

Supplementary Table 1. Univariate analysis for relapse, OS and CRFS

| Patient and Graft Characteristics | Relapse | | OS | | CRFS | |
|---------------------------------------|---------------|---------|---------------|---------|---------------|---------|
| | HR (95%CI) | P value | HR (95%CI) | P value | HR (95%CI) | P value |
| Sex | | 0.11 | | | | |
| Male | Ref. | | Ref. | 0.63 | Ref. | 1.00 |
| Female | 0.7 (0.4-1.1) | | 1.1 (0.8-1.5) | | 1 (0.7-1.4) | |
| D/R gender combination | | | | | | |
| Female to Male | Ref. | 0.85 | Ref. | 0.14 | Ref. | 0.15 |
| Other | 1.1 (0.6-1.9) | | 1.4 (0.9-2.2) | | 1.4 (0.9-2.1) | |
| Age (years) | | | | | | |
| < 40 (n =) | Ref. | 0.87 | Ref. | 0.09 | Ref. | 0.16 |
| ≥40 (n =) | 1 (0.5-1.7) | | 1.5 (0.9-2.4) | | 1.4 (0.9-2.1) | |
| Donor | | | | | | |
| Related donor | Ref. | 0.37 | Ref. | 0.33 | Ref. | 0.32 |
| Non-related donor | 0.8 (0.5-1.3) | | 1.2 (0.9-1.6) | | 1.2 (0.9-1.6) | |
| HLA compatibility | | | | | | |
| Identical | Ref. | 0.39 | Ref. | 0.24 | Ref. | 0.34 |
| Non-identical | 0.8 (0.5-1.4) | | 1.2 (0.9-1.7) | | 1.2 (0.8-1.6) | |
| Diagnosis | | | | | | |
| Acute myeloid leukemia | Ref. | 0.19 | Ref. | 0.96 | Ref. | 0.68 |
| Myelodysplastic syndrome | 0.7 (0.4-1.2) | | 1 (0.7-1.4) | | 0.9 (0.7-1.3) | |
| Transplant year | | | | | | |
| | Ref. | 0.03 | Ref. | 0.85 | Ref. | 0.92 |
| | 1.1 (1-1.2) | | 1 (1-1.1) | | 1.0 (1-1.1) | |
| HCT-CI | | | | | | |
| 0 | Ref. | 0.26 | Ref. | < 0.001 | Ref. | 0.001 |
| 1-2 | 0.6 (0.3-1.2) | | 1 (0.6-1.6) | | 0.8 (0.5-1.3) | |
| ≥3 | 1 (0.6-1.6) | | 1.9 (1.3-2.9) | | 1.5 (1-2.3) | |
| HCT-CI/age | | | | | | |
| 0 | Ref. | 0.90 | Ref. | < 0.001 | Ref. | 0.001 |
| 1-2 | 1 (0.3-2.8) | | 2.1 (0.6-6.6) | | 1.1 (0.5-2.5) | |
| 3-4 | 0.9 (0.3-2.7) | | 3.2 (1-10.1) | | 1.6 (0.7-3.6) | |
| ≥5 | 1.2 (0.4-3.4) | | 5 (1.6-16.1) | | 2.3 (1-5.2) | |
| Conditioning regimen | | | | | | |
| TBI based | Ref. | 0.56 | Ref. | 0.20 | Ref. | 0.23 |
| Chemo based | 0.9 (0.5-1.4) | | 1.3 (0.9-1.8) | | 1.2 (0.9-1.7) | |
| CD34+ x 10⁶/kg dose | | | | | | |
| < 7.6x10 ⁶ /kg | Ref. | 0.84 | Ref. | 0.60 | Ref. | 0.52 |
| ≥ 7.6x10 ⁶ /kg | 1.2 (0.7-1.8) | | 0.9 (0.7-1.3) | | 0.9 (0.7-1.3) | |

| CD34+ selection method | | | | | | |
|-------------------------------|---------------|------|-------------|------|-------------|------|
| Clinimacs ® | Ref. | 0.10 | Ref. | 0.90 | Ref. | 0.80 |
| OTHER | 0.7 (0.4-1.1) | | 1 (0.7-1.4) | | 1 (0.7-1.3) | |

Abbreviations: NRM, non-relapse mortality; OS, overall survival, CRFS Chronic GVHD-Free, Relapse-Free Survival; D/R, donor/recipient; HCT-CI, Hematopoietic Cell Transplantation Comorbidity Index.