

# Allogeneic stem cell transplantation using HLA-matched donors for acute myeloid leukemia with deletion 5q or monosomy 5: a study from the Acute Leukemia Working Party of the EBMT

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**Supplement Figure 1: Relapse incidence (RI), non-relapse mortality (NRM), leukemia-free survival (LFS) and overall survival (OS) in the entire cohort.**

The 2-year cumulative incidence of relapse was 59.9% [95% CI: 55.3-64.2] (A). The 2-year probability of NRM was 19.9% [95% CI: 16.4-23.7] (B). The 2-year probability of LFS was 20.2% [95% CI: 16.4-23.9] (C) and the 2-year probability of OS was 27% [95% CI: 22.8-31.2] (D).

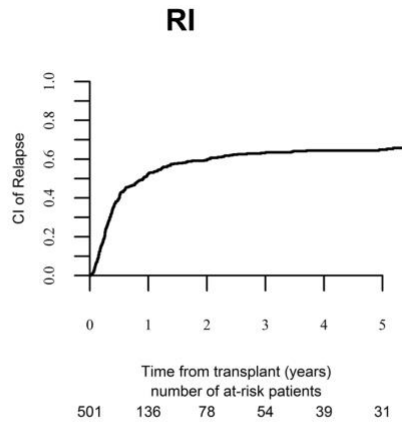
**Supplemental Figure 2: Graft-versus-host and relapse free survival (GRFS) by cytogenetic groups.**

The 2-year probability of GRFS was 26.5% [95% CI: 13-39.9] for the “none group”, 17% [95% CI: 8.5-25.4] for the “CK group”, 14.2% [95% CI: 8.7-19.7] for the “MK group” and only 6.6% [95% CI: 2.8-10.4] for the “abn(17p) group” ( $p < 0.001$ ).

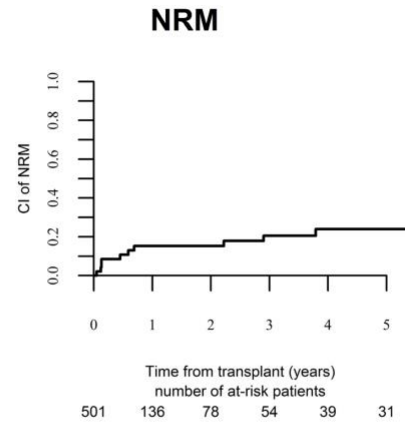
## Supplemental Figure 1

Relapse incidence (RI), non-relapse mortality (NRM), leukemia-free survival (LFS) and overall survival (OS) in the entire cohort.

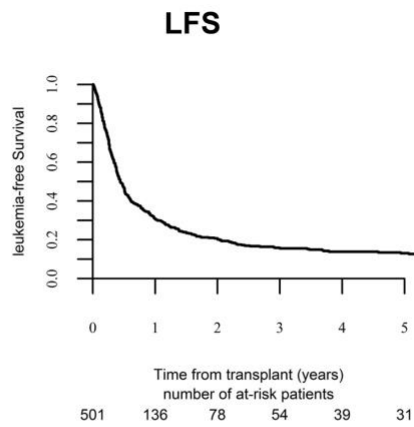
**A**



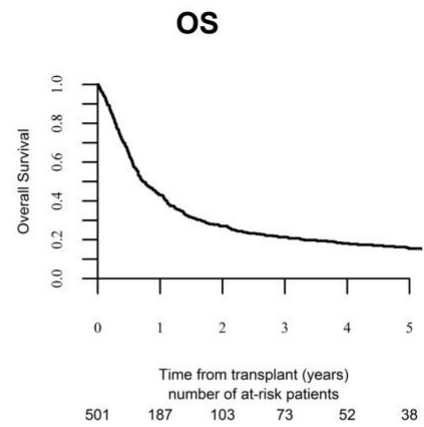
**B**



**C**

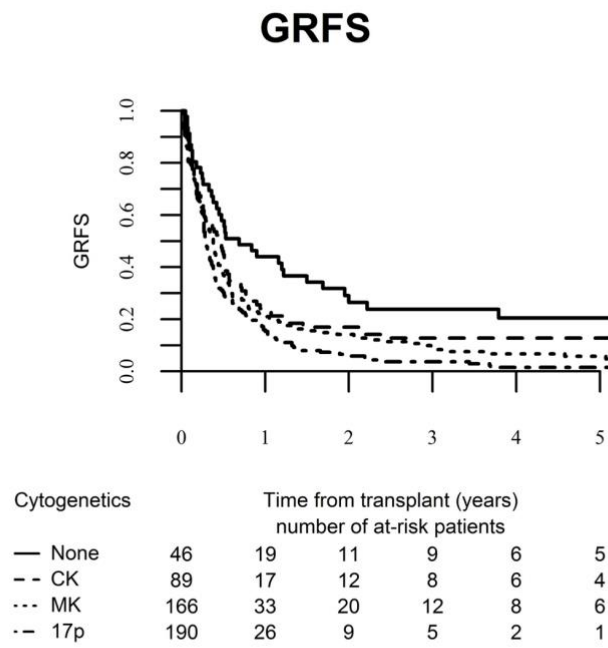


**D**



## Supplemental Figure 2

Graft-versus-host and relapse free survival (GRFS) by cytogenetic groups.



**Supplemental Table 1**  
**Multivariate analysis using a Cox proportional hazard model in the entire cohort for RI, NRM, OS and LFS.**  
**Only variables with a p<0.05 in univariate analysis were included in this analysis**

	p-value	HR	95% CI
<b>RI</b>			
<i>Age (per 10 year)</i>	0.67	1.03	0.91-1.16
<i>MUD versus MSD</i>	0.58	0.93	0.73-1.19
<i>Active disease versus CR</i>	<0.0001	1.75	1.33-2.29
<i>KPS ≥ 80%</i>	0.05	0.62	0.39-0.99
<i>RIC versus MAC</i>	0.14	1.22	0.93-1.6
<i>MK</i>	0.005	1.52	1.14-2.05
<i>CK</i>	0.25	1.28	0.84-1.95
<i>Abn(17p)</i>	0.07	1.26	0.98-1.63
<b>NRM</b>			
<i>Age (per 10 year)</i>	0.0007	1.48	1.18-1.85
<i>MUD versus MSD</i>	0.002	2.08	1.32-3.27
<i>Active disease versus CR</i>	0.0015	2.03	1.31-3.14
<i>KPS ≥ 80%</i>	0.21	0.60	0.27-1.33
<i>RIC versus MAC</i>	0.22	0.75	0.48-1.19
<i>MK</i>	0.60	1.14	0.71-1.83
<i>CK</i>	0.97	0.99	0.53-1.84
<i>Abn(17p)</i>	0.16	1.37	0.88-2.13
<b>LFS</b>			
<i>Age (per 10 year)</i>	0.03	1.12	1.01-1.25
<i>MUD versus MSD</i>	0.26	1.13	0.91-1.39
<i>Active disease versus CR</i>	<0.0001	1.82	1.45-2.29
<i>KPS ≥ 80%</i>	0.03	0.63	0.42-0.94
<i>RIC versus MAC</i>	0.54	1.08	0.85-1.35
<i>MK</i>	0.008	1.4	1.09-1.8
<i>CK</i>	0.35	1.18	0.83-1.67
<i>Abn(17p)</i>	0.02	1.29	1.04-1.61
<b>OS</b>			
<i>Age (per 10 year)</i>	0.007	1.16	1.04-1.30
<i>MUD versus MSD</i>	0.14	1.18	0.95-1.46
<i>Active disease versus CR</i>	<0.00001	1.86	1.47-2.35
<i>KPS ≥ 80%</i>	0.03	0.64	0.43-0.96
<i>RIC versus MAC</i>	0.6	1.06	0.84-1.35
<i>MK</i>	0.03	1.34	1.03-1.73
<i>CK</i>	0.06	1.43	0.99-2.05
<i>Abn(17p)</i>	0.04	1.27	1.01-1.59
-7/7q-			

Abbreviations: HR: hazard ratio; CI: confidence interval; RI: relapse incidence; MUD: matched unrelated donor; MSD: matched sibling donor; CR: complete remission; KPS: Karnofsky performance status; RIC: reduced-intensity conditioning; MAC: myeloablative conditioning; abn(17p):

abnormalities of chromosome 17p; -7/7q-: monosomy 7 or deletion 7q; CK: complex karyotype; MK: monosomal karyotype; NRM: non relapse mortality; LFS: leukemia-free survival; OS: overall survival

**Supplemental Table 2**  
**Multivariate analysis using a Cox proportional hazard model in the entire cohort for grade II-IV aGvHD, cGvHD and GRFS.**  
**Only variables with a p<0.05 in univariate analysis were included in this analysis**

	p-value	HR	95% CI
<b>Grade II-IV aGvHD</b>			
<i>Age (per 10 year)</i>	0.93	1.01	0.84-1.12
<i>MUD versus MSD</i>	0.03	1.48	1.03-2.13
<i>Active disease versus CR</i>	0.003	1.74	1.20-2.52
<i>KPS ≥ 80%</i>	0.79	1.10	0.53-2.31
<i>RIC versus MAC</i>	0.74	0.94	0.63-1.39
<i>MK</i>	0.64	1.11	0.72-1.70
<i>CK</i>	0.81	1.08	0.59-1.96
<i>Abn(17p)</i>	0.31	1.21	0.83-1.77
<b>cGvHD</b>			
<i>Age (per 10 year)</i>	0.08	1.18	0.98-1.43
<i>MUD versus MSD</i>	0.92	1.02	0.70-1.49
<i>Active disease versus CR</i>	0.73	1.09	0.68-1.74
<i>KPS ≥ 80%</i>	0.54	0.75	0.29-1.91
<i>RIC versus MAC</i>	0.47	0.85	0.55-1.31
<i>MK</i>	0.57	0.88	0.57-1.36
<i>CK</i>	0.45	1.24	0.71-2.16
<i>Abn(17p)</i>	0.10	1.42	0.93-2.16
<b>GRFS</b>			
<i>Age (per 10 year)</i>	0.01	1.14	1.03-1.26
<i>MUD versus MSD</i>	0.18	1.15	0.94-1.41
<i>Active disease versus CR</i>	<0.0001	1.65	1.32-2.06
<i>KPS ≥ 80%</i>	0.042	0.67	0.45-0.99
<i>RIC versus MAC</i>	0.76	1.04	0.83-1.30
<i>MK</i>	0.072	1.25	0.98-1.58
<i>CK</i>	0.12	1.30	0.93-1.81
<i>Abn(17p)</i>	0.047	1.25	1.00-1.55

Abbreviations: HR: hazard ratio; CI: confidence interval; aGvHD: acute graft-versus-host disease; MUD: matched unrelated donor; MSD: matched sibling donor; CR: complete remission; KPS: Karnofsky performance status, RIC: reduced-intensity conditioning; MAC: myeloablative conditioning; abn(17p): abnormalities of chromosome 17p; -7/7q-: monosomy 7 or deletion 7q; CK: complex karyotype; MK: monosomal karyotype; cGvHD: chronic graft-versus-host disease; GRFS: graft-versus-host and relapse-free survival.

**Supplemental Table 3**  
**Patients' characteristics by cytogenetic subgroups**

	<b>5q sole N=47</b>	<b>CK N=90</b>	<b>MK N=169</b>	<b>Abn(17p) N=193</b>	<b>p-values</b>
Median follow-up (range)	37 months (3-163)	21 months (3-147)	27 months (2-173)	27 months (2-173)	
Median age (range)	50 yo (18-71)	55 yo (19-75)	56 yo (20-73)	55 yo (22-71)	0.35
Median time from diagnosis to SCT (range)	6 months (4-8)	5 months (4-6)	5 months (4-6)	5 months (4-6)	0.11
Median year of SCT (range)	2010 (2001-2015)	2010 (2000-2015)	2009 (2000-2015)	2010 (2000-2015)	0.01
Disease status, N (%)					
CR1	38 (81%)	55 (61%)	114 (67%)	130 (67%)	0.34
CR2/CR3	2 (4%)	5(6%)	5 (3%)	9 (5%)	
Active disease	7 (15%)	30 (33%)	50 (30%)	54 (28%)	
Secondary AML, N (%)	6 (13%)	21 (23%)	35 (21%)	41 (21%)	0.53
MSD/MUD, N (%)	16/31 (35%/66%)	41/49 (46%/54%)	87/82 (51%/49%)	79/114 (41%/59%)	0.09
Gender (M/F), N (%)	21/26 (45%/55%)	52/38 (58%/42%)	100/69 (59%/41%)	98/95 (51%/49%)	0.19
KPS $\geq$ 80%, N (%)	44 (94%)	82 (95%)	148 (94%)	171 (91%)	0.14
MAC/RIC, N (%)	27/20 (58%/42%)	39/51 (43%/57%)	80/89 (47%/53%)	76/117 (39%/61%)	0.12
BM/PB, N (%)	9/38 (19%/81%)	14/76 (16%/86%)	33/136 (20%/80%)	26/167 (13%/87%)	0.44
In vivo TCD, N (%)	29 (62%)	54 (61%)	85 (51%)	114 (59%)	0.25

Abbreviations: N: number; CK: complex karyotype; MK: monosomal karyotype; abn(17p): abnormalities of chromosome 17p; yo: year-old; SCT: stem cell transplantation; CR1: first remission; CR2/CR3: subsequent remission; AML: acute myeloid leukemia; MSD: matched sibling donor; MUD: matched unrelated donor; M: male; F: female; KPS: Karnofsky performance status; MAC: myeloablative conditioning; RIC: reduced-intensity conditioning; BM: bone marrow; PB: peripheral blood; TCD: T-cell depletion.