

Better allele-level matching improves transplant-related mortality after double cord blood transplantation

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Supplementary Table 1: Transplant-related mortality, overall survival, disease progression and progression-free survival at 2-years by HLA matching between the donor and recipient by univariate analysis

	N	2-year TRM			2-year OS			2-year PRG			2-year PFS		
Standard HLA matching		HR	95%CI	p				HR	95%CI	p	HR	95% CI	p
4/6	79	Ref			Ref			Ref			Ref.		
5/6	59	0.5	0.3-0.9	0.03	0.7	0.4-1.1	0.09	1.4	0.8-2.7	0.2	0.9	0.6-1.3	0.5
6/6	8	0.2	0.03-1.6	0.1	0.3	0.3-1.2	0.096	0.9	0.2-4.0	0.9	0.6	0.2-1.7	0.4
>4/6 vs. 4/6		0.5	0.3-0.8	0.01	0.6	0.4-0.97	0.04	1.4	0.7-2.5	0.3	0.8	0.6-1.2	0.4
High resolution typing at HLA -A, -B, DRB1													
2-3/6	28	Ref			Ref			Ref			Ref		
4/6	71	0.8	0.5-1.6	0.7	0.96	0.6-1.7	0.9	2.4	0.8-7.0	0.1	1.2	0.7-2.0	0.5
5/6	38	0.4	0.2-0.9	0.04	0.6	0.3-1.2	0.2	2.2	0.7-7	0.2	0.9	0.5-1.6	0.6
6/6	3	*NE			*NE			2.7	0.3-24	0.4	1.1	0.3-4.9	0.9
>4/6 vs. ≤4/6		0.4	0.2-0.9	0.02	0.6	04-1.04	0.07	1.1	0.6-2.2	0.7	0.8	0.5-1.2	0.3

Supplementary Table 2: The effect of HLA matching by standard and high resolution typing on GVHD.

	Day 100 aGVHD, Grade 2-4			2-year cGVHD		
	HR	95%CI	p	HR	95%CI	p
Standard HLA matching						
5/6 vs. 4/6	0.4	0.2-0.8	0.007	0.7	0.4-1.3	0.3
6/6 vs. 4/6	0.4	0.1-1.7	0.2	1.1	0.3-3.7	0.8
4/6 vs. >4/6	2.3	1.3-4.2	0.005	1.3	0.7-2.4	0.3
High resolution typing at HLA -A, -B and DRB1						
4/6 vs. 2-3/6	1.6	0.8-3.5	0.2	1.3	0.6-2.8	0.6
5/6 vs. 2-3/6	0.9	0.4-2.3	0.9	1.2	0.5-2.9	0.7
6/6 vs. 2-3/6	*NE			5.2	0.4-44	0.1
>4/6 vs. <=4/6	0.6	0.3-1.2	0.1	1.05	0.6-1.9	0.9
High resolution typing at HLA -A, -B, -C and DRB1						
5/8 vs. 3-4/8	1.4	0.7-2.9	0.4	1.4	0.6-2.9	0.4
6/8 vs. 3-4/8	1.2	0.5-2.7	0.7	0.9	0.4-2.1	0.8
7-8/8 vs. 3-4/8	0.2	0.03-1.6	0.1	1.6	0.5-4.9	0.4
5-6/8 vs. 3-4/8	1.3	0.7-2.6	0.4	1.1	0.5-2.4	0.7
7-8/8 vs. 3-4/8	0.2	0.03-1.6	0.1	1.6	0.5-4.9	0.4

*NE: non-evaluable because of absence of events

Supplementary Figure 1: The effect of HLA matching between the dominant unit and the recipient by standard testing (intermediate-resolution typing for HLA-A and HLA-B and high-resolution typing for HLA DRB1) on (A) TRM (B) OS (C) PFS and by high resolution typing at 3 loci (HLA-A, -B, and -DRB1) on (D) TRM (E) OS (F) PFS.

