LETTER TO THE EDITOR

The prognostic role of myeloid-related gene mutations in adult acute lymphoblastic leukemia

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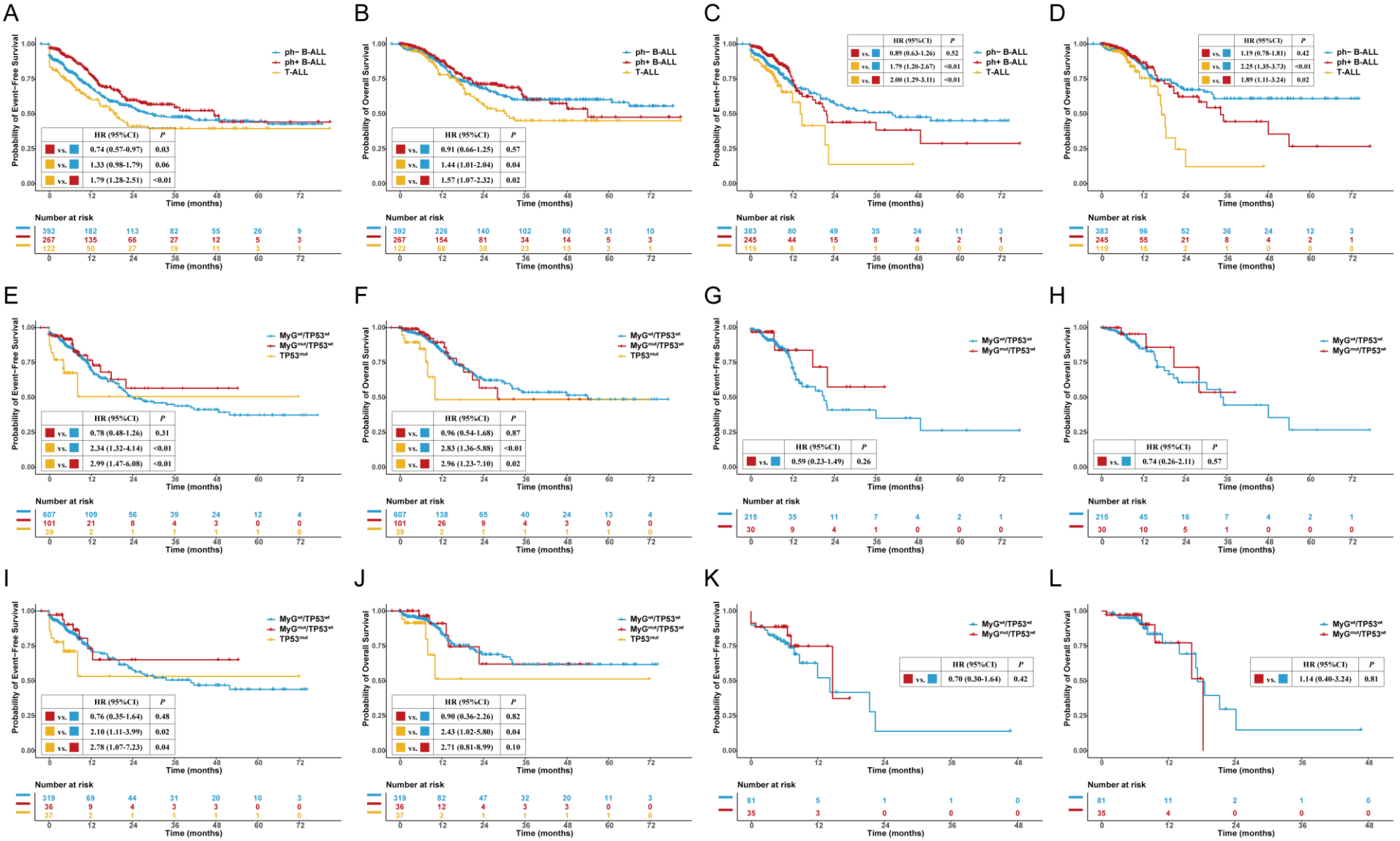

Supplementary Figure 1. Kaplan-Meier analysis of EFS and OS in ALL cohorts. Plots A-D are grouped by immunophenotype and Philadelphia chromosome status. Plots (A, B) show EFS and OS in the overall ALL cohort, and plots (C, D) show EFS and OS after censoring for transplantation. Plots E-L are grouped by *TP53* and MyG mutation status, with Kapla-Meier EFS and OS analysis in the overall ALL cohort (E, F), Ph+ B-ALL (G, H), in Ph- B-ALL (I, J), and in T-ALL (K, L) after censoring of transplantation.

Supplementary Table 1. Distribution of MyG mutations in ph+ B-ALL, ph -B-ALL, and T-ALL.

	ALL	Ph-BALL	Ph+BALL	TALL	*P1*	*P2*	*P3*
	N=783	N=394	N=267	N=122			
MyG:	111 (14.20%)	41 (10.40%)	32 (12.00%)	38 (31.10%)	0.611	<0.001	<0.001
MDS:	69 (8.81%)	18 (4.57%)	27 (10.10%)	24 (19.70%)	0.013	<0.001	0.015
DTA:	42 (5.36%)	12 (3.05%)	11 (4.12%)	19 (15.60%)	0.601	<0.001	<0.001
DNA methylation:	38 (4.85%)	22 (5.58%)	3 (1.12%)	13 (10.70%)	0.009	0.082	<0.001
DNMT3A	16 (2.04%)	5 (1.27%)	1 (0.37%)	10 (8.20%)	0.41	0.001	<0.001
TET2	7 (0.89%)	2 (0.51%)	2 (0.75%)	3 (2.46%)	1	0.266	0.27
IDH1	13 (1.66%)	12 (3.05%)	0 (0.00%)	1 (0.82%)	0.007	0.318	0.318
IDH2	10 (1.28%)	3 (0.76%)	0 (0.00%)	7 (5.74%)	0.277	0.003	0.001
histone modification:	28 (3.58%)	6 (1.52%)	10 (3.75%)	12 (9.84%)	0.117	<0.001	0.044
ASXL1	23 (2.94%)	5 (1.27%)	9 (3.37%)	9 (7.38%)	0.138	0.004	0.138
EZH2	6 (0.77%)	1 (0.25%)	1 (0.37%)	4 (3.28%)	1	0.037	0.053
RNA splicing machinery：	8 (0.10%)	5 (0.11%)	0 (0.00%)	3 (0.16%)	0.249	0.487	0.065
SF3B1	1 (0.13%)	1 (0.25%)	0 (0.00%)	0 (0.00%)	1	1	1
U2AF1	7 (0.89%)	4 (1.02%)	0 (0.00%)	3 (2.46%)	0.228	0.364	0.091
transcription:	43 (5.49%)	10 (2.54%)	20 (7.49%)	13 (10.70%)	0.007	0.001	0.399
BCOR	13 (1.83%)	5 (1.40%)	2 (0.84%)	6 (5.26%)	0.708	0.042	0.042
BCORL1	9 (1.27%)	3 (0.84%)	4 (1.67%)	2 (1.75%)	0.898	0.898	1
RUNX1	22 (2.81%)	2 (0.51%)	15 (5.62%)	5 (4.10%)	<0.001	0.014	0.702
CEBPA	1 (0.13%)	0 (0.00%)	1 (0.37%)	0 (0.00%)	0.808	1	1
cohesion complexes:	4 (0.51%)	3 (0.76%)	0 (0.00%)	1 (0.82%)	0.47	1	0.47
RAD21	2 (0.28%)	2 (0.56%)	0 (0.00%)	0 (0.00%)	1	1	1
SMC3	2 (0.26%)	1 (0.25%)	0 (0.00%)	1 (0.82%)	1	0.627	0.627

P1: Ph- B-ALL vs. Ph+ B-ALL; P2: Ph- B-ALL vs. T-ALL; P3: Ph+ B-ALL vs. T-ALL

(The genes listed in the table were all examined in 783 patients, except for BCOR, BCORL1, RAD21, and SMC3, which were detected in 710, 710, 709, 782 patients.)

Supplementary Table 2. Multivariate cox analysis of prognostic factors in OS and EFS in ALL, Ph+B-ALL, Ph- B-ALL and T-ALL.

	EFS			OS		
ALL	HR	95%CI	*P*	HR	95%CI	*P*
Age	1.014	1.006 - 1.023	0.001	1.021	1.012 - 1.031	<0.001
male	1.385	1.092 - 1.756	0.007	1.326	1.000 - 1.759	0.05
WBC > 30 × 10^9/L	1.209	0.955 - 1.531	0.115	1.225	0.925 - 1.622	0.158
PLT	0.997	0.995 - 0.999	0.001	0.997	0.995 - 0.999	0.006
TP53 mutant	2.101	1.321 - 3.344	0.002	2.023	1.136 - 3.600	0.017
MyG mutant	0.693	0.467 - 1.029	0.069	0.746	0.467 - 1.191	0.219
HSCT in CR1	0.716	0.524 - 0.978	0.036	0.757	0.553 - 1.035	0.081
Ph+ B-ALL						
Age	1.022	1.004 - 1.041	0.019	1.028	1.006 - 1.050	0.012
male	1.408	0.892 - 2.224	0.142	1.191	0.709 - 2.002	0.509
WBC > 30 × 10^9/L	2.294	1.375 - 3.828	0.001	2.037	1.129 - 3.675	0.018
PLT	0.996	0.992 - 1.000	0.036	0.994	0.989 - 0.999	0.029
MyG mutant	0.514	0.221 - 1.196	0.122	0.654	0.259 - 1.655	0.37
HSCT in CR1	0.749	0.430 - 1.303	0.307	0.652	0.361 - 1.177	0.156
Ph- B-ALL						
Age	1.017	1.006 - 1.029	0.003	1.024	1.011 - 1.039	0.001
male	1.195	0.866 - 1.647	0.278	1.086	0.734 - 1.609	0.679
WBC > 30 × 10^9/L	1.176	0.823 - 1.681	0.372	1.302	0.845 - 2.006	0.232
PLT	0.995	0.992 - 0.997	0	0.995	0.992 - 0.999	0.004
TP53 mutant	1.717	1.041 - 2.832	0.034	1.573	0.828 - 2.988	0.167
MyG mutant	0.604	0.314 - 1.160	0.13	0.569	0.245 - 1.318	0.188
HSCT in CR1	0.897	0.583 - 1.381	0.622	0.987	0.630 - 1.548	0.955
T-ALL						
Age	1.014	1.005 - 1.022	0.001	1.021	1.011 - 1.031	<0.001
male	1.385	1.093 - 1.756	0.007	1.321	0.997 - 1.751	0.053
WBC > 30 × 10^9/L	1.159	0.918 - 1.464	0.216	1.173	0.889 - 1.548	0.26
PLT	0.997	0.995 - 0.999	<0.001	0.997	0.995 - 0.999	0.005
MyG mutant	0.724	0.488 - 1.073	0.107	0.776	0.487 - 1.236	0.286
HSCT in CR1	0.734	0.538 - 1.002	0.051	0.776	0.568 - 1.061	0.112