Supplemental Table 1.

Characteristics of patients who met study eligibility criteria

Variables	NIMA mismatched transplantations	NIMA matched transplantations	P-value
Number	456	52	
Region			
Europe	196 (43%)	28 (54%)	NS
United States	260 (57%)	24 (46%)	
Sex, male	240 (53%)	26 (50%)	NS
Median age (range), years	10 (<1 – 68)	12 (<1 – 67)	
Age			
≤10 years	235 (52%)	24 (46%)	NS
11 – 20 years	85 (19%)	8 (15%)	
21 – 50 years	102 (22%)	13 (25%)	
>50 years	34 (7%)	7 (13%)	
Recipient CMV serostatus			NS
Negative	196 (43%)	21 (40%)	
Positive	233 (51%)	27 (53%)	
Not reported	27 (6%)	4 (8%)	
Disease			NS
Acute myeloid leukemia	163 (36%)	21 (40%)	
Acute lymphoblastic leukemia	171 (38%)	19 (37%)	
Chronic myeloid leukemia	13 (3%)	2 (4%)	
Myelodysplastic syndrome	56 (12%)	4 (8%)	
Other leukemia	19 (5%)	4 (8%)	
Non-Hodgkin lymphoma	34 (7%)	2 (4%)	
Disease status			NS
1st complete remission /chronic phase	118 (26%)	14 (27%)	
2nd complete remission /chronic phase/accelerated phase	202 (44%)	22 (42%)	
Relapse / blast phase	136 (30%)	16 (31%)	
TNC infused median (range) x 10^7/kg	4 (1 – 27)	3.9 (0.8 – 9.9)	

Supplemental table 1. Continued

Variables	NIMA mismatched transplantations	NIMA matched transplantations	P-value
Conditioning regimen			NS
TBI, myeloablative	246 (54%)	21 (40%)	
Non-TBI myeloablative	143 (31%)	17 (33%)	
TBI reduced intensity	40 (9%)	10 (19%)	
Non-TBI reduced intensity	27 (6%)	4 (8%)	
Conditioning regimen			
TBI ($\geq$1000 cGy) + Cy	342 (53%)	21 (40%)	
TBI (200 cGy) + Cy	40 (9%)	10 (19%)	
Busulphan + melphalan	57 (13%)	7 (13%)	
Busulfan (>9 mg/kg) + Cy	83 (18%)	10 (19%)	
Busulfan (<9 mg/kg) + FLU	6 (1%)	1 (2%)	
Melphalan (>150 mg/m^2) + FLU	3 (1%)	__	
Melphalan (<150 mg/m^2) + FLU	11 (2%)	2 (4%)	
Cy + FLU	10 (2%)	1 (2%)	
GVHD prophylaxis			NS
Cyclosporine + steroids	186 (41%)	22 (43%)	
Cyclosporine +methotrexate	32 (7%)	5 (9%)	
Cyclosporine + MMF	119 (26%)	16 (30%)	
Cyclosporine alone	34 (7%)	3 (6%)	
Tacrolimus + methotrexate	37 (8%)	3 (6%)	
Tacrolimus + MMF	29 (6%)	1 (2%)	
Tacrolimus alone	19 (4%)	2 (4%)	
In vivo t-cell depletion			NS
ATG/alemtuzumab	298 (65%)	33 (63%)	
None	145 (32%)	17 (33%)	
Not reported	13 (3%)	2 (4%)	
Donor-recipient HLA match			0.0002
5/6 HLA match	307 (47%)	14 (26%)	
4/6 HLA match	256 (39%)	38 (74%)	

Abbreviations
NIMA = non inherited maternal antigen; CMV = cytomegalovirus; TNC = total nucleated cell dose; TBI = total body irradiation; Cy = cyclophosphamide; FLU = fludarabine; MMF = mycophenolate mofetil; ATG = anti-thymocyte globulin; HLA = human leukocyte antigen

Supplemental Table 2:
Risk factors for transplant-related mortality after HLA-mismatched umbilical cord blood transplant

Variable	Relative Risk	P-value
Age		
≤16 years	1.00	
>16 years	2.00	<0.001
Donor-recipient HLA match		
1-antigen mismatch	1.00	
2-antigen mismatch	1.36	0.06
Disease status at transplant		
Not in remission	1.00	
1st complete remission/1st chronic phase	0.54	0.01
2nd complete remission/2nd chronic e/accelerated phase	0.68	0.09
Transplant conditioning regimen		
Reduced intensity non-TBI regimen	1.00	
Myeloablative TBI regimen	0.84	0.60
Myeloablative non-TBI regimen	0.54	0.07
Reduced intensity TBI regimen	0.24	0.002

Abbreviation
TBI = total body irradiation