

**Table S1.** Patients with resistance variants in CMV *UL97* and *UL54* genes

	Patient #1	Patient #2	Patient #3	Patient #4	Patient #5
Gender, age (years)	F/50	M/28	F/13	M/53	F/17
Primary disease	MDS	ALL	ALL	AML	MDS
HCT source	Peripheral blood	Cord blood	Peripheral blood	Cord blood	Peripheral blood
Donor type	Unrelated	Unrelated	Unrelated	Unrelated	Related
HLA-matching	Matched	Matched	Matched	Matched	Mismatched
Letermovir prophylaxis	No	No	No	Yes	No
CMV D/R serostatus	D?/R+	D?/R+	D-/R+	D?/R+	D+/R+
Initial antiviral regimen	Valganciclovir	Ganciclovir	Ganciclovir	Ganciclovir	Ganciclovir
Period of development of refractory CMV DNAemia (days)	65	68	44	124	40
Resistant variant in the <i>UL97</i> gene	A594V	M460I, A594V	L595F	C603W	L595W
Resistant variant in the <i>UL54</i> gene	A809V	No	No	No	No
Modification of initial antiviral regimen	Yes	Yes	No	Yes	No
Secondary antiviral regimen	Foscarnet	Foscarnet	.	Foscarnet	.
CMV clearance (days)	Yes (239)	Yes (256)	Yes (168)	Yes (142)	Yes (133)
Acute Graft vs. Host Disease	Moderate	Moderate	Severe	Severe	Moderate
CMV organ disease	Colitis	Colitis	Retinitis	Colitis Retinitis	Retinitis
Peak CMV viral load (IU/ml)	3,135,692	36,080	310,464	64,569	467,696
Outcome	Alive	Dead	Alive	Dead	Dead

**Table S1.** Continued

	Patient #6	Patient #7	Patient #8	Patient #9	Patient #10
Gender, age (years)	M/23	F/64	M/59	F/67	F/5
Primary disease	NHL	ALL	AML	AML	HLH
HCT source	Peripheral blood	Peripheral blood	Peripheral blood	Peripheral blood	Peripheral blood
Donor type	Related	Unrelated	Related	Related	Unrelated
HLA-matching	Mismatched	Matched	Mismatched	Mismatched	Matched
Letermovir prophylaxis	No	No	No	No	No
CMV D/R serostatus	D+/R+	D+/R+	D-/R+	D-/R+	D?/R+
Initial antiviral regimen	Ganciclovir	Ganciclovir	Ganciclovir	Ganciclovir	Ganciclovir
Period of development of refractory CMV DNAemia (days)	57	51	189	266	70
Resistant variant in the <i>UL97</i> gene	No	No	L595W	A594V	L595W
Resistant variant in the <i>UL54</i> gene	A809V	F412L	F412L, V787L	No	No
Modification of initial antiviral regimen	Yes	No	Yes	Yes	Yes
Secondary antiviral regimen	Foscarnet	.	Foscarnet	Foscarnet	Foscarnet
CMV clearance (days)	No	No	No	Yes (155)	Yes (125)
Acute Graft vs. Host Disease	Severe	Severe	Severe	Moderate	No
CMV organ disease	Colitis Retinitis Encephalitis	No	gastritis colitis encephalitis pneumonitis	gastritis colitis retinitis	No
Peak CMV viral load (IU/ml)	865,252	386,720	14,690,000	806,000	1,079,000
Outcome	Dead	Dead	Dead	Alive	Alive

MDS, myelodysplastic syndrome; ALL, acute lymphoblastic leukemia; AML, acute myeloid leukemia; NHL, non-Hodgkin lymphoma; HLH, Hemophagocytic lymphohistiocytosis; HCT, hematopoietic cell transplantation; HLA, human leukocyte antigen; CMV, cytomegalovirus; D+, donor seropositive; D-, donor seronegative; D?, donor serostatus unknown; R+, recipient seropositive.