

Allogeneic hematopoietic stem cell transplantation from non-sibling 10/10 HLA-matched related donors: a single-center experience

Yaoyao Shen,^{1,2,3*} Jiaqian Qi,^{1,2,3*} Jia Chen,^{1,2,3} Yang Xu,^{1,2,3} Feng Chen,^{1,2,3} Xiao Ma,^{1,2,3} Miao Miao,^{1,2,3} Shengli Xue,^{1,2,3} Huiying Qiu,^{1,2,3} Xiaowen Tang,^{1,2,3} Yue Han,^{1,2,3*} Suning Chen,^{1,2,3} Aining Sun,^{1,2,3} Depei Wu^{1,2,3,4} and Ying Wang^{1,2,3,4}

¹National Clinical Research Center for Hematologic Diseases, Jiangsu Institute of Hematology, The First Affiliated Hospital of Soochow University, Suzhou;

²Institute of Blood and Marrow Transplantation, Collaborative Innovation Center of Hematology, Soochow University, Suzhou; ³Key Laboratory of Thrombosis and Hemostasis of Ministry of Health, Suzhou, China and ⁴State Key Laboratory of Radiation Medicine and Protection, Soochow University, Suzhou, China.

*YS and JQ contributed equally as co-first authors.

Correspondence: YING WANG - yingwang1977@hotmail.com

DEPEI WU - drwudepei@163.com

doi:10.3324/haematol.2021.278933

Supplemental Materials

Figure legends

Figure S1. Transplantation outcome. Differences in cumulative rates of OS (A), Relapse (B), aGVHD (C), TRM (D) and RFS (E) between sib-HSCT and NSMRD-HSCT patients.

Figure S2. Transplantation outcome. Differences in cumulative rates of OS (A), Relapse (B), aGVHD (C), TRM (D) and RFS (E) between haplo-HSCT(1:2) and NSMRD-HSCT patients.

Table S1. Baseline characteristics and procedure characteristics before and after matching on the propensity score

Variables	Before matching			After matching		
	Sib (n = 752)	NSMRD (n = 23)	p-value	Sib (n = 23)	NSMRD (n = 23)	p-value
Age, Median (IQR)	45.21 (34.33, 52.59)	37.45 (27.02, 50.65)	0.128	35.34 (29.13, 51.42)	37.45 (27.02, 50.65)	0.624
Gender, n (%)			0.574			1.000
female	321 (43)	8 (35)		9 (39)	8 (35)	
male	427 (57)	15 (65)		14 (61)	15 (65)	
Diagnosis, n (%)			0.267			0.536
ALL	184 (25)	7 (30)		4 (17)	7 (30)	
AML	419 (56)	9 (39)		12 (52)	9 (39)	
MPAL	13 (2)	0 (0)		0 (0)	0 (0)	
MDS	133 (18)	7 (30)		7 (30)	7 (30)	
Disease risk index*, n (%)			0.949			0.678
low risk	133 (18)	4 (17)		2 (9)	4 (17)	
intermediate risk	435 (57)	14 (61)		17 (74)	14 (61)	
high and very high risk	184 (25)	5 (22)		4 (17)	5 (22)	
Donor-recipient ABO group match, n (%)			0.795			0.652
matched	450 (62)	14 (61)		11 (48)	14 (61)	
major mismatched	128 (18)	5 (22)		8 (35)	5 (22)	
minor mismatched	113 (15)	4 (17)		3 (13)	4 (17)	
major+minor mismatched	40 (5)	0 (0)		1 (4)	0 (0)	

Abbreviation: NSMRD, Nonsibling 10/10 HLA-matched related donor; IQR, interquartile range; ALL, Acute lymphoblastic leukemia; AML, Acute myelocytic leukemia; MPAL, Mixed-phenotype acute leukemia; MDS, Myelodysplastic syndrome; HLA, Human leukocyte antigen.

*Risk was defined according to the refined Disease Risk Index of the Center for International Blood and Marrow Transplant Research⁷.

Figure S1

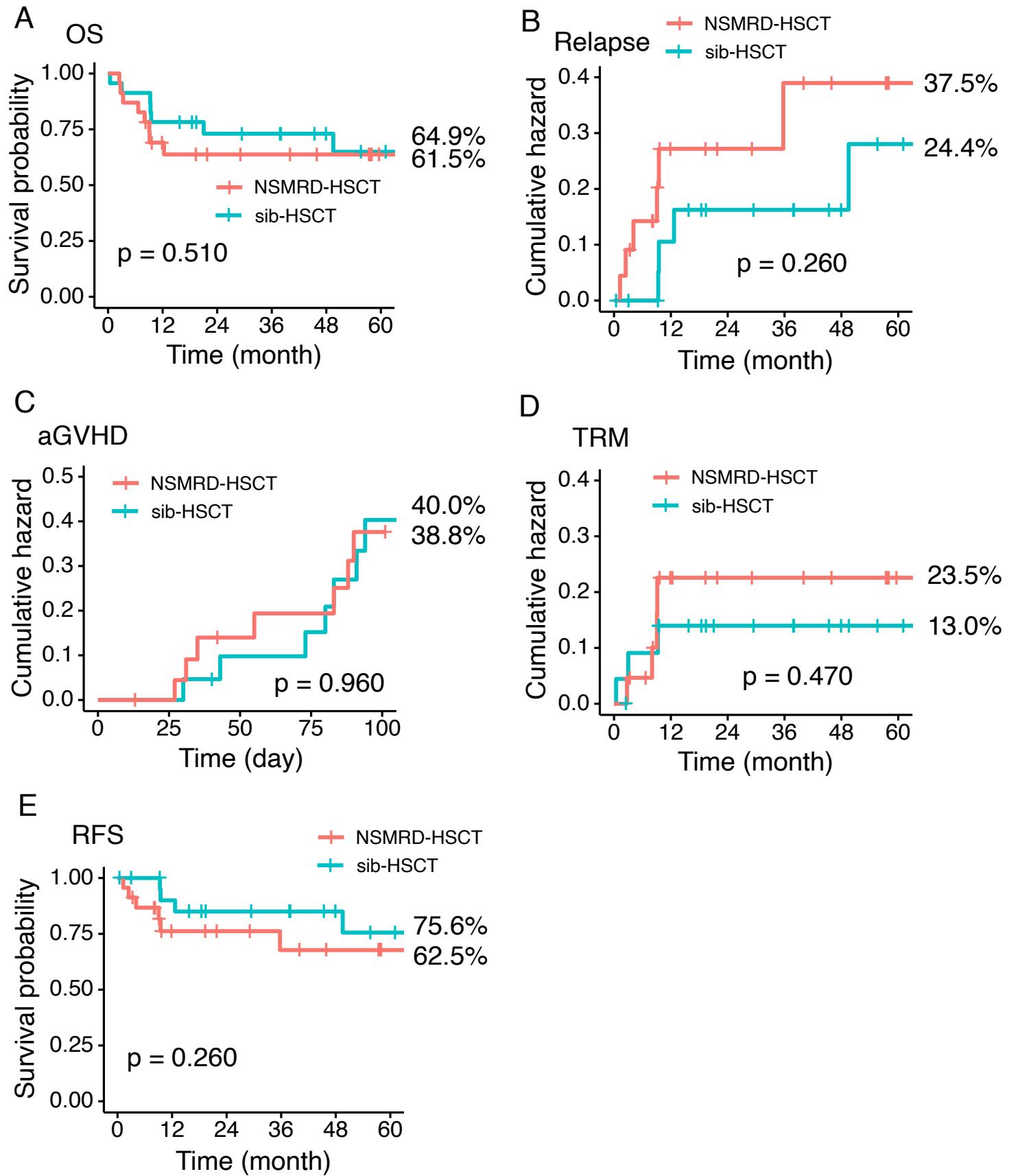


Figure S2

