

Table S1: Patient characteristics by count recovery

[illegible]

<100,00/ μ L	1359	82.7%	1065	82.4%	97	79.5%	119	88.1%	78	82.1%	0.290
\geq 100,00/ μ L	285	17.3%	227	17.6%	25	20.5%	16	11.9%	17	17.9%	
Race											
Non-African American	1292	87.8%	1011	87.6%	99	90.8%	114	89.1%	68	85.0%	0.626
African American	179	12.2%	143	12.4%	10	9.2%	14	10.9%	12	15.0%	
MRD at EO11											
Negative	1340	81.5%	1065	82.4%	97	79.5%	110	80.9%	68	71.6%	0.063
Positive	305	20.7%	227	19.7%	25	22.9%	26	20.3%	27	33.8%	
New Risk Group*											
Low Risk 1	467	27.7%	360	27.9%	41	33.6%	42	30.9%	24	25.3%	0.443
Low Risk 2	667	39.6%	547	42.3%	35	28.7%	52	38.2%	33	34.7%	0.015
High	551	32.7%	385	29.8%	46	37.7%	42	30.9%	38	40.0%	0.071
Age											
Median (range)	9.4	(0 - 29.5)	9.8	(0.02 - 29.5)	9.6	(0 - 26.3)	6.1	(0.2 - 22.2)	10.4	(0.6 - 19.6)	0.001
WBC $\times 10^3$ μL											
Median (range)	19.9	(0.2 - 918.5)	19.9	(0.2 - 918.5)	22.8	(0.9 - 446)	16.7	(1.5 - 550)	24.2	(1.1 - 400)	0.252
Bone Marrow Blasts %											
Median (range)	67	(0 - 100)	67	(0 - 100)	65	(3.6 - 97)	67.5	(2.8 - 98)	68	(3 - 99)	0.778
Peripheral blasts (%)											
Median (range)	35	(0 - 100)	35	(0 - 99)	33	(0 - 98)	30	(0 - 98)	46	(0 - 100)	0.254

*Based on risk group definition in AAML1831 (using FLT3/ITD, FLT3/AM, mutations, cytogenetics and MRD). ANC, absolute neutrophil count; EO11, End of induction I; GO, Gemtuzumab ozogamicin; MRD, minimal residual disease; WBC, white blood cells

Table S2: Multivariable analysis for overall survival (OS), disease free survival (DFS), and relapse risk (RR) from end of induction I

	OS from EO11				DFS from EO11			RR from EO11		
	N	HR	95% CI	p	HR	95% CI	p	HR	95% CI	p
ANC/PLT recovery groups^										
Both platelet and ANC recovery (CR)	1154	1			1			1		
Platelet recovery only (≥ 50 cells/uL)	127	1.14	0.83 - 1.58	0.421	1.27	0.98 - 1.65	0.073	1.24	0.93 - 1.67	0.150
ANC recovery only (> 500 cells/uL; CRp)	109	0.89	0.60 - 1.31	0.545	0.92	0.68 - 1.25	0.586	0.93	0.66 - 1.30	0.655
Neither platelet nor ANC recovery	80	1.06	0.72 - 1.55	0.766	1.14	0.83 - 1.55	0.418	1.14	0.82 - 1.58	0.443
Study/Treatment Arm										
AAML0531 Arm A or AAML1031 Arms A/B	1108	1			1			1		
AAML0531 Arm B (GO)	305	0.81	0.65 - 1.03	0.081	0.80	0.66 - 0.97	0.021	0.74	0.60 - 0.91	0.005
AAML1031 Arm C (Sorafenib)	57	0.57	0.34 - 0.97	0.040	0.45	0.28 - 0.72	0.001	0.31	0.18 - 0.55	<0.001
WBC Count										
$< 100,00/\mu\text{L}$	1207	1			1			1		
$\geq 100,00/\mu\text{L}$	263	1.26	0.99 - 1.60	0.056	1.42	1.18 - 1.72	<0.001	1.55	1.25 - 1.92	<0.001
Race										
Non-African American	1291	1			1			1		
African American	179	1.31	1.00 - 1.72	0.051	1.05	0.84 - 1.33	0.655	0.96	0.75 - 1.24	0.757
New Risk Group*										
Low Risk 1	413	1			1			1		
Low Risk 2	592	2.64	1.90 - 3.68	<0.001	2.03	1.62 - 2.54	<0.001	2.31	1.82 - 2.93	<0.001
High	465	6.88	4.95 - 9.55	<0.001	4.33	3.42 - 5.47	<0.001	4.86	3.78 - 6.24	<0.001
HSCT in CR [‡]	234	0.85	0.65 - 1.11	0.233	0.70	0.55 - 0.90	0.005	0.52	0.39 - 0.69	<0.001

ANC, absolute neutrophil count; CI, confidence interval; CR, complete response; CRp, complete response with incomplete platelet recovery; DFS, disease free survival; EOI1, end of induction 1; HR, hazard ratio; OS, overall survival; PLT, platelet; RR, relapse risk; HSCT, hematopoietic stem cell transplant; WBC, white blood cell

[^]CR defined as <5% residual marrow disease by flow cytometry, peripheral ANC of ≥ 500 cells/ μ L and a platelet count of $\geq 50,000$ cells/ μ L for 7 days without transfusion

^{*}Based on risk group definition in AAML1831 (using FLT3/ITD, FLT3/AM, mutations, cytogenetics and MRD)

[†]Time dependent variable

n=175 patients are unknown for either WBC or Race and are excluded from MV analyses above

n=51 patients on AAML1031 have unknown SCT in CR status therefore they are censored at the start time of follow-up period when SCT was received

Table S3: Multivariable analysis for overall survival (OS), disease free survival (DFS), and relapse risk (RR) from end of induction I by study treatment arm

	OS from EOI1				DFS from EOI1			RR from EOI1		
	N	HR	95% CI	p	HR	95% CI	p	HR	95% CI	p
AAML0531 Arm A or AAML1031 Arms A/B only										
ANC/PLT recovery groups[^]										
Both platelet and ANC recovery (CR)	870	1			1			1		
Platelet recovery only (≥ 50 cells/uL)	100	1.18	0.81 - 1.71	0.398	1.35	1.01 - 1.82	0.043	1.27	0.91 - 1.78	0.165
ANC recovery only (>500 cells/uL; CRp)	82	0.89	0.57 - 1.38	0.595	0.88	0.62 - 1.25	0.476	0.86	0.58 - 1.27	0.439
Neither platelet nor ANC recovery	56	0.81	0.50 - 1.33	0.413	1.05	0.72 - 1.52	0.806	1.09	0.74 - 1.58	0.671
AAML0531 Arm B (GO) only										
ANC/PLT recovery groups[^]										
Both platelet and ANC recovery (CR)	246	1			1			1		
Platelet recovery only (≥ 50 cells/uL)	22	1.13	0.54 - 2.37	0.741	0.98	0.51 - 1.88	0.946	0.95	0.48 - 1.88	0.877
ANC recovery only (>500 cells/uL; CRp)	22	1.05	0.45 - 2.42	0.917	1.30	0.70 - 2.44	0.409	1.45	0.75 - 2.78	0.266
Neither platelet nor ANC recovery	15	1.18	0.51 - 2.75	0.694	0.99	0.48 - 2.06	0.988	0.99	0.45 - 2.21	0.988

ANC, absolute neutrophil count; CI, confidence interval; CR, complete response; CRp, complete response with incomplete platelet recovery; DFS, disease free survival; EO1, end of induction 1; HR, hazard ratio; OS, overall survival; PLT, platelet; RR, relapse risk

^aCR defined as <5% residual marrow disease by flow cytometry, peripheral ANC of ≥ 500 cells/ μ L and a platelet count of $\geq 50,000$ cells/ μ L for 7 days without transfusion