

SUPPLEMENTARY MATERIAL

Supplementary Table 1. Risk Factors for Early Cardiac Events. Univariate Analysis.

Univariate Regression Analysis	Risk for ECE HR (95% CI)	P value
Age		
Continuous variable	1.02 (1.01-1.05)	0.033
Older than 59 years (vs. younger)	2.04 (1.16-3.57)	0.012
Sex		
Female (vs. Male)	0.76 (0.43-1.34)	0.35
Active smoker at Allo-HCT		
Yes (vs. no)	1.14 (0.48-2.68)	0.76
Hypertension		
Yes (vs. no)	2.71 (1.53-4.82)	<0.001
Dyslipidemia		
Yes (vs. no)	3.06 (1.66-5.62)	<0.001
Diabetes Mellitus		
Yes (vs. no)	1.14 (0.40-3.18)	0.8
Obesity		
Yes (vs. no)	0.27 (0.03-1.96)	0.2
Previous cardiac pathology		
Yes (vs. no)	1.75 (0.88-3.53)	0.11
HCT-CI		
>3 (vs. 0-3)	1.51 (0.75-3.01)	0.24
Disease Status Prior to Allo-HCT		
Active disease (vs. Complete Remission)	1.60 (0.72-3.57)	0.24
Conditioning Regimen		
MAC (vs. RIC)	1.16 (0.59-2.27)	0.677
Conditioning Regimen		
MAC regimen including Cy (vs. other)	0.55 (0.19-1.53)	0.26
High Dose TBI		
Yes (vs. no)	0.44 (0.06-3.22)	0.42
Donor		
Haploidentical (vs. others)	2.44 (1.39-4.28)	0.001
GVHD prophylaxis		
PTCY-based (vs. others)	3.10 (1.67-5.76)	<0.001
Graft Failure		
Time-dependent variable	0.86 (0.11-6.51)	0.887
Grade 2-4 aGVHD		
Time-dependent variable	1.45 (0.62-3.42)	0.385
Grade 3-4 aGVHD		
Time-dependent variable	2.19 (0.74-6.47)	0.155

CE variable has been treated as time dependent variable. CE occurring after disease relapse have not been accounted

Supplementary Table 2. Risk Factors for Late Cardiac Events. Univariate Analysis.

Univariate Regression Analysis	Risk for ECE HR (95% CI)	P value
Age		
Continuous variable	1.03 (1.01-1.06)	0.002
Older than 50 years (vs. younger)	3.06 (1.43- 6.53)	0.003
Sex		
Female (vs. Male)	0.68 (.37-1.24)	0.22
Active smoker at Allo-HCT		
Yes (vs. no)	1.59 (0.71-3.55)	0.25
Hypertension		
Yes (vs. no)	2.43 (1.30- 4.54)	0.005
Dyslipidemia		
Yes (vs. no)	3.28 (1.72-6.28)	<0.001
Diabetes Mellitus		
Yes (vs. no)	2.22 (0.94-5.26)	0.06
Obesity		
Yes (vs. no)	3.09 (2.01-8.30)	<0.001
Previous cardiac pathology		
Yes (vs. no)	3.14 (1.64-6.01)	<0.001
HCT-CI		
>3 (vs. 0-3)	0.63 (0.22-1.75)	0.38
Disease Status Prior to Allo-HCT		
Active disease (vs. Complete Remission)	0.24 (0.03-1.73)	0.16
Conditioning Regimen		
MAC (vs. RIC)	1.01 (0.52-1.93)	0.970
Conditioning Regimen		
MAC regimen including Cy (vs. other)	0.38 (0.12-1.21)	0.1
High Dose TBI		
Yes (vs. no)	0.40 (0.05-2.80)	0.36
Donor		
Haploidentical (vs. others)	1.70 (0.92-3.12)	0.086
GVHD prophylaxis		
PTCY-based (vs. others)	1.28 (0.71-2.31)	0.41
Grade 2-4 aGVHD (before day +100)		
Yes (vs. No)	2.29 (1.26-4.16)	0.006
Moderate/Severe cGVHD		
Time-dependent variable	1.21 (0.37-3.91)	0.742

CE variable has been treated as time dependent variable. CE occurring after disease relapse have not been accounted

Supplementary Table 3. Risk Factors for OS and NRM. Univariate Analysis

Univariate Regression Analysis	OS HR (95% CI)	P value	NRM HR (95% CI)	P value
Patient Age				
Age median (continuous)	1.01(1.01-1.03)	0.002	1.03 (1.01-1.05)	<0.001
Older 59 years (vs. younger)	1.62 (1.19-2.21)	0.002	1.95 (1.26-3.01)	0.002
Sex				
Female (vs. male)	0.79 (0.58-1.08)	0.144	0.91 (0.59-1.41)	0.7
Relevant comorbidities				
HTN (vs. No)	1.68 (1.18-2.37)	0.003	2.1 (1.32-3.33)	0.001
Dyslipidemia (vs. No)	1.98 (1.34-2.94)	<0.001	2.13 (1.26-3.58)	0.004
Diabetes Mellitus (vs. No)	1.98 (1.23-3.21)	0.005	2.66 (1.45-4.87)	<0.001
Obesity (vs. No)	1.78 (1.07-2.94)	0.024	2.77 (1.52-5.05)	<0.001
History of Cardiac Disease (vs. No)	1.24 (0.80-1.94)	0.323	1.50 (0.85-2.65)	0.16
Disease status prior allo-HCT				
Refractory AML / Active Disease (vs. CR)	3.03 (2.02-4.45)	<0.001	1.17 (0.57-2.39)	0.65
HCT-CI				
>3 (vs. 0-3)	1.57 (1.07-2.31)	0.018	2.07 (1.25-3.42)	0.004
Intensity				
RIC (vs. MAC)	1.62 (1.19-2.21)	0.002	1.98 (1.27-3.09)	0.002
Donor type				
Haploidentical (vs. Others)	1.35 (0.98-1.87)	0.069	1.80 (1.12-2.89)	0.015
Donor				
10/10 MUD (vs. MSD)	0.78 (0.44-1.38)	0.402	1.57 (0.67-3.69)	0.30
9/10 MMUD (vs. MSD)	0.83 (0.38-1.83)	0.659	0.99 (0.27-3.59)	0.99
Haploidentical (vs. MSD)	1.21 (0.80-1.81)	0.357	2.20 (1.09-4.41)	0.026
Cumulative Incidence of GVHD				
Grade II-IV aGVHD	1.60 (1.16-2.22)	<0.001	2.12 (1.35-3.33)	<0.001
Grade II-IV aGVHD	2.32 (1.47-3.65)	0.004	6.42 (3.94-10.47)	<0.001

Supplementary Table 4. Baseline Characteristics Based on GVHD Prophylaxis

Baseline Characteristics	PTCY N=456	No PTCY N=558	P value
Age median (IQR)	55 (42-62)	54 (45-62)	0.982
Older 59 years	175 (37.4)	195 (34.9)	0.344
Sex			
Male	236 (51.2)	488 (87.3)	0.368
Female	225 (48.8)	71 (12.7)	
Relevant comorbidities			
Active smoker	56(12.1)	55 (9.8)	0.996
HTN	95 (20.6)	101 (18.1)	0.331
Dyslipidemia	60 (13.0)	73 (13.1)	0.970
Diabetes Mellitus	36 (7.8)	38 (6.8)	0.327
Obesity (BMI≥30)	34 (7.8)	36 (6.4)	0.564
History of Cardiac Disease	60 (13.0)	71 (12.7)	0.881
Prior treatment with cardiotoxic chemotherapy	14 (3)	17 (3.0)	0.239
Disease status prior allo-HCT			
Complete Remission	414 (89.8)	509 (91.1)	0.498
Refractory AML / Active Disease	47 (10.2)	50 (8.9)	
HCT-CI			
>3	73 (15.8)	69 (13.2)	0.174
Missing	23	41	
Allo-HCT Information			
Intensity			
Myeloablative	249 (54.0)	345 (61.7)	0.013
Reduced intensity	212 (46.0)	214 (38.3)	
MAC Regimen containing Cy	41 (8.9)	99 (17.7)	0.001
Total Body Irradiation (TBI) (High dose TBI: 12Gy)	4 (0.9)	41 (7.3)	0.001
Donor			
10/10 MSD	86 (18.7)	276 (49.4)	0.001
10/10 MUD	77 (16.7)	222 (39.7)	
9/10 MMUD	30 (6.5)	56 (10.0)	
Haploidentical	268 (58.1)	5 (0.9)	
Median Follow-up, months (IQR)	26.6 (10.0-51.2)	29.6 (9.3-72.7)	0.131