = 101 | Poor, N = 29 | p-value <sup>1</sup> |
|---|------------------|-------------------|--------------|----------------------|
| ELN classification of cytogenetic risk, n/N (%) |                  |                   |              | <0.001               |
| Favorable                                       | 37/130 (28%)     | 37/101 (37%)      | 0/29 (0%)    |                      |
| Intermediate                                    | 64/130 (49%)     | 64/101 (63%)      | 0/29 (0%)    |                      |
| Adverse   | 29/130 (22%)     | 0/101 (0%)        | 29/29 (100%) |                      |
| CBF, n/N (%)                                    |                  |                   |              | <0.001               |
| t(8;21)(q22;q22.1)                              | 15/130 (12%)     | 15/101 (15%)      | 0/29 (0%)    |                      |
| inv(16)(p13.1q22) or t(16;16)(p13.1;q22)        | 22/130 (17%)     | 22/101 (22%)      | 0/29 (0%)    |                      |
| Frequency of response CR/CRi, n/N (%)           | 95/130 (73%)     | 81/101 (80%)      | 14/29 (48%)  | <0.001               |

<sup>1</sup>Wilcoxon rank sum test; Pearson's Chi-squared test; Fisher's exact test

**Supplementary Table 3.** Distribution of covariates among Go-go, Slow-go, No-go groups

| Characteristic  | Overall, N = 130       | Go-go, N = 56          | Slow-go, N = 61        | No-go, N = 13          | p-value <sup>1</sup> |
|---|------------------------|------------------------|------------------------|------------------------|----------------------|
| Age at diagnosis, Mean+/-SD; (Median)                   | 65.83+/- 5.20; (64.15) | 65.86+/- 5.60; (64.02) | 66.07+/- 5.13; (64.44) | 64.61+/- 3.74; (63.41) | 0.7                  |
| Peripheral blood white cell counts, Mean+/-SD; (Median) | 25.77+/- 43.76; (7.55) | 24.62+/- 36.28; (7.80) | 29.49+/- 51.71; (9.00) | 13.25+/- 30.64; (3.70) | 0.11                 |
| Gender, n/N (%)   | 60/130 (46%)           | 24/56 (43%)            | 30/61 (49%)            | 6/13 (46%)             | 0.8                  |
| Frequency of secondary AML, n/N (%)                     | 30/130 (23%)           | 14/56 (25%)            | 13/61 (21%)            | 3/13 (23%)             | >0.9                 |
| ELN classification of cytogenetic risk, n/N (%)         |                        |                        |                        |                        | <0.001               |
| Favorable   | 37/130 (28%)           | 17/56 (30%)            | 20/61 (33%)            | 0/13 (0%)              |                      |
| Intermediate  | 64/130 (49%)           | 39/56 (70%)            | 25/61 (41%)            | 0/13 (0%)              |                      |
| Adverse   | 29/130 (22%)           | 0/56 (0%)              | 16/61 (26%)            | 13/13 (100%)           |                      |

| Characteristic                           | Overall, N = 130 | Go-go, N = 56 | Slow-go, N = 61 | No-go, N = 13 | p-value <sup>1</sup> |
|--|------------------|---------------|-----------------|---------------|----------------------|
| CBF, n/N (%)                             |                  |               |                 |               | 0.036                |
| t(8;21)(q22;q22.1)                       | 15/130<br>(12%)  | 7/56 (12%)    | 8/61 (13%)      | 0/13 (0%)     |                      |
| inv(16)(p13.1q22) or t(16;16)(p13.1;q22) | 22/130<br>(17%)  | 10/56 (18%)   | 12/61 (20%)     | 0/13 (0%)     |                      |
| Frequency of response CR/CRI, n/N (%)    | 95/130<br>(73%)  | 46/56 (82%)   | 46/61 (75%)     | 3/13 (23%)    | <0.001               |

<sup>1</sup>Kruskal-Wallis rank sum test; Pearson's Chi-squared test; Fisher's exact test

## Reference:

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