

SUPPLEMENTARY MATERIAL

Supplementary Table 1: Impact of Acute Cardiac Toxicity in Post-Transplant Outcomes: Univariate analysis

Univariate Analysis	Risk factors for Overall Survival		Risk factors for Non-Relapse Mortality	
	HR (95% CI)	P value	HR (95% CI)	P value
Early Cardiac Toxicity Time-dependent variable	2.95 (1.81-4.79)	<0.001	5.16 (2.91-9.15)	<0.001
GVHD Prophylaxis PTCY-based (vs. others)	0.79 (0.56-1.12)	0.19	1.14 (0.70-1.85)	0.58
TBI Yes (vs. No)	0.90 (0.62-1.31)	0.60	1.17 (0.72-1.91)	0.51
Age at allo-HCT ≥55 years (vs <55)	1.68 (1.19-2.36)	0.002	1.613(1.02-2.59)	0.04
KPS ≤80% (vs 90-100%)	1.58 (1.09-2.30)	0.014	1.51 (0.91-2.53)	0.11
HCT-CI score ≥3 (vs < 3)	1.58 (1.09-2.27)	0.014	1.19 (0.69-2.02)	0.52
Donor Selection Haplo and MMUD (vs. others)	0.98 (0.68-1.41)	0.91	1.45 (0.91-2.33)	0.12
Intensity of the Conditioning Regimen RIC (vs MAC)	1.28 (0.90-1.80)	0.15	1.12 (0.70-1.78)	0.63
Grade 3-4 acute GVHD Time-dependent variable	4.30 (2.79-6.63)	<0.001	6.07 (3.48-10.61)	<0.001

Legend: Post-transplant follow-up has been censored at 2-years.

GVHD: Graft-versus-Host Disease; KPS: Karnofsky Performance Status; HCT-CI: Hematopoietic Cell Transplantation-specific Comorbidity Index; Haplo: Haploidentical; MMUD: Mismatched unrelated donor; MAC: Myeloablative; RIC: Reduced Intensity; HR: Hazard Ratio; CI: Confidence Interval

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Supplementary Table 2: Baseline Characteristics According to Donor Type

	Allo-HCT with PTCY-based prophylaxis N=128 (%)	Allo-HCT with other prophylaxis N= 151	P value
Age Median (range) ≥55 years	58 (45.3)	70 (46.3)	0.861
Sex Female	52 (40.6)	74 (49.0)	0.161
History of smoking Yes	33 (25.7)	55 (36.4)	0.920
Relevant Comorbidities			
History of HTN	33 (25.7)	19 (12.5)	0.035
History of Hyperlipidemia	11 (8.5)	9 (5.9)	0.295
Diabetes Mellitus	17 (13.2)	21 (13.9)	0.879
Pre-existing cardiac morbidity	18 (14.0)	16 (10.6)	0.378
Arrhythmia	7 (5.4)	1 (0.6)	0.085
Heart Failure	3 (2.3)	3 (1.9)	0.838
Coronary disease	3 (2.3)	3 (1.9)	0.796
Pericardial Disorders	1 (0.78)	3 (1.9)	0.399
Other*	4 (3.1)	5 (3.3)	0.982
LVEF < 50%**	2 (1.5)	3 (1.9)	0.523
Baseline Diagnosis			
AML	40 (31.3)	62 (41.1)	-
ALL	22 (17.2)	17 (11.2)	
MDS	22 (17.2)	29 (19.2)	
MPN	10 (7.8)	10 (6.7)	
Lymphoproliferative disorders	13 (10.1)	20 (13.2)	
PCD	8 (6.3)	1 (0.6)	
Other	13 (10.1)	12 (8)	
Treatment with antracyclins before allo-HCT Yes	80 (62.5)	103 (68.2)	0.317
Treatment with cyclophosphamide before allo-HCT+ Yes	26 (20.3)	25 (16.5)	0.419
HCT-CI >3	39 (30.4)	34 (22.5)	0.132
Karnofsky Performance Status 70-80%	31 (24.2)	37 (24.5)	0.708
Conditioning			
Myeloablative	66 (51.5)	73 (48.3)	0.592
Reduced intensity	62 (49.5)	78 (51.7)	
Total Body Irradiation			
Yes (any dose)	44 (34.3)	20 (13.2)	0.001
2 Gy	16 (13.3)	0	
8 Gy	8 (6.2)	0	
12 Gy	20 (15.6)	20 (100)	
Stem cell source: Peripheral blood	6 (4.7)	7 (4.6)	0.984

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Other*: Degenerative aortic valve disease with severe insufficiency (n=1), aneurysm of the ventricular septum (n=1), arterial ductus in childhood, intervened (n=1), atrial septal defect causing left to right shunt (n=1), sinus bradycardia with ECHO abnormalities (n=1), right or left bundle branch block with impaired mobility on ECHO (n=4).

**Three out of the 5 patients with FVEF<50% had echocardiographic abnormalities or history of cardiac disease and were additionally accounted in the pre-existing cardiac morbidity category (others).

+Not accounted if patients received Cy as part of the conditioning regimen or PTCY.

PTCY: Post-transplant cyclophosphamide; Allo-HCT: Allogeneic Hematopoietic Cell Transplantation; HTN: Hypertension; AML: Acute myeloid leukemia, ALL: Acute lymphoblastic Leukemia; MDS: Myelodysplastic Syndrome; MPN: Myeloproliferative disorder; PCD: Plasma Cell Dyscrasia; HCT-CI: Hematopoietic Cell Transplantation-Comorbidity Index.