Table 4. Univariate and multivariate analysis of factors affecting GFFS and OS

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Factors |  | GFFS |  |  |  | OS |  |  |
| Univariate | *P* | Multivariate | *P* | Univariate | *P* | Multivariate | *P* |
| Rate at 6 yrs (%) | HR (95% CI) | Rate at 6 yrs (%) | HR (95% CI) |
| Donor-type group |  | < 0.011 |  | < 0.011 |  | 0.021 |  | 0.041 |
| WM-URD vs. MSD | 55.5% vs. 76.7% | < 0.01 | 1.78 (1.02-3.13) | 0.04 | 86.2% vs. 93.9% | 0.18 | 1.69 (0.65-4.40) | 0.28 |
| PM-URD vs. MSD | 51.5% vs. 76.7% | < 0.01 | 2.44 (1.25-4.76) | < 0.01 | 78.3% vs. 93.9% | < 0.01 | 3.27 (1.21-8.85) | 0.02 |
| Age (≤ 40 yrs vs. > 40 yrs) | 76.8% vs. 64.3% | 0.06 | 0.79 (0.48-1.32) | 0.37 | 91.8% vs. 88.7% | 0.46 |  |  |
| Sex (Male vs. Female) | 70.1% vs. 66.1% | 0.60 |  |  | 90.5% vs. 91.1% | 0.86 |  |  |
| Disease severity (SAA vs. VSAA) | 70.8% vs. 63.9% | 0.32 |  |  | 91.8% vs. 88.1% | 0.40 |  |  |
| Presence of PNH clone (Yes vs. No) | 68.2% vs. 68.8% | 0.90 |  |  | 88.5% vs. 91.0% | 0.56 |  |  |
| Serum ferritin level† (≤ 1000 ng/mL / > 1000 ng/mL) | 72.2% vs. 65.9% | 0.35 |  |  | 92.6% vs. 88.1% | 0.43 |  |  |
| Preceding IST history (Yes vs. No) | 61.3% vs. 76.7% | 0.01 | 1.16 (68.7-1.98) | 0.58 | 88.1% vs. 93.6% | 0.15 |  |  |
| Heavily transfusion history (> 100 units) (Yes vs. No) | 66.2% vs. 81.1% | 0.13 |  |  | 89.3% vs. 97.7% | 0.09 | 3.76 (0.50-28.34) | 0.02 |
| Interval from diagnosis to transplant (≤ 12mo / > 12 mo) | 73.1% vs. 66.9% | 0.28 |  |  | 93.3% vs. 89.6% | 0.35 |  |  |
| HCT-CI (< 3 / ≥ 3) | 69.5% vs. 67.6% | 0.71 |  |  | 92.0% vs. 88.9% | 0.57 |  |  |
| ABO blood type mismatch (Yes vs. No) | 68.0% vs. 69.5% | 0.80 |  |  | 90.2% vs. 91.2% | 0.87 |  |  |
| Donor-recipient sex mismatch (Female to male / Others) | 65.3% vs. 69.1% | 0.90 |  |  | 89.1% vs. 90.9% | 0.89 |  |  |
| Stem cell source (BM / PBSC) | 71.7% vs. 64.5% | 0.20 |  |  | 90.6% vs. 90.2% | 0.78 |  |  |

1 indicate the result of Wald test for overall p value.

† Pre-transplant serum ferritin level were available in 245 (95.0%) patients.

*GFFS* graft-versus-host disease-free, failure-free survival, *OS* overall survival, *HR* hazard ratio, *CI* confidence interval, *WM-URD* well-matched unrelated donor, *MSD* matched sibling donor, *PM-URD* partially matched unrelated donor, *SAA* severe aplastic anemia, *VSAA* very severe aplastic anemia, *PNH* paroxysmal nocturnal hemoglobinuria, *IST* immunosuppressive treatment, *HCT-CI* hematopoietic cell transplantation-specific comorbidity index, *BM* bone marrow, *PBSC* peripheral blood stem cell