

**Supplementary Table. Univariate analyses of risk factors for rate of mortality+relapse during second year post-hematopoietic cell transplantation (HCT).**

	AML			ALL		
	N	Rate difference (95% CI)	P	N	Rate difference (95% CI)	
ANC engraftment						
< 16 days	1439	Ref		573	Ref	
≥ 16 days	1844	-0.024 (-0.052 – 0.003)	0.09	837	0.024 (-0.029 – 0.078)	0.37
Platelet engraftment						
< 23 days	1215	Ref		469	Ref	
≥ 23 days	1109	-0.009 (-0.043 – 0.025)	0.60	547	0.046 (-0.019 – 0.110)	0.17
Gender						
Male	1740	Ref		878	Ref	
Female	1575	-0.008 (-0.035 - 0.019)	0.56	548	-0.016 (-0.070 – 0.038)	0.56
D/R gender						
Other	2585	Ref		1105	Ref	
Female/Male	716	0.009 (-0.025 – 0.043)	0.61	313	0.135 (0.059 – 0.211)	0.0005
KPS at HCT						
90-100	2465	Ref		1071	Ref	
< 90	746	0.086 (0.048 - 0.125)	<0.0001	315	0.086 (0.014 – 0.157)	0.02
Duration of remission						
< 1 year	382	Ref		277	Ref	
≥ 1 year	558	0.108 (0.050-0.166)	0.0003	171	0.087 (-0.036 – 0.209)	0.16
Extramedullary disease						
Absent	2918	Ref		1085	Ref	
Present	369	0.042 (-0.006 – 0.090)	0.09	325	-0.006 (-0.068 – 0.057)	0.86
Stem cell source						
Marrow	2252	Ref		1033	Ref	
PBSC	1063	0.034 (0.003-0.064)	0.03	393	0.046 (-0.017 – 0.108)	0.15
Acute GVHD						
0-1	2347	Ref		928	Ref	
2-4	945	0.013 (-0.018 – 0.043)	0.41	495	0.074 (0.016 – 0.133)	0.01

Race						
Caucasian	2797	Ref		1184	Ref	
Other	501	-0.012 (-0.049 – 0.024)	0.51	234	0.034 (-0.042 – 0.110)	0.38
Recipient CMV serostatus						
Negative	1292	Ref		638	Ref	
Positive	1888	0.012 (-0.016 – 0.040)	0.41	722	0.036 (-0.019 – 0.090)	0.20
Donor CMV serostatus						
Negative	1663	Ref		761	Ref	
Positive	1517	-0.000 (-0.028 – 0.027)	0.98	599	0.094 (0.037 – 0.151)	0.001
TBI in conditioning						
No	1435	Ref		190	Ref	
Yes	1880	-0.000 (-0.027 – 0.027)	0.99	1236	-0.073 (-0.161 – 0.015)	0.11
WBC at diagnosis						
< 30	2035	Ref	0.90*	803	Ref	0.97*
30-100	585	-0.013 (-0.048 – 0.022)	0.48	247	-0.035 (-0.102 – 0.031)	0.30
> 100	267	0.017 (-0.037 – 0.071)	0.54	162	0.038 (-0.054 – 0.129)	0.42
Time from 1 <sup>st</sup> CR to HCT						
< 6 months	1557	Ref	0.08*	624	Ref	0.92*
6-12 months	286	-0.029 (-0.067 – 0.009)	0.13	152	-0.000 (-0.074 – 0.075)	0.99
> 12 months	44	-0.063 (-0.130 – 0.004)	0.07	23	-0.010 (-0.176 – 0.156)	0.91
Age at transplant						
18-29	972	Ref	0.50*	740	Ref	0.15*
30-44	1441	-0.015 (-0.046 – 0.017)	0.36	521	0.043 (-0.015 – 0.101)	0.14
45-69	902	0.035 (-0.003 – 0.074)	0.07	165	0.041 (-0.048 – 0.130)	0.36
Donor HLA match						
HLA-identical sibling	2200	Ref	0.001*	827	Ref	0.88*
Well matched	478	0.043 (0.000 – 0.085)	0.05	250	0.013 (-0.061 – 0.087)	0.73
Other matching	550	0.060 (0.018 – 0.101)	0.005	299	-0.022 (-0.086 – 0.043)	0.52
Cytogenetic risk						
Good	383	Ref	0.32*	55	Ref	0.76*
Intermediate/normal	1824	-0.003 (-0.046 – 0.040)	0.89	595	-0.035 (-0.183 – 0.112)	0.64
Poor	334	0.072 (0.006 – 0.138)	0.03	352	0.018 (-0.136 – 0.172)	0.82

Unknown	774	0.000 (-0.047 – 0.048)	0.99	424	-0.048 (-0.197 – 0.101)	0.53
GVHD prophylaxis						
Cyclosporin-based	2192	Ref	0.05*	897	Ref	0.71*
Tacrolimus-based	411	0.063 (0.015 – 0.112)	0.01	217	0.029 (-0.050 – 0.107)	0.47
T-cell depletion	322	0.010 (-0.036 – 0.057)	0.66	148	-0.005 (-0.092 – 0.081)	0.91
ATG/Campath	338	0.024 (-0.023 – 0.071)	0.32	140	0.034 (-0.063 – 0.132)	0.49
Other	46	0.051 (-0.085 – 0.188)	0.46	22	-0.005 (-0.217 – 0.206)	0.96
Disease status at HCT						
1st remission	1971	Ref	<0.0001*	827	Ref	<0.0001*
2nd remission	648	0.048 (0.012 – 0.083)	0.008	349	0.105 (0.040 – 0.169)	0.001
Remission > 2nd	41	-0.030 (-0.117 – 0.058)	0.50	58	0.129 (-0.023 – 0.281)	0.10
Relapse/refractory	626	0.165 (0.119 – 0.212)	<0.0001	167	0.308 (0.186 – 0.429)	<0.0001
AML origin						
De novo	2822	Ref			Not applicable	
Secondary	412	0.045 (-0.000 – 0.091)	0.05			
Chronic extensive GHVD						
None	2256	Ref		962	Ref	
Prior or current	1026	0.051 (0.020 – 0.083)	0.002	451	0.099 (0.037 – 0.161)	0.002
Year of transplant						
Continuous, per year	3315	0.003 (0.000 – 0.006)	0.03	1426	0.004 (-0.002 – 0.010)	0.17
Philadelphia-BCR/ABL						
Negative		Not applicable		722	Ref	0.08*
Positive				280	0.102 (0.022 – 0.182)	0.01
Unknown				424	-0.005 (-0.063 – 0.053)	0.86
Time from diagnosis to 1 <sup>st</sup> CR						
0-8 weeks		Not applicable		880	Ref	
> 8 weeks				372	0.044 (-0.018 – 0.106)	0.16
Type of ALL						
T-cell		Not applicable		240	Ref	0.003*
B-cell				929	0.104 (0.041 – 0.166)	0.001
Other				147	0.124 (0.018 – 0.229)	0.02

\* overall p-value

Abbreviations: PBPC, peripheral blood progenitor cells; GVHD, graft-versus-host disease; CMV, cytomegalovirus; TBI, total body irradiations; WBC, white blood count; CR, complete remission; HLA, human leukocyte antigen; BCR-ABL, breakpoint cluster region-Abelson gene rearrangement.

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