

Supplemental Table 1. Patient and transplant characteristics

| | All patients (N=134) | HHV-6 encephalitis | | P Value |
|----------------------------------|-------------------------|--------------------|---------------------|--------------|
| | | Positive (N=14) | Negative (N=120) | |
| Median age (years) [range] | 53 [19-72] | 46 [28-68] | 52 [20-70] | 0.951 |
| Patient Age | | | | |
| <50 years | 57 | 8 | 49 | 0.266 |
| ≥50 years | 77 | 6 | 71 | |
| Gender | | | | |
| Male | 88 | 10 | 78 | 0.771 |
| Female | 46 | 4 | 42 | |
| Disease | | | | |
| AML | 59 | 9 | 50 | 0.167 |
| ALL | 31 | 0 | 31 | |
| MDS/MPN | 22 | 3 | 19 | |
| Malignant Lymphoma | 14 | 1 | 13 | |
| Adult T-cell leukemia/lymphoma | 3 | 0 | 3 | |
| Others | 5 | 1 | 4 | |
| Refined-DRI | | | | |
| Very High/High | 76 | 11 | 65 | 0.095 |
| Intermediate | 58 | 3 | 55 | |
| Donor source | | | | |
| Related BM or PB, HLA match | 16 | 0 | 16 | 0.145 |
| Related BM or PB, HLA mismatch | 32 | 1 | 31 | |
| Unrelated BM or PB, HLA match | 13 | 2 | 11 | |
| Unrelated BM or PB, HLA mismatch | 13 | 1 | 12 | |
| CB | 60 | 10 | 50 | |
| Conditioning regimen | | | | |
| MAC | 108 | 11 | 97 | 0.735 |
| RIC | 26 | 3 | 23 | |
| GVHD prophylaxis | | | | |
| TAC alone | 17 | 5 | 12 | 0.018 |
| Multiple drugs combination | 117 | 9 | 108 | |

AML acute myeloid leukemia, ALL acute lymphoblastic leukemia, BM bone marrow, CB cord blood, DRI disease risk index, GVHD graft-versus-host disease, HLA human leukocyte antigen, MAC myeloablative conditioning, MDS myelodysplastic syndrome, MPN myeloproliferative neoplasm, PB peripheral blood stem cell, RIC reduced-intensity conditioning, TAC tacrolimus.

Supplemental Table 2. Classification of GVHD prophylaxis regimens

| | Total allo-HSCT (N=134) | | |
|------------------------|----------------------------|-----------------|---------------|
| | BMT (N=29) | PBSCT (N=45) | CBT (N=60) |
| TAC+sMTX (N=44) | 25 | 6 | 13 |
| TAC+sMTX+ATG (N=10) | 4 | 6 | 0 |
| TAC+MMF (N=33) | 0 | 1 | 32 |
| TAC alone (N=17) | 0 | 2 | 15 |
| PTCY+TAC+MMF (N=30) | 0 | 30 | 0 |

Allo-HSCT allogeneic hematopoietic stem cell transplantation, *ATG* anti-thymocyte globulin, *BMT* bone marrow transplantation, *CBT* cord blood transplantation, *MMF* mycophenolate mofetil, *PBSCT* peripheral blood stem cell transplantation, *PTCY* post-transplantation cyclophosphamide, *sMTX* short-term methotrexate, *TAC* tacrolimus.

Supplemental Table 3. Univariate and multivariate analysis of risk factors for the cumulative incidence of HHV-6 encephalitis

| | Univariate analysis | | Multivariate analysis | |
|-----------------------------------|----------------------|------------------|-----------------------|------------------|
| | Hazard ratio (95%CI) | P Value | Hazard ratio (95%CI) | P Value |
| Male Recipient | 0.207 (0.412-4.149) | 0.649 | - | - |
| Refined-DRI : Very High / High | 3.157 (0.854-10.470) | 0.076 | 2.959 (0.811-10.800) | 0.1005 |
| HLA-Mismatched Donor | 0.548 (0.403-7.471) | 0.459 | - | - |
| CBT | 4.748 (1.087-10.490) | 0.029 | 2.457 (0.658-9.179) | 0.1811 |
| MAC | 0.033 (0.254-3.113) | 0.856 | - | - |
| TAC alone | 8.064 (1.537-13.830) | 0.005 | 1.981 (0.485-8.090) | 0.341 |
| ES / PIR | 3.277 (0.909-7.210) | 0.07 | 1.130 (0.307-4.165) | 0.8539 |
| Hyponatremia | 9.615 (2.946-31.380) | 0.0001766 | 9.501 (2.534-35.620) | 0.0008399 |

CBT cord blood transplantation, *DRI* disease risk index, *ES* engraftment syndrome, *HLA* human leukocyte antigen, *MAC* myeloablative conditioning, *PIR* pre-engraftment immune reaction, *TAC* tacrolimus.