Supplementary Table 2. Cumulative incidence of individual failure events and crude incidence of infectious complications.

	ATG 6 mg/kg (N=43)	ATG 9 mg/kg (N=87)	*P*
100-day acute graft-versus-host disease, grade III-IV	23.3%	16.1%	0.023[a]
2-year chronic graft-versus-host disease requiring systemic treatment	41.2%	21.0%	0.025[a]
2-year non-relapse mortality	16.6%	24.3%	0.517[a]
2-year relapse	28.8%	33.7%	0.311[a]
Fungal infection	2.3%	25.3%	0.003[b]
CMV infection	0	3.4%	0.541[b]

[a]*P*-value by Gray test. [b]*P*-value by χ^2 test.
Abbreviations: ATG, antithymocyte globulin; CMV, cytomegalovirus.

Kaplan-Meier method, and compared with the log-rank test. Cumulative incidence was estimated for individual failure events and compared using the Gray test, with death without GVHD being a competing risk for GVHD, relapse for NRM, and NRM for relapse. Cox proportional hazards models were applied to identify risk factors significantly related to survival, in which variables with statistical significance from the univariate analyses were subsequently used to construct multivariate analyses, along with the donor types. All *P*-values were 2-sided and values of <0.05 were considered statistically significant. The analyses were done with two statistical software packages: SPSS version 23.0 (IBM Corp, Armonk, NY, USA) and R 3.5.1.

Supplementary Results

Baseline characteristics

The characteristics of the included 130 patients are shown in Supplementary Table 1. Overall, the median recipient age was 52 years (range, 16-68 yr) and 52.3% of the patients were males. Median HCT-CI scores were 0 both in the overall and in each of the two groups. The most common diagnosis was acute myeloid leukemia (AML, 60.0%), followed by acute lymphoblastic leukemia (ALL, 25.4%), and myelodysplastic syndrome (MDS, 14.6%). The DRI was low/intermediate in 76.2% and high/very high in 23.8% of the patients. Patients received a HCT after a median of 5.92 months (range, 2.07-197.43 mo) from their diagnosis of hematologic malignancy, and about 16.2% of the cases consisted of the combination of a male recipient and a female donor. The median dose of the infused $CD34^+$ cells was 5.14×10^6/kg (range, $0.97\text{-}12.68\times10^6$/kg). Although these characteristics were generally comparable among the groups with different anti-thymocyte globulin (ATG) doses, haploidentical familial donors (HIDs) were more common in the 6 mg/kg group than in the 9 mg/kg groups, with 58.1% vs. 34.5%, respectively (P=0.008). In addition, tacrolimus or methotrexate was more frequently used in the 6 mg/kg group than in the 9 mg/kg groups, with 64.4% vs. 27.9% for tacrolimus ($P<0.001$) and 79.1% vs. 51.7% (P=0.005) for methotrexate, respectively.

Incidence of infectious complications

Both fungal infection and cytomegalovirus infection were less frequently observed with a total ATG dose of 6 mg/kg compared to 9 mg/kg, with a crude incidence of 2% vs. 25% (P=0.003) and 0 vs. 3% (P=0.541), respectively (Supplementary Table 2).

References

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