

Supplementary Table: Acute GVHD 2-4; Myeloablative, Sibling donor

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
GVHD prophylaxis				
Tac + MTX (reference)	1369 (34.9%)	1.00 (., .)	.	0.002
CsA + MMF	114 (2.9%)	1.65 (1.24, 2.20)	<.001	
CsA + MTX	2218 (56.6%)	1.17 (1.04, 1.33)	0.010	
Tac + MMF	220 (5.6%)	1.05 (0.83, 1.34)	0.661	
Disease				
AML (reference)	1890 (48.2%)	1.00 (., .)	.	<.001
ALL	798 (20.4%)	1.24 (1.08, 1.43)	0.003	
CML	842 (21.5%)	1.35 (1.17, 1.55)	<.001	
MDS	390 (9.9%)	1.31 (1.10, 1.56)	0.003	
Donor-recipient sex match				
M-M (reference)	1277 (32.6%)	1.00 (., .)	.	0.005
F-F	805 (20.5%)	0.94 (0.81, 1.10)	0.430	
F-M	945 (24.1%)	1.20 (1.04, 1.37)	0.012	
M-F	893 (22.8%)	1.05 (0.91, 1.21)	0.528	
Missing		8.36 (1.17, 59.94)	0.035	
Graft type				
BM (reference)	794 (20.2%)	1.00 (., .)	.	<.001
PB	3127 (79.8%)	1.50 (1.30, 1.74)	<.001	
Karnofsky performance score				
<90 (reference)	1015 (25.9%)	1.00 (., .)	.	0.018
90-100	2793 (71.3%)	0.87 (0.77, 0.98)	0.027	
Missing	112 (2.9%)	0.65 (0.45, 0.95)	0.026	

Pairwise Comparisons

	HR (95% CI)	P-value
GVHD prophylaxis		
CsA + MMF vs Tac + MTX	1.65 (1.24 - 2.20)	<.001
CsA + MMF vs CsA + MTX	1.41 (1.06 - 1.86)	0.017
CsA + MMF vs Tac + MMF	1.57 (1.10 - 2.22)	0.012
CsA + MTX vs Tac + MTX	1.17 (1.04 - 1.33)	0.010
CsA + MTX vs Tac + MMF	1.11 (0.88 - 1.41)	0.378
Tac + MMF vs Tac + MTX	1.05 (0.83 - 1.34)	0.661

Supplementary Table: Acute GVHD 3-4; Myeloablative, Sibling donor

Parameter	N (%)	Est (95% CI)	P-value	Overall P-value
GVHD prophylaxis				
Tac + MTX (reference)	1369 (35.0%)	1.00 (., .)	.	0.010
CsA + MMF	114 (2.9%)	1.92 (1.31, 2.83)	<0.001	
CsA + MTX	2202 (56.4%)	1.13 (0.92, 1.37)	0.238	
Tac + MMF	220 (5.6%)	1.19 (0.85, 1.66)	0.319	
Disease				
AML (reference)	1880 (48.1%)	1.00 (., .)	.	0.001
ALL	795 (20.4%)	1.16 (0.95, 1.43)	0.154	
CML	840 (21.5%)	1.41 (1.16, 1.72)	<.001	
MDS	390 (10.0%)	1.43 (1.10, 1.82)	0.006	
Donor-recipient sex-match				
M-M (ref)	1270 (32.5%)	1.00 (ref)		0.003
F-F	801 (20.5%)	0.92 (0.73, 1.14)	0.442	
F-M	942 (24.1%)	1.22 (1.01, 1.49)	0.044	
M-F	390 (10.0%)	1.05 (0.85, 1.29)	0.662	
missing		21.85 (3.00, 158.91)	0.002	
Graft type				
BM (reference)	793(20.3%)	1.00 (., .)	.	<.001
PB	3113 (79.7%)	1.57 (1.27, 1.93)	<.001	
Karnofsky performance score				
<90 (reference)	1011 (25.9%)	1.00 (., .)	.	0.021
90-100	2782 (71.2%)	0.82 (0.69, 0.97)	0.024	
Missing	112 (2.9%)	0.55 (0.31, 0.97)	0.040	
Year of transplant				
2000-2004 (reference)	1747 (44.7%)	1.00 (., .)	.	0.009
2005-2008	1184 (30.3%)	0.77 (0.64, 0.93)	0.007	
2009-2013	975 (25.0%)	0.75 (0.60, 0.94)	0.013	

Pairwise comparisons	HR (95% CI)	P-value
GVHD prophylaxis		
CsA + MMF vs Tac + MTX	1.92 (1.31 - 2.83)	<0.001
CsA + MMF vs CsA + MTX	1.71 (1.17 - 2.50)	0.006
CsA + MMF vs Tac + MMF	1.62 (1.01 - 2.61)	0.047
CsA + MTX vs Tac + MTX	1.13 (0.92 - 1.37)	0.238
CsA + MTX vs Tac + MMF	0.95 (0.68 - 1.34)	0.766
Tac + MMF vs Tac + MTX	1.19 (0.85- 1.66)	0.319

Supplementary Table: Chronic GVHD; Myeloablative, Sibling donor

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
GVHD prophylaxis < 5 months				
Tac+MTX		1.00(., .)	.	0.001
CSA+MMF		1.34 (0.83, 2.17)	0.233	
CSA+MTX		1.41 (1.20, 1.67)	<.001	
Tac+MMF		1.28 (0.94, 1.74)	0.119	
GVHD prophylaxis ≥ 5 months				
Tac+MTX		1.00(., .)	.	0.0001
CSA+MMF		0.56 (0.34, 0.95)	0.030	
CSA+MTX		0.74 (0.65, 0.85)	<.001	
Tac+MMF		0.92 (0.71, 1.19)	0.512	
Age at transplant, years				
18-29 (reference)	924 (23.7%)	1.00 (,)		<.001
30-39	793 (20.3%)	1.19 (1.03, 1.38)	0.022	
40-49	1040 (26.7%)	1.21 (1.05, 1.39)	0.009	
50-64	1087 (27.9%)	1.38 (1.19, 1.59)	<.001	
65+	53 (1.4%)	0.83 (0.51, 1.35)	0.445	
Disease				
AML (reference)	1883 (48.3%)	1.00 (,)		<.001
ALL	796 (20.4%)	1.15 (1.01, 1.30)	0.040	
CML	829 (21.3%)	1.21 (1.06, 1.37)	0.004	
MDS	389 (10.0%)	1.40 (1.19, 1.63)	<.001	
Donor-recipient sex match				
M-M (reference)	1266 (32.5%)	1.00 (,)		<.001
F-F	803 (20.6%)	1.27 (1.11, 1.45)	<.001	
F-M	945 (24.2%)	1.71 (1.51, 1.94)	<.001	
M-F	883 (22.7%)	1.05 (0.92, 1.21)	0.468	
Graft type				
BM (reference)	784 (20.1%)	1.00 (,)		<.001
PB	3113 (79.9%)	1.62 (1.42, 1.86)	<.001	

Pairwise Comparisons

	HR 95% CI	P-value
CsA+ MMF vs.CsA+MTX < 5 months	0.95 (0.50-1.52)	0.8262
Tac+ MMF vs.CsA+MTX < 5 months	0.91 (0.67-1.22)	0.5196
Tac+ MMF vs.CsA+ MMF < 5 months	0.96 (0.55-1.65)	0.8682
CsA+ MMF vs.CsA+MTX ≥ 5 months	0.76 (0.46-1.28)	0.3062
Tac+ MMF vs.CsA+MTX ≥ 5 months	1.24 (0.95-1.62)	0.1127
Tac+ MMF vs.CsA+ MMF ≥ 5 months	1.62 (0.922-2.86)	0.0931

Supplementary Table: Overall Survival; Myeloablative, Sibling donor

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
GVHD prophylaxis < 5 months				
Tac+MTX		1.00(., .)	.	0.0001
CSA+MMF		2.31 (1.73, 3.09)	<.001	
CSA+MTX		1.27 (1.10, 1.48)	0.002	
Tac+MMF		1.05 (0.81, 1.37)	0.704	
GVHD prophylaxis ≥ 5 months				
Tac+MTX		1.00(., .)	.	0.003
CSA+MMF		0.94 (0.62, 1.43)	0.767	
CSA+MTX		0.74 (0.64, 0.87)	<.001	
Tac+MMF		0.92 (0.70, 1.20)	0.530	
Age at transplant, years				
18-29 (reference)	924 (23.7%)	1.00 (,)		<.001
30-39	793 (20.3%)	1.23 (1.06, 1.43)	0.008	
40-49	1040 (26.7%)	1.46 (1.27, 1.68)	<.001	
50-64	1087 (27.9%)	1.84 (1.60, 2.12)	<.001	
65+	53 (1.4%)	2.00 (1.41, 2.83)	<.001	
Disease				
AML (reference)	1883 (48.3%)	1.00 (,)		<.001
ALL	796 (20.4%)	1.31 (1.16, 1.47)	<.001	
CML	829 (21.3%)	0.71 (0.61, 0.84)	<.001	
MDS	389 (10.0%)	1.04 (0.89, 1.21)	0.621	
Disease status				
Early (reference)	1852 (47.5%)	1.00 (,)		<.001
Advanced	761 (19.5%)	2.01 (1.79, 2.24)	<.001	
Intermediate	1242 (31.9%)	1.23 (1.08, 1.41)	0.002	
Missing	42 (1.1%)	1.52 (1.00, 2.30)	0.048	
Donor-recipient CMV match				
-/- (reference)	833 (21.4%)	1.00 (,)		0.015
+/+	1887 (48.4%)	1.07 (0.95, 1.20)	0.275	
+/-	384 (9.9%)	0.86 (0.72, 1.02)	0.086	
-/+	672 (17.2%)	1.01 (0.87, 1.16)	0.913	
Missing	121 (3.1%)	1.34 (1.04, 1.74)	0.026	
Donor-recipient sex match				
M-M (reference)	1266 (32.5%)	1.00 (,)		<.001
F-F	803 (20.6%)	1.00 (0.88, 1.14)	0.997	
F-M	945 (24.2%)	1.37 (1.22, 1.55)	<.001	
M-F	883 (22.7%)	0.97 (0.85, 1.09)	0.583	
Graft type				
BM (reference)	784 (20.1%)	1.00 (,)		<.001
PB	3113 (79.9%)	1.40 (1.23, 1.60)	<.001	
Karnofsky performance score				
<90 (reference)	1019 (26.1%)	1.00 (,)		<.001

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
90-100	2769 (71.1%)	0.72 (0.65, 0.79)	<.001	
Missing	109 (2.8%)	0.81 (0.63, 1.05)	0.113	
Sorror co-morbidity index				
0-1 (reference)	662 (17.0%)	1.00 (,)		0.024
>=2	576 (14.8%)	1.13 (0.97, 1.32)	0.114	
Missing	19 (0.5%)	1.28 (0.63, 2.60)	0.496	
N/A Prior to 2007	2640 (67.7%)	0.83 (0.68, 1.00)	0.051	
Year of transplant				
2000-2004 (reference)	1745 (44.8%)	1.00 (,)		<.001
2005-2008	1168 (30.0%)	0.84 (0.74, 0.95)	0.006	
2009-2013	984 (25.3%)	0.61 (0.49, 0.75)	<.001	

Pairwise Comparisons

	HR (95% CI)	P-value
CsA+ MMF vs.CsA+MTX < 5 months	1.82 (1.36-2.42)	<.0001
Tac+ MMF vs.CsA+MTX < 5 months	0.93 (0.63-1.08)	0.1607
Tac+ MMF vs.CsA+ MMF < 5 months	0.46 (0.32-0.65)	<.0001
CsA+ MMF vs.CsA+MTX \geq 5 months	1.26 (0.83-1.92)	0.2786
Tac+ MMF vs.CsA+MTX \geq 5 months	1.23 (0.94-1.63)	0.1358
Tac+ MMF vs.CsA+ MMF \geq 5 months	0.98 (0.61-1.58)	0.9267

Supplementary Table: Disease-Free Survival; Myeloablative, Sibling donor

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
GVHD prophylaxis				
Tac + MTX (reference)	1368 (35.0%)	1.00 (., .)	.	<.001
CsA + MMF	112 (2.9%)	1.64 (1.30, 2.06)	<.001	
CsA + MTX	2212 (56.5%)	1.01 (0.90, 1.13)	0.912	
Tac + MMF	219 (5.6%)	0.94 (0.78, 1.13)	0.502	
Age at transplant, years				
18-29 (reference)	937 (24%)	1.00 (., .)	.	<.001
30-39	796 (20.4%)	1.10 (0.96, 1.27)	0.155	
40-49	1038 (26.5%)	1.28 (1.13, 1.45)	<.001	
50-64	1087 (27.8%)	1.54 (1.35, 1.75)	<.001	
65+	53 (1.4%)	2.26 (1.62, 3.14)	<.001	
Disease				
AML (reference)	1884 (48.2%)	1.00 (., .)	.	<.001
ALL	794 (20.3%)	1.29 (1.15, 1.45)	<.001	
CML	841 (21.5%)	0.93 (0.81, 1.08)	0.341	
MDS	391 (10.0%)	0.89 (0.77, 1.03)	0.112	
Disease status				
Early (reference)	1872 (47.9%)	1.00 (., .)	.	<.001
Advanced	744 (19.0%)	2.38 (2.14, 2.65)	<.001	
Intermediate	1253 (32.0%)	1.34 (1.18, 1.52)	<.001	
Missing	42 (1.1%)	1.63 (1.11, 2.39)	0.012	
Donor-recipient CMV match				
-/- (reference)	839 (21.5%)	1.00 (., .)	.	0.011
+/+	1899 (48.6%)	1.10 (0.99, 1.23)	0.090	
+/-	381 (9.7%)	0.92 (0.78, 1.09)	0.352	
-/+	672 (17.2%)	0.99 (0.86, 1.13)	0.871	
Missing	120 (3.1%)	1.36 (1.07, 1.73)	0.011	
Karnofsky performance score				
<90 (reference)	1019 (26.1%)	1.00 (., .)	.	<.001
90-100	2783 (71.2%)	0.70 (0.63, 0.76)	<.001	
Missing	108 (2.8%)	0.89 (0.69, 1.13)	0.330	
Race				
Caucasian (reference)	3142 (80.3%)	1.00 (., .)	.	0.014
Missing	197 (5.0%)	1.30 (1.08, 1.56)	0.006	
Non-Caucasian	572 (14.6%)	1.08 (0.96, 1.23)	0.210	
Sorror co-morbidity index				
0-1 (reference)	661 (16.9%)	1.00 (., .)	.	<.001
>=2	571 (14.6%)	1.08 (0.94, 1.25)	0.289	
Missing	19 (0.5%)	1.85 (1.03, 3.32)	0.038	
N/A Prior to 2007	2660 (68.0%)	0.77 (0.64, 0.93)	0.006	
Year of transplant				
2000-2004 (reference)	1743 (44.6%)	1.00 (., .)	.	0.033

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
2005-2008	1192 (30.5%)	0.92 (0.81, 1.03)	0.138	
2009-2013	976 (25.0%)	0.76 (0.62, 0.93)	0.009	

Pairwise Comparisons

	HR (%95 CI)	P-value
GVHD prophylaxis		
CsA + MMF vs Tac + MTX	1.64 (1.30 - 2.06)	<.001
CsA + MMF vs CsA + MTX	1.63 (1.29 - 2.05)	<.001
CsA + MMF vs Tac + MMF	1.74 (1.32 - 2.30)	<.001
CsA + MTX vs Tac + MTX	1.01 (0.90 - 1.13)	0.912
CsA + MTX vs Tac + MMF	1.07 (0.88 - 1.30)	0.489
Tac + MMF vs Tac + MTX	0.94 (0.78 - 1.13)	0.502

Supplementary Table: Treatment-related Morality; Myeloablative, Sibling donor

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
GVHD prophylaxis < 5 months				
Tac+MTX		1.00(., .)	.	0.0001
CSA+MMF		4.03 (2.61, 6.23)	<.001	
CSA+MTX		2.29 (1.78, 2.95)	<.001	
Tac+MMF		1.17 (0.71, 1.94)	0.537	
GVHD prophylaxis ≥ 5 months				
Tac+MTX		1.00(., .)	.	0.174
CSA+MMF		1.38 (0.78, 2.44)	0.275	
CSA+MTX		0.83 (0.67, 1.03)	0.095	
Tac+MMF		0.90 (0.59, 1.36)	0.609	
Graft type				
Age at transplant, years				
18-29 (reference)	936 (23.9%)	1.00 (., .)	.	<.001
30-39	796 (20.4%)	1.33 (1.05, 1.68)	0.018	
40-49	1038 (26.5%)	1.70 (1.37, 2.12)	<.001	
50-64	1087 (27.8%)	2.63 (2.11, 3.27)	<.001	
65+	53 (1.4%)	3.52 (2.15, 5.76)	<.001	
Disease				
AML (reference)	1884 (48.2%)	1.00 (., .)	.	<.001
ALL	794 (20.3%)	1.65 (1.37, 1.98)	<.001	
CML	841 (21.5%)	0.96 (0.77, 1.21)	0.751	
MDS	391 (10.0%)	1.44 (1.16, 1.79)	0.001	
Disease status				
Early (reference)	1871 (47.9%)	1.00 (., .)	.	<.001
Advanced	744 (19.0%)	1.48 (1.23, 1.79)	<.001	
Intermediate	1253 (32.0%)	1.41 (1.16, 1.71)	<.001	
Missing	42 (1.1%)	1.49 (0.83, 2.67)	0.185	
Donor-recipient CMV match				
-/- (reference)	839 (21.5%)	1.00 (., .)	.	0.012
+/+	1898 (48.5%)	1.12 (0.93, 1.33)	0.226	
+/-	381 (9.7%)	0.77 (0.59, 1.02)	0.070	
-/+	672 (17.2%)	0.97 (0.78, 1.21)	0.790	
Missing	120 (3.1%)	1.46 (1.02, 2.09)	0.038	
Donor-recipient sex match				
M-M (reference)	1279 (32.7%)	1.00 (., .)	.	<.001
F-F	802 (20.5%)	1.06 (0.88, 1.30)	0.529	
F-M	937 (24.0%)	1.44 (1.21, 1.72)	<.001	
M-F	892 (22.8%)	1.06 (0.87, 1.28)	0.574	
Graft type				
BM (reference)	788 (20.2%)	1.00 (., .)	.	<.001
PB	3122 (79.8%)	1.53 (1.26, 1.86)	<.001	
Karnofsky performance score				
<90 (reference)	1019 (26.1%)	1.00 (., .)	.	<.001

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
90-100	2783 (71.2%)	0.67 (0.58, 0.78)	<.001	
Missing	108 (2.8%)	1.01 (0.70, 1.44)	0.974	
Race				
Caucasian (reference)	3141 (80.3%)	1.00 (., .)	.	0.001
Missing	197 (5.0%)	1.40 (1.04, 1.87)	0.025	
Non-Caucasian	572 (14.6%)	1.35 (1.12, 1.63)		0.002
Year of transplant				
2000-2004 (reference)	1743 (44.6%)	1.00 (., .)	.	0.025
2005-2008	1191 (30.5%)	0.80 (0.68, 0.96)	0.014	
2009-2013	976 (25.0%)	0.79 (0.64, 0.98)	0.030	

Pairwise Comparisons

	HR (95% CI)	P-value
CsA+ MMF vs.CsA+MTX < 5 months	1.76 (1.17-2.65)	0.0070
Tac+ MMF vs.CsA+MTX < 5 months	0.51 (0.31-0.84)	0.0074
Tac+ MMF vs.CsA+ MMF < 5 months	0.29 (0.159-0.53)	<.0001
CsA+ MMF vs.CsA+MTX \geq 5 months	1.66 (0.94-2.93)	0.0821
Tac+ MMF vs.CsA+MTX \geq 5 months	1.08 (0.71-1.66)	0.7118
Tac+ MMF vs.CsA+ MMF \geq 5 months	0.65 (0.33-1.29)	0.2179

Supplementary Table: Relapse; Myeloablative, Sibling donor

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
GVHD prophylaxis				
Tac + MTX (reference)	1368 (35.0%)	1.00 (., .)	.	0.005
CsA + MMF	112 (2.9%)	1.43 (1.05, 1.93)	0.022	
CsA + MTX	2212 (56.6%)	0.86 (0.74, 0.98)	0.029	
Tac + MMF	219 (5.6%)	0.92 (0.73, 1.14)	0.444	
Disease				
AML (reference)	1884 (48.2%)	1.00 (., .)	.	<.001
ALL	794 (20.3%)	1.10 (0.95, 1.27)	0.213	
CML	841 (21.5%)	0.97 (0.80, 1.17)	0.741	
MDS	391 (10.0%)	0.68 (0.56, 0.82)	<.001	
Disease status				
Early (reference)	1872 (47.9%)	1.00 (., .)	.	<.001
Advanced	744 (19.0%)	3.05 (2.66, 3.49)	<.001	
Intermediate	1253 (32.0%)	1.28 (1.09, 1.51)	0.003	
Missing	42 (1.1%)	1.75 (1.06, 2.91)	0.029	
Karnofsky performance score				
<90 (reference)	1019 (26.1%)	1.00 (., .)	.	<.001
90-100	2783 (71.2%)	0.71 (0.63, 0.81)	<.001	
Missing	108 (2.8%)	0.82 (0.59, 1.14)	0.239	
Sorror co-morbidity index				
0-1 (reference)	661 (16.9%)	1.00 (., .)	.	<.001
>=2	571 (14.6%)	1.06 (0.89, 1.27)	0.524	
Missing	19 (0.5%)	2.73 (1.44, 5.18)	0.002	
N/A Prior to 2007	2660 (68.0%)	0.69 (0.55, 0.86)	<.001	
Year of transplant				
2000-2004 (reference)	1743 (44.6%)	1.00 (., .)	.	0.043
2005-2008	1192 (30.5%)	0.99 (0.85, 1.15)	0.876	
2009-2013	976 (25.0%)	0.77 (0.60, 0.98)	0.037	

Pairwise comparisons

	HR (95% CI)	P-value
GVHD prophylaxis		
CsA + MMF vs Tac + MTX	1.43 (1.05 - 1.93)	0.022
CsA + MMF vs CsA + MTX	1.67 (1.23 - 2.27)	0.001
CsA + MMF vs Tac + MMF	1.56 (1.09 - 2.23)	0.016
CsA + MTX vs Tac + MTX	0.86 (0.74 - 0.98)	0.029
CsA + MTX vs Tac + MMF	0.93 (0.74 - 1.18)	0.570
Tac + MMF vs Tac + MTX	0.92 (0.73 - 1.14)	0.444

Supplementary Table: Acute GVHD 2-4; Myeloablative, Unrelated donor

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
GVHD prophylaxis				0.030
Tac + MTX (reference)	2678 (64.9%)	1.00 (., .)		
CsA + MMF	68 (1.6%)	1.49 (1.08, 2.07)	0.016	
CsA + MTX	964 (23.3%)	1.00 (0.90, 1.12)	0.961	
Tac + MMF	419 (10.1%)	1.14 (0.99, 1.32)	0.066	
Conditioning regimen / ATG				< 0.001
BU+CU+/-others (reference)	1051 (25.5%)	1.00 (ref)		
ATG+BU+/-CY+/-FLU+/-others	699 (16.9%)	0.76 (0.66-0.87)	< 0.001	
ATG+TBI+/-CY+/-others	309 (7.5%)	0.64 (0.52, 0.79)	< 0.001	
BU+FLU+/-others	397 (9.6%)	1.10 (0.94, 1.29)	0.224	
TBI+/-CY+/-others	1505 (36.4%)	1.06 (0.94, 1.18)	0.351	
TBI+ETOP+/-others	81 (2%)	0.97 (0.70, 1.35)	0.854	
others	87 (2.1%)	1.00 (0.74, 1.36)	0.979	
Disease				<.001
AML (reference)	2237 (54.2%)	1.00 (., .)		
ALL	81 (18.9%)	1.08 (0.95, 1.23)	0.215	
CML	546 (13.2%)	1.26 (1.10, 1.43)	<.001	
MDS	565 (13.7%)	1.21 (1.07, 1.38)	0.003	
Donor type				<.001
8/8-matched (reference)	974 (23.6%)	1.00 (., .)		
7/8-matched	3155 (76.4%)	0.74 (0.67, 0.82)	<.001	
Graft type				<.001
BM (reference)	1348 (32.6%)	1.00 (., .)		
PB	2781 (67.4%)	1.30 (1.18, 1.44)	<.001	
Sex				
Male (reference)	2253 (54.6%)	1.00 (., .)		
Female	1876 (45.4%)	0.91 (0.83, 0.99)	0.029	0.029
Sorror's Co-morbidity index				0.012
0-1 (reference)	867 (21.0%)	1.00 (., .)		
≥ 2	822 (19.9%)	1.16 (1.01, 1.33)	0.030	
Missing	42 (1.0%)	1.37 (0.87, 2.15)	0.179	
N/A prior to 2007	2398 (58.1%)	1.21 (1.08, 1.37)	0.002	
Unrelated donor age, years				0.009
18-32 (reference)	2001 (48.5%)	1.00 (., .)		
33-49	1760 (42.6%)	1.07 (0.98, 1.18)	0.127	
50+	260 (6.3%)	1.34 (1.13, 1.59)	<.001	
Missing	108 (2.6%)	1.10 (0.84, 1.46)	0.484	

Pairwise Comparisons	<i>HR (95% CI)</i>	<i>P-value</i>
CsA + MMF vs Tac + MTX	1.49 (1.08 - 2.07)	0.016
CsA + MMF vs CSA + MTX	1.49 (1.07 - 2.08)	0.019
CsA + MMF vs Tac + MMF	1.31 (0.92 - 1.85)	0.133
CsA + MTX vs Tac + MTX	1.00 (0.90 - 1.12)	0.961
CSA + MTX vs TAC + MMF	0.88 (0.74 - 1.04)	0.126
TAC + MMF vs TAC + MTX	1.14 (0.99 - 1.32)	0.066

Supplementary Table: Acute GVHD 3-4; Myeloablative, Unrelated donor

Parameter	N(%)	Est (%95 CI)	P-value	Overall P-value
GVHD prophylaxis				
Tac + MTX (reference)	2673 (64.8%)	1.00 (., .)	.	<.001
CsA + MMF	68 (1.6%)	2.31 (1.57, 3.42)	<.001	
CsA + MTX	965 (23.4%)	1.02 (0.87, 1.20)	0.806	
Tac + MMF	420 (10.2%)	1.26 (1.02, 1.56)	0.030	
Conditioning regimen / ATG				
(MA)BU+CU+/-others (reference)	1053 (25.5%)	1.00 (., .)	.	<.001
(MA)ATG+BU+/-CY+/-FLU+/-others	698 (16.9%)	0.59 (0.47, 0.74)	<.001	
(MA)ATG+TBI+/-CY+/-others	308 (7.5%)	0.58 (0.42, 0.80)	<.001	
(MA)BU+FLU+/-others	396 (9.6%)	0.90 (0.70, 1.16)	0.410	
(MA)TBI+/-CY+/-others	1503 (36.4%)	1.09 (0.92, 1.30)	0.303	
(MA)TBI+ETOP+/-others	81 (2.0%)	0.95 (0.59, 1.54)	0.838	
(MA)others	87 (2.1%)	1.22 (0.79, 1.87)	0.364	
Disease				
AML (reference)	2235 (54.2%)	1.00 (., .)	.	<.001
ALL	780 (18.9%)	1.17 (0.96, 1.42)	0.112	
CML	546 (13.2%)	1.56 (1.29, 1.88)	<.001	
MDS	565 (13.7%)	1.21 (0.98, 1.48)	0.079	
Disease status				
Early (reference)	2009 (48.7%)	1.00 (., .)	.	0.020
Advanced	1051 (25.5%)	1.14 (0.97, 1.34)	0.101	
Intermediate	1015 (24.6%)	0.88 (0.74, 1.04)	0.123	
Missing	51 (1.2%)	1.53 (0.92, 2.55)	0.104	
Donor type				
8/8-matched (reference)	3152 (76.4%)	1.00 (., .)	.	<.001
7/8-matched	974 (23.6%)	1.75 (1.52, 2.02)	<.001	
Graft type				
BM (reference)	1348 (32.7%)	1.00 (., .)	.	0.002
PB	2778 (67.3%)	1.27 (1.09, 1.47)	0.002	
Sex				
Male (reference)	2252 (54.6%)	1.00 (., .)	.	.
Female	1874 (45.4%)	0.80 (0.70, 0.92)	0.001	
Unrelated donor age, years				
18-32 (reference)	1998 (48.4%)	1.00 (., .)	.	<.001
33-49	1759 (42.6%)	1.29 (1.12, 1.49)	<.001	
50+	261 (6.3%)	1.36 (1.05, 1.77)	0.020	
Missing	108 (2.6%)	1.62 (1.12, 2.33)	0.009	

Pairwise Comparisons

	HR (95% CI)	P-value
GVHD prophylaxis		
CsA + MMF vs Tac + MTX	2.31 (1.57 - 3.42)	<.001

Pairwise Comparisons

	<i>HR (95% CI)</i>	<i>P-value</i>
CsA + MMF vs CsA + MTX	2.27 (1.51 - 3.40)	<.001
CsA + MMF vs Tac + MMF	1.83 (1.19 - 2.81)	0.006
CsA + MTX vs Tac + MTX	1.02 (0.87 - 1.20)	0.806
CsA + MTX vs Tac + MMF	0.81 (0.63 - 1.03)	0.087
Tac + MMF vs Tac + MTX	1.26 (1.02 - 1.56)	0.030

Supplementary Table: Chronic GVHD; Myeloablative, Unrelated donor

Parameter	N(%)	Est (%95 CI)	P-value	Overall P-value
GVHD prophylaxis < 4 months				
Tac+MTX		1.00(., .)	.	0.0001
CSA+MMF		1.54 (0.79, 2.98)	0.203	
CSA+MTX		1.62 (1.35, 1.93)	<.001	
Tac+MMF		1.34 (1.04, 1.73)	0.022	
GVHD prophylaxis ≥ 4 months				
Tac+MTX		1.00(., .)	.	0.0001
CSA+MMF		0.92 (0.52, 1.63)	0.779	
CSA+MTX		0.85 (0.74, 0.98)	0.025	
Tac+MMF		1.47 (1.24, 1.75)	<.001	
Conditioning regimen / ATG				
(MA)BU+CU+/-others (reference)	1050 (25.5%)	1.00 (,)		<.001
(MA)ATG+BU+/-CY+/-FLU+/-others	695 (16.9%)	0.51 (0.44, 0.59)	<.001	
(MA)ATG+TBI+/-CY+/-others	306 (7.4%)	0.47 (0.38, 0.58)	<.001	
(MA)BU+FLU+/-others	394 (9.6%)	1.25 (1.07, 1.45)	0.005	
(MA)TBI+/-CY+/-others	1506 (36.6%)	0.83 (0.74, 0.93)	<.001	
(MA)TBI+ETOP+/-others	79 (1.9%)	0.94 (0.68, 1.32)	0.732	
(MA)others	87 (2.1%)	0.66 (0.46, 0.93)	0.018	
Disease				
AML (reference)	2228 (54.1%)	1.00 (,)		<.001
ALL	782 (19.0%)	0.85 (0.75, 0.98)	0.020	
CML	538 (13.1%)	1.19 (1.04, 1.35)	0.009	
MDS	569 (13.8%)	1.13 (0.99, 1.28)	0.063	
Donor-recipient sex match				
M-M (reference)	1561 (37.9%)	1.00 (,)		<.001
F-F	690 (16.8%)	0.95 (0.84, 1.08)	0.435	
F-M	685 (16.6%)	1.11 (0.98, 1.26)	0.093	
M-F	1181 (28.7%)	0.85 (0.76, 0.95)	0.003	
Unrelated donor age, years				
18-32 (reference)	2003 (48.7%)	1.00 (,)		0.014
33-49	1747 (42.4%)	1.03 (0.94, 1.13)	0.564	
50+	261 (6.3%)	1.28 (1.06, 1.53)	0.009	
Missing	106 (2.6%)	0.76 (0.56, 1.03)	0.078	
Year of transplant				
2000-2004 (reference)	1117 (27.1%)	1.00 (,)		<.001
2005-2008	1696 (41.2%)	1.00 (0.89, 1.12)	0.993	
2009-2013	1304 (31.7%)	0.76 (0.67, 0.87)	<.001	

Pairwise Comparisons

	<i>HR (95% CI)</i>	<i>P-value</i>
CsA+ MMF vs.CsA+MTX < 4 months	0.95 (0.49-1.86)	0.8854
Tac+ MMF vs.CsA+MTX < 4 months	0.83 (0.63-1.09)	0.1858
Tac+ MMF vs.CsA+ MMF < 4 months	0.87 (0.44-1.75)	0.7010
CsA+ MMF vs.CsA+MTX \geq 4 months	1.08 (0.60-1.93)	0.7968
Tac+ MMF vs.CsA+MTX \geq 4 months	1.73 (1.41-2.12)	<.0001
Tac+ MMF vs.CsA+ MMF \geq 4 months	1.60 (0.89-2.89)	0.1186

Supplementary Table: Overall Survival; Myeloablative, Unrelated donors

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
GVHD prophylaxis < 4 months				
Tac+MTX		1.00(., .)	.	0.0001
CSA+MMF		2.36 (1.67, 3.35)	<.001	
CSA+MTX		1.23 (1.08, 1.41)	0.002	
Tac+MMF		1.20 (1.01, 1.44)	0.044	
GVHD prophylaxis ≥ 4 months				
Tac+MTX		1.00(., .)	.	0.004
CSA+MMF		1.10 (0.64, 1.89)	0.730	
CSA+MTX		0.91 (0.79, 1.05)	0.221	
Tac+MMF		1.34 (1.12, 1.61)	0.001	
Age at transplant, years				
18-29 (reference)	896 (21.8%)	1.00 (,)		<.001
30-39	803 (19.5%)	1.00 (0.88, 1.14)	0.952	
40-49	1043 (25.3%)	1.19 (1.06, 1.34)	0.003	
50-64	1248 (30.3%)	1.37 (1.22, 1.54)	<.001	
65+	127 (3.1%)	1.50 (1.18, 1.90)	<.001	
Conditioning regimen / ATG				
(MA)BU+CY+/-others (reference)	1050 (25.5%)	1.00 (,)		<.001
(MA)ATG+BU+/-CY+/-FLU+/-others	695 (16.9%)	0.80 (0.70, 0.91)	<.001	
(MA)ATG+TBI+/-CY+/-others	306 (7.4%)	0.87 (0.73, 1.03)	0.099	
(MA)BU+FLU+/-others	394 (9.6%)	1.12 (0.96, 1.31)	0.150	
(MA)TBI+/-CY+/-others	1506 (36.6%)	1.06 (0.95, 1.17)	0.279	
(MA)TBI+ETOP+/-others	79 (1.9%)	1.07 (0.81, 1.43)	0.631	
(MA)others	87 (2.1%)	1.08 (0.84, 1.40)	0.540	
Disease status				
Early (reference)	2005 (48.7%)	1.00 (,)		<.001
Advanced	1056 (25.6%)	1.71 (1.56, 1.87)	<.001	
Intermediate	1005 (24.4%)	1.08 (0.98, 1.20)	0.126	
Missing	51 (1.2%)	1.14 (0.80, 1.61)	0.471	
Donor type				
8/8-matched (reference)	3147 (76.4%)	1.00 (,)		<.001
7/8-matched	970 (23.6%)	1.36 (1.24, 1.49)	<.001	
Donor-recipient CMV match				
-/- (reference)	1234 (30.0%)	1.00 (,)		0.024
+/+	845 (20.5%)	1.14 (1.02, 1.28)	0.023	
+-	414 (10.1%)	1.16 (1.00, 1.33)	0.044	
-/+	1432 (34.8%)	1.17 (1.06, 1.29)	0.002	
Missing	192 (4.7%)	1.11 (0.92, 1.34)	0.282	
Karnofsky performance score				
<90 (reference)	1248 (30.3%)	1.00 (,)		<.001
90-100	2593 (63.0%)	0.79 (0.73, 0.86)	<.001	

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
Missing	276 (6.7%)	0.83 (0.71, 0.98)	0.032	
Sex				
Male (reference)	2246 (54.6%)	1.00 (,)		<.001
Female	1871 (45.4%)	0.86 (0.80, 0.93)	<.001	
Sorror co-morbidity index				
0-1 (reference)	869 (21.1%)	1.00 (,)		0.004
>=2	818 (19.9%)	1.11 (0.97, 1.26)	0.121	
Missing	41 (1.0%)	0.67 (0.41, 1.09)	0.106	
N/A Prior to 2007	2389 (58.0%)	1.27 (1.08, 1.48)	0.003	
Unrelated donor age, years				
18-32 (reference)	2003 (48.7%)	1.00 (,)		<.001
33-49	1747 (42.4%)	1.17 (1.07, 1.27)	<.001	
50+	261 (6.3%)	1.42 (1.22, 1.66)	<.001	
Missing	106 (2.6%)	0.93 (0.70, 1.23)	0.604	
Year of transplant				
2000-2004 (reference)	1117 (27.1%)	1.00 (,)		0.013
2005-2008	1696 (41.2%)	0.97 (0.87, 1.08)	0.573	
2009-2013	1304 (31.7%)	0.78 (0.65, 0.93)	0.007	

Pairwise Comparisons

	HR (95%CI)	P-value
CsA+ MMF vs.CsA+MTX < 4 months	1.92 (1.34-2.75)	0.0004
Tac+ MMF vs.CsA+MTX < 4 months	0.98 (0.80-1.20)	0.8210
Tac+ MMF vs.CsA+ MMF < 4 months	0.51 (0.35-0.74)	0.0005
CsA+ MMF vs.CsA+MTX \geq 4 months	1.20 (0.69-2.08)	0.5122
Tac+ MMF vs.CsA+MTX \geq 4 months	1.47 (1.18-1.81)	0.0004
Tac+ MMF vs.CsA+ MMF \geq 4 months	1.22 (0.70-2.14)	0.4881

Supplementary Table: Disease free survival Myeloablative, Unrelated donors

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
GVHD prophylaxis				
Tac + MTX (reference)	2652 (64.9%)	1.00 (., .)	.	0.100
CsA + MMF	64 (1.6%)	1.41 (1.04, 1.91)	0.028	
CsA + MTX	954 (23.4%)	1.04 (0.95, 1.15)	0.389	
Tac + MMF	415 (10.2%)	1.08 (0.95, 1.22)	0.252	
Age at transplant, years				
18-29 (reference)	894 (21.9%)	1.00 (., .)	.	<.001
30-39	791 (19.4%)	0.95 (0.84, 1.07)	0.416	
40-49	1039 (25.4%)	1.15 (1.03, 1.29)	0.017	
50-64	1233 (30.2%)	1.31 (1.17, 1.47)	<.001	
65+	128 (3.1%)	1.65 (1.31, 2.08)	<.001	
Conditioning regimen / ATG				
(MA)BU+CU+/-others (reference)	1033 (25.3%)	1.00 (., .)	.	0.007
(MA)ATG+BU+/-CY+/-FLU+/-others	700 (17.1%)	1.10 (0.97, 1.25)	0.119	
(MA)ATG+TBI+/-CY+/-others	308 (7.5%)	1.16 (0.98, 1.38)	0.083	
(MA)BU+FLU+/-others	392 (9.6%)	1.07 (0.92, 1.24)	0.403	
(MA)TBI+/-CY+/-others	1487 (36.4%)	1.22 (1.10, 1.36)	<.001	
(MA)TBI+ETOP+/-others	78 (1.9%)	1.12 (0.83, 1.50)	0.451	
(MA)others	87 (2.1%)	1.35 (1.05, 1.73)	0.020	
Disease				
AML (reference)	2224 (54.4%)	1.00 (., .)	.	0.002
ALL	773 (18.9%)	1.07 (0.96, 1.20)	0.230	
CML	533 (13.0%)	1.10 (0.97, 1.24)	0.136	
MDS	555 (13.6%)	0.81 (0.71, 0.92)	0.001	
Disease status				
Early (reference)	1996 (48.9%)	1.00 (., .)	.	<.001
Advanced	1041 (25.5%)	2.04 (1.86, 2.24)	<.001	
Intermediate	1002 (24.5%)	1.14 (1.03, 1.25)	0.010	
Missing	46 (1.1%)	1.30 (0.89, 1.91)	0.175	
Donor type				

7/8-matched URD (reference)	947 (23.2%)	1.00 (., .)	.	<.001
8/8-matched URD	3138 (76.8%)	0.82 (0.75, 0.90)		<.001
Karnofsky performance score				
<90 (reference)	1246 (30.5%)	1.00 (., .)	.	<.001
90-100	2570 (62.9%)	0.79 (0.72, 0.86)		<.001
Missing	269 (6.6%)	0.81 (0.68, 0.95)		0.009
Sorror co-morbidity index				
0-1 (reference)	868 (21.2%)	1.00 (., .)	.	0.011
>=2	822 (20.1%)	1.10 (0.97, 1.25)	0.126	
Missing	40 (1.0%)	0.69 (0.43, 1.11)	0.127	
N/A Prior to 2007	2355 (57.6%)	1.16 (1.04, 1.30)		0.006
Unrelated donor age, years				
18-32 (reference)	1988 (48.7%)	1.00 (., .)	.	0.004
33-49	1732 (42.4%)	1.09 (1.01, 1.19)	0.028	
50-60	257 (6.3%)	1.29 (1.11, 1.50)		0.001
Missing	108 (2.6%)	0.91 (0.70, 1.19)	0.510	

Pairwise comparisons		
	<i>HR (%95 CI)</i>	<i>P-value</i>
CsA + MMF vs Tac + MTX	1.41 (1.04 - 1.91)	0.028
CsA + MMF vs CsA + MTX	1.35 (0.99 - 1.84)	0.060
CsA + MMF vs Tac + MMF	1.31 (0.94 - 1.81)	0.106
CsA + MTX vs Tac + MTX	1.04 (0.95 - 1.15)	0.389
CsA + MTX vs Tac + MMF	0.97 (0.84 - 1.12)	0.679
Tac + MMF vs Tac + MTX	1.08 (0.95 - 1.22)	0.252

Supplementary Table: Treatment-related Mortality; Myeloablative, Unrelated donor

Parameter	N(%)	Est (%95 CI)	P-value	Overall P-value
GVHD prophylaxis < 4 months				
Tac+MTX		1.00(., .)	.	0.0001
CSA+MMF		3.09 (2.00, 4.77)	<.001	
CSA+MTX		1.24 (1.02, 1.51)	0.030	
Tac+MMF		1.02 (0.77, 1.36)	0.896	
GVHD prophylaxis ≥ 4 months				
Tac+MTX		1.00(., .)	.	0.011
CSA+MMF		0.89 (0.42, 1.90)	0.763	
CSA+MTX		1.00 (0.84, 1.20)	0.979	
Tac+MMF		1.45 (1.16, 1.81)	0.001	
Age at transplant, years				
18-29 (reference)	894 (21.9%)	1.00 (,)		<.001
30-39	791 (19.4%)	1.10 (0.92, 1.31)	0.309	
40-49	1038 (25.4%)	1.33 (1.12, 1.57)	<.001	
50-64	1233 (30.2%)	1.71 (1.44, 2.02)	<.001	
65+	128 (3.1%)	2.00 (1.41, 2.83)	<.001	
Conditioning regimen / ATG				
(MA)BU+CU+/-others (reference)	1032 (25.3%)	1.00 (,)		<.001
(MA)ATG+BU+/-CY+/-FLU+/-others	700 (17.1%)	0.93 (0.77, 1.12)	0.448	
(MA)ATG+TBI+/-CY+/-others	308 (7.5%)	1.11 (0.86, 1.43)	0.408	
(MA)BU+FLU+/-others	392 (9.6%)	0.98 (0.78, 1.23)	0.867	
(MA)TBI+/-CY+/-others	1487 (36.4%)	1.35 (1.16, 1.56)	<.001	
(MA)TBI+ETOP+/-others	78 (1.9%)	1.75 (1.22, 2.52)	0.002	
(MA)others	87 (2.1%)	1.36 (0.93, 2.00)	0.112	
Disease				
AML (reference)	2223 (54.4%)	1.00 (,)		0.004
ALL	773 (18.9%)	1.08 (0.92, 1.27)	0.346	
CML	533 (13.1%)	1.32 (1.12, 1.55)	<.001	
MDS	555 (13.6%)	1.19 (1.00, 1.42)	0.048	
Disease status				
Early (reference)	1995 (48.8%)	1.00 (,)		<.001
Advanced	1041 (25.5%)	1.33 (1.16, 1.53)	<.001	
Intermediate	1002 (24.5%)	1.00 (0.87, 1.14)	0.945	
Missing	46 (1.1%)	1.06 (0.63, 1.79)	0.820	
Donor type				
8/8-matched (reference)	3137 (76.8%)	1.00 (,)		<.001
7/8-matched	947 (23.2%)	1.43 (1.27, 1.62)	<.001	
Donor-recipient CMV match				
-/- (reference)	1220 (29.9%)	1.00 (,)		0.006
+/+	847 (20.7%)	1.20 (1.02, 1.41)	0.028	
+/-	410 (10.0%)	1.17 (0.96, 1.43)	0.114	

Parameter	N(%)	Est (%95 CI)	P-value	Overall P-value
-/+	1415 (34.6%)	1.31 (1.14, 1.51)	<.001	
Missing	192 (4.7%)	1.21 (0.93, 1.56)	0.157	
Karnofsky performance score				
<90 (reference)	1245 (30.5%)	1.00 (,)		<.001
90-100	2570 (62.9%)	0.76 (0.67, 0.85)	<.001	
Missing	269 (6.6%)	0.67 (0.53, 0.86)	0.001	
Race				
Caucasian (reference)	3756 (92.0%)	1.00 (,)		0.032
Missing	102 (2.5%)	1.44 (1.07, 1.94)	0.015	
Non-Caucasian	226 (5.5%)	1.15 (0.91, 1.46)	0.252	
Sex				
Male (reference)	2224 (54.5%)	1.00 (,)		0.001
Female	1860 (45.5%)	0.83 (0.74, 0.93)	0.001	
Unrelated donor age, years				
18-32 (reference)	1988 (48.7%)	1.00 (,)		<.001
33-49	1732 (42.4%)	1.24 (1.11, 1.39)	<.001	
50+	257 (6.3%)	1.49 (1.21, 1.85)	<.001	
Missing	107 (2.6%)	0.81 (0.54, 1.22)	0.321	
Year of transplant				
2000-2004 (reference)	1098 (26.9%)	1.00 (,)		0.012
2005-2008	1677 (41.1%)	0.92 (0.79, 1.06)	0.223	
2009-2013	1309 (32.1%)	0.77 (0.65, 0.92)	0.004	

Pairwise Comparisons

	HR (95%CI)	P-value
CsA+ MMF vs.CsA+MTX < 4 months	2.49 (1.58-3.91)	<.0001
Tac+ MMF vs.CsA+MTX < 4 months	0.82 (0.60-1.26)	0.2209
Tac+ MMF vs.CsA+ MMF < 4 months	0.33 (0.20-0.54)	<.0001
CsA+ MMF vs.CsA+MTX \geq 4 months	0.89 (0.41-1.91)	0.7609
Tac+ MMF vs.CsA+MTX \geq 4 months	1.45 (1.12-1.87)	0.0053
Tac+ MMF vs.CsA+ MMF \geq 4 months	1.63 (0.75-2.54)	0.2196

Supplementary Tables: Relapse, Myeloablative, Unrelated donor

Parameter	N(%)	Est (95% CI)	P-value	Overall P-value
GVHD prophylaxis				
Tac + MTX (reference)	2652 (64.9%)	1.00 (., .)	.	0.729
CsA + MMF	64 (1.6%)	0.81 (0.50, 1.32)	0.398	
CsA + MTX	954 (23.4%)	0.97 (0.85, 1.12)	0.699	
Tac + MMF	415 (10.2%)	0.93 (0.78, 1.12)	0.449	
Age at transplant, years				
18-29 (reference)	894 (21.9%)	1.00 (., .)	.	0.042
30-39	791 (19.4%)	0.85 (0.72, 1.01)	0.066	
40-49	1039 (25.4%)	1.02 (0.88, 1.20)	0.767	
50-64	1233 (30.2%)	1.03 (0.87, 1.20)	0.757	
65+	128 (3.1%)	1.33 (0.98, 1.83)	0.070	
Conditioning regimen / ATG				
(MA)BU+CU+/-others (reference)	1033 (25.3%)	1.00 (., .)	.	0.016
(MA)ATG+BU+/-CY+/-FLU+/-others	700 (17.1%)	1.23 (1.04, 1.46)	0.013	
(MA)ATG+TBI+/-CY+/-others	308 (7.5%)	1.14 (0.91, 1.44)	0.261	
(MA)BU+FLU+/-others	392 (9.6%)	1.16 (0.94, 1.43)	0.157	
(MA)TBI+/-CY+/-others	1487 (36.4%)	1.11 (0.95, 1.28)	0.181	
(MA)TBI+ETOP+/-others	78 (1.9%)	0.55 (0.33, 0.93)	0.026	
(MA)others	87 (2.1%)	1.36 (0.97, 1.89)	0.070	
Disease				
AML (reference)	2224 (54.4%)	1.00 (., .)	.	<.001
ALL	773 (18.9%)	1.08 (0.92, 1.26)	0.363	
CML	533 (13.0%)	0.83 (0.69, 1.01)	0.059	
MDS	555 (13.6%)	0.55 (0.46, 0.67)	<.001	
Disease status				
Early (reference)	1996 (48.9%)	1.00 (., .)	.	<.001
Advanced	1041 (25.5%)	2.99 (2.64, 3.40)	<.001	
Intermediate	1002 (24.5%)	1.32 (1.15, 1.52)	<.001	
Missing	46 (1.1%)	1.66 (0.95, 2.91)	0.078	
Karnofsky performance score				
<90 (reference)	1246 (30.5%)	1.00 (., .)	.	0.001

90-100	2570 (62.9%)	0.81 (0.72, 0.91)	<.001
Missing	269 (6.6%)	0.92 (0.74, 1.14)	0.455

Pairwise comparisons

	<i>HR (%95 CI)</i>	<i>P-value</i>
CsA + MMF vs Tac + MTX	0.81 (0.50 - 1.32)	0.398
CsA + MMF vs CsA + MTX	0.83 (0.50 - 1.37)	0.472
CsA + MMF vs Tac + MMF	0.87 (0.52 - 1.45)	0.592
CsA + MTX vs Tac + MTX	0.97 (0.85 - 1.12)	0.699
CsA + MTX vs Tac + MMF	1.04 (0.84 - 1.29)	0.692
Tac + MMF vs Tac + MTX	0.93 (0.78 - 1.12)	0.449