**Supplementary Table 1**. Characteristics of patient, disease, and transplantation according to administration and timing of G-CSF initiation in BMT.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | None | Day 0-4 | Day 5-10 | *P* |
| Number of patients | 336 | 252 | 1193 |  |
| Median recipient age, years (IQR) | 57.5 (48-63) | 57.5 (47-64) | 57 (47-63) | 0.952 |
| Recipient age, number (%) |  |  |  | 0.770 |
| < 60 years | 198 (58.9) | 142 (56.3) | 679 (56.9) |  |
| ≥ 60 years | 138 (41.1) | 110 (43.7) | 514 (43.1) |  |
| Recipient sex, number (%) |  |  |  | 0.908 |
| Male | 221 (65.8) | 166 (65.9) | 797 (66.9) |  |
| Female | 115 (34.2) | 86 (34.1) | 395 (33.1) |  |
| Missing | 0 | 0 | 1 |  |
| HCT-CI, number (%) |  |  |  | 0.709 |
| 0-2 | 269 (80.8) | 206 (81.7) | 950 (79.6) |  |
| ≥ 3 | 64 (19.2) | 46 (18.3) | 243 (20.4) |  |
| Missing | 3 | 0 | 0 |  |
| Karyotype, number (%) |  |  |  | 0.079 |
| Good | 128 (38.1) | 125 (49.6) | 467 (39.1) |  |
| Intermediate | 66 (19.6) | 44 (17.5) | 233 (19.5) |  |
| Poor | 118 (35.1) | 69 (27.4) | 421 (35.3) |  |
| Unevaluable | 24 (7.1) | 14 (5.6) | 72 (6.) |  |
| Disease risk at HCT, number (%) |  |  |  | 0.056 |
| Low-risk | 101 (33.9) | 101 (43.7) | 391 (36.6) |  |
| High-risk | 197 (66.1) | 130 (56.3) | 677 (63.4) |  |
| Missing | 38 | 21 | 125 |  |
| Conditioning regimen, number (%) |  |  |  | **0.006** |
| MAC | 231 (68.8) | 141 (56.0) | 754 (63.2) |  |
| RIC | 105 (31.2) | 111 (44.0) | 439 (36.8) |  |
| GVHD prophylaxis, number (%) |  |  |  | **<0.001** |
| CI + MTX | 308 (91.9) | 217 (86.1) | 1106 (92.9) |  |
| CI + MMF | 5 (1.5) | 19 (7.5) | 41 (3.4) |  |
| Others | 22 (6.6) | 16 (6.3) | 43 (3.6) |  |
| Missing | 1 | 0 | 3 |  |
| ATG, number (%) |  |  |  | 0.880 |
| No use | 283 (84.2) | 216 (85.7) | 1014 (85.0) |  |
| Use of ATG | 53 (15.8) | 36 (14.3) | 179 (15.0) |  |
| PTCy, number (%) |  |  |  | 0.170 |
| No PTCy | 335 (99.7) | 251 (99.6) | 1177 (98.7) |  |
| Use of PTCy | 1 (0.3) | 1 (0.4) | 16 (1.3) |  |
| Donor type, number (%) |  |  |  | 0.405 |
| Related | 38 (12.1) | 26 (11.2) | 158 (14.0) |  |
| Unrelated | 276 (87.9) | 207 (88.8) | 970 (86.0) |  |
| Missing | 22 | 19 | 65 |  |
| HLA disparity, number (%) |  |  |  | 0.777 |
| Match | 275 (81.8) | 211 (83.7) | 977 (81.9) |  |
| Mismatch | 61 (18.2) | 41 (16.3) | 216 (18.1) |  |
| HCT year, number (%) |  |  |  | 0.894 |
| 2013-2017 | 175 (52.1) | 136 (54.0) | 635 (53.2) |  |
| 2018-2022 | 161 (47.9) | 116 (46.0) | 558 (46.8) |  |

G-CSF, granulocyte colony-stimulating factor; BMT, bone marrow transplantation; IQR, interquartile range; HCT-CI, hematopoietic cell transplantation-specific comorbidity index; HCT, hematopoietic cell transplantation; MAC, myeloablative conditioning; RIC, reduced-intensity conditioning; GVHD, graft-versus-host disease; CI, calcineurin inhibitor; MTX, methotrexate; MMF, mycophenolate mofetil; ATG, antithymocyte globulin; PTCy, post-transplant cyclophosphamide, HLA, human leukocyte antigen.

The P-values in bold are statistically significant (<0.05).

The number of HLA disparities between recipient and donor was defined based on low-resolution HLA-A, -B, and -DR matching in the graft-versus-host direction.