Table 1 Patient and Transplant-Related Characteristics

Disease	Total n (%)	MM n (%)	HL n (%)	NHL n (%)
PATIENTS	324	132 (41)	91 (28)	101 (31)
CONDITIONING REGIMEN		Melphalan	Beam	Beam
AGE at ASCT: Median (Range)	48 (14-74)	55 (27-74)	28 (16-65)	42 (14-70)
GENDER: Female/Male	144 (44)/180 (56)	53 (40)/79 (60)	42 (46)/49 (54)	49 (49)/52 (51)
CMV REACTIVATION	53 (16)	29 (22)	4 (4)	20 (20)
CMV PCR Blood + / Biopsy -	51 (96)	28 (97)	4 (100)	19 (95)
0-150 copies	14 (27)	8 (29)	1 (25)	5 (26)
151-1000 copies	12 (26)	9 (32)	0 (0)	3 (10)
>1000 copies	25 (49)	11 (40)	3 (75)	11 (60)
CMV DISEASE (Pathology)	5 (9.4)	3 (10)	0 (0)	2 (10)
Colitis/Ileitis	4 (80)	3 (100)	0 (0)	1 (50)
Pneumonitis	1 (20)	0 (0)	0 (0)	1 (50)
PCR Blood - / Biopsy +	2 (40)	1 (33)	0 (0)	1 (50)
PCR Blood + / Biopsy +				
PCR < 150 copies	2 (40)	2 (67)	0 (0)	0 (0)
PCR > 10000 copies	1(20)	0 (0)	0 (0)	1 (50)
REQUIRING ANTI-CMV TREATMENT	38 (72)	22 (76)	3 (75)	13 (65)

MM Multiple Myeloma, HL Hodgkin Lymphoma, NHL Non Hodgkin Lymphoma, ASCT Autologous Peripheral Stem Cell Transplant, CMV Cytomegalovirus, PCR Polymerase Chain Reaction, Beam Carmustine Etoposide Cytarabine Melphalan, (+) positive, (-) negative

Results: Overall, 53 (16%) patients had R-CMV and 38 (72%) required anti-CMV treatment. Five (1.5%) had CMV disease with positive PCR on colon biopsy, yet two had PCR negative in blood. After a median follow up of 21.5 months (range: 1 to 125 months), there was no significant difference in OS or PFS between patients with or without R-CMV. TRM has increased from 1.1% in patients with no R-CMV to 13% in patients with R-CMV (P=0.003). We didn't observe any impact for age, sex, type of disease, pre-transplant treatment types/lines on the incidence R-CMV following ASCT. **Conclusions:** Our data suggest that R-CMV is not uncommon in ASCT recipients and may contribute to increased TRM. Biopsy is recommended in case of high suspicion of R-CMV irrespective of PCR results.

RES-117

Cyclosporine (CsA) Pharmacogenetics Post HLA-Matched Sibling Allogeneic Hematopoietic Stem Cell Transplantation in Patients with Myeloid Leukemia: Value of CYP3A4 Gene Polymorphism

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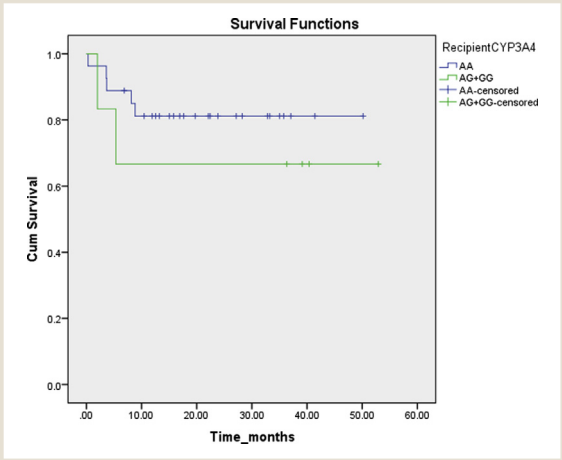
Background: Variant genotypes of CYP3A4 gene polymorphism (A290G) is associated with decreased enzymatic activity that could interfere with CsA metabolism post HSCT in leukemic patients. **Objectives:** To evaluate impact of the A290G polymorphism of CYP3A4 on the CsA phramcodynamics and clinical outcomes of leukemic patients treated using HLA-matched sibling HSCT as acute graft versus host disease (GVHD), oral mucositis, CsA related hepatic and renal toxicity, transplant-related mortality (TRM) and overall survival (OS). **Patients and Methods:** We examined the association of a single nucleotide polymorphism (SNP) at position 290 in the CYP3A4 gene with outcomes of allogeneic HSCT of 33 leukemic patients, 28 (16/12) AML (CR1/CR2-3) and 5 CML (CP1). All patients received CsA as GVHD prophylaxis in addition to pulse MTX. CYP3A4 genotyping was performed by polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP). **Results:** Median age at the time of HSCT

Table 1 Univariate Analysis of Association of Recipient CYP3A4 Polymorphism with HSCT Outcomes of 33 Myeloid Leukemic Patients

Event	AA (n=27)		AG or GG (n=6)		P value
	N	%	N	%	
Acute GVHD (n=5)	5	18.5	0	0	0.25
Chronic GVHD (n=5)	4	14.8	1	16.7	0.9
Hepatic toxicity (n=15)	13	48.1	2	33.3	0.51
Renal Toxicity (n=8)	7	25.9	1	16.7	0.63
Severe oral mucositis (n=14)	12	44.4	2	33.3	0.61
TRM (n=5)	3	11.1	2	33.3	0.17

Figure 1 Lower Overall Survival for Recipients with Variant Allele CYP3A4 (Not Statistically Significant)



was 22 years (range 8−44 years); 17 patients (51.5%) are males, and the median (range) follow-up period of survivors was 24.8 (0.3-50.1) months. BU/CY was as conditioning regimen in 25 patients (75.8%). All received peripheral blood stem as a stem cell source with median CD34+ stem cell dose 6.7 (3.2-10) 10^6/kg. The frequencies of the CYP3A4 A290G genotypes in patients were 81.8% (27 patients) for AA (wild type), 18.2% (6 patients) for combined variant genotypes (AG+GG). Recipient CYP3A4 in AG or GG genotypes versus AA genotypes showed non-statistically significant lower incidence of acute GVHD (0% vs 18.5%); p=0.25, severe oral mucositis (33.3% vs 44.4%); p=0.61. Also, variant genotypes showed unexpected lower incidence of hepatic toxicity (33.3% vs 48.1%) and renal toxicity (16.7% vs 25.9%), but not statistically significant; p= 0.51 and 0.63 respectively. Higher TRM was noted in variant genotypes (33.3% vs 11.1%); with p=0.17 (Table 1). Recipients with variant allele CYP3A4 were associated with lower non-statistically significant overall survival; p=0.4 (Figure 1). **Conclusion:** Value of CYP3A4 gene polymorphism in predicting CsA pharmacodynamics post HSCT is uncertain. Larger cohort and considering confounding factors of CsA metabolism are needed in future studies.

RES-125

Phenotypic Profile of Rh and Kell Blood Group Systems in Blood Donors and Patients with Hematologic Malignancies: a Report from Armenia

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Table 1

Phenotypes Rh/K	Patients-110		Donors-118	
	n	%	n	%
Rh (D) positive	97		107	
D+C+c-E+e+K+	1	1.0	0	0
D+C+c-E+e+K-	0	0	3	2.8
D+C+c-E-e+K-	24	24.7	25	23.4
D+C+c-E-e+K+	0	0	2	1.9
D+C+c+E+e+K+	1	1.0	0	0
D+C+c+E+e+K-	17	17.5	16	15.0
D+C+c+E-e+K+	2	2,1	4	3.7
D+C+c+E-e+K-	42	43.3	40	37.4
D+C-c+E+e-K-	0	0	1	0.9
D+C-c+E+e+K+	2	2.1	1	0.9
D+C-c+E+e+K-	8	8,3	10	9.3
D+C-c+E-e+K-	0	0	5	4.7
Rh (D) negative	13		11	
D-C-c+E-e+K+	0	0	2	18.2
D-C-c+E-e+K-	11	84.6	8	72.7
D-C-c+E+e+K-	1	7.7	0	0
D-C+c+E-e+K-	1	7.7	1	9.1