

**SUPPLEMENTARY LEGEND:**

**Supplementary Table 1:** Mutation frequency by sex of the patient

**Supplementary Table 2:** Details of conditioning regimens by conditioning intensity

**Supplementary Table 3:** Summary of HCT outcomes

**Supplementary Figure 1:** Association of age at HCT and intensity of conditioning regimen

**Supplementary Table 1: Mutation frequency by sex of the patient**

	<b>Women (n=34)</b>	<b>Men (n=56)</b>	<b>P-value</b>
<b>Total number of mutations, median (range)</b>	3 (0-5)	4 (0-7)	<b>0.015</b>
<b>High-risk NGS:</b>			0.19
<b>No</b>	15 (44%)	17 (30%)	
<b>Yes</b>	19 (56%)	39 (70%)	
<b>ERS mutation</b>			0.79
<b>No</b>	24 (71%)	38 (68%)	
<b>Yes</b>	10 (29%)	18 (32%)	

**Supplementary Table 2: Details of conditioning regimens by conditioning intensity**

<b>Myeloablative conditioning (n=22/120, 18%)</b>	Fludarabine TBI (1200cGy)	9
	Fludarabine Busulfan Thiotepa	4
	Fludarabine Melphalan Thiotepa	3
	Busulfan Cyclophosphamide	2
	Busulfan Fludarabine	1
	Busulfan Fludarabine Cyclophosphamide	1
	Fludarabine Cyclophosphamide TBI (1050 cGy)	1
	Fludarabine Melphalan TBI1200	1
<b>Reduced-intensity conditioning (n=44/120, 37%)</b>	Fludarabine Melphalan TBI (200 cGy)	15
	Fludarabine Cyclophosphamide TBI (400 cGy)	14
	Busulfan Fludarabine	6
	Busulfan Fludarabine TBI (200cGy)	4
	Fludarabine Melphalan	2
	Fludarabine Busulfan Thiotepa	2
	Fludarabine Melphalan Thiotepa	1
<b>Non-myeloablative conditioning (n=54/120, 45%)</b>	Fludarabine Cyclophosphamide TBI (200 cGy)	52
	Fludarabine Cyclophosphamide TBI (300 cGy)	2

**Supplementary Table 3: Summary of HCT outcomes (N=120)**

<b>Outcomes</b>		<b>N (%) or median (range) or Cumulative incidence (95%CI)</b>
Number of patients achieving ANC engraftment		111 (92.5%)
Median time to ANC engraftment in days (n=111)		18 (IQ range, 16-22)
Number of patients achieving platelet engraftment		103 (85.8%)
Median time to platelet engraftment in days (n=103)		31 (IQ range, 22.5 – 41)
Graft failure		7 (5.8%)
Cumulative incidence of NRM:	1 year 3 years	20% (13-28%) 25% (17-34%)
Cumulative incidence of relapse:	1 year 3 years	20% (13-27%) 27% (18-36%)
Cumulative incidence of grade 2-4 acute GVHD:	Day +100 1 year	28% (20-37%) 35% (27-44%)
Cumulative incidence of grade 3-4 acute GVHD:	Day +100 1 year	6% (2-10%) 12% (6-18%)
Cumulative incidence of chronic GVHD:	1 year 3 years	24% (16-32%) 33% (24-42%)
Cumulative incidence of chronic GVHD requiring systemic immunosuppression:	1 year 3 years	12% (6-17%) 14% (7-20%)
PFS:	1 year 3 years	60% (51-69%) 48% (39-59%)
OS:	1 year 3 years	70% (62-79%) 56% (47-67%)
CMV reactivation requiring intervention		35 (29.2%)
Time to CMV reactivation (n=35)		46 (27 – 203) days

Supplementary Figure 1: Association of age at HCT and intensity of conditioning regimen

