Supplemental Material:

#	Transplant	Sex	Age	Donor CMV	Recipient CMV	Induction therapy	Valganciclovir duration	Recipient HLA type	Donor HLA type
1	Heart	F	66	-	+	αIL-2R, steroid	3 months	A*23:01 A*68:01 B*07:02 B*53:01 C*04 C*15	A*02:01 A*25:01 B*08:01 B*51:01 C*07 C*14
2	Heart	M	58	-	+	Steroid	3 months	A*24:02 A*33:03 B*13:01 B*65:01 C*w6 C*w8	A*24:02 A*02:01 B*44:01 B*62:01 C*w9 C*16
3	Kidney	M	68	+	+	rATG, steroid	4 months	A*01:01 A*02:01 B*07:02 B*08:01 C*07	A*02:01 B*07:02 B*55:01 C*07 C*09
4	Kidney	M	50	-	+	rATG, steroid	3 months	A*02:01 A*68:01 B*18:01 B*35:01 C*04 C*10	A*24:02 B*60:01 B*44:01 C*10 C*2
5	Heart	M	58	+	+	αIL-2R, steroid	3 months	A*01:01 A*02:01 B*18:01 B*35:01 C*02 C*04	A*24:02 A*11:01 B*13:01 B*55:01 C*06 C*09
6	Kidney	M	41	+	+	rATG, steroid	5 months	A*30.02 A*33.03 B*72.01 B*45.01 C*w2 C*16	A*33.03 A*74.01 B*72.01 B*35.01 C*w2 C*w4

Table SI: Demographic and clinical information for each subject. Donor and recipient serostatus were determined pre-transplant. None of these individuals had a prior transplant or episode of graft rejection or viremia during the study period. Note, while these subjects were also included in previously published analysis (17), the subject numbers are different in the two studies.

TcRß CDR3	V	J	Sam-ple
CSADRESGLDEQFF	TRBV20-1	TRBJ2-1	3 m0
CSADRESGLDEQFF	TRBV20-1	TRBJ2-1	3 m12
CSVESGLAGNTGELF	TRBV29-01	TRBJ2-2	M
CSVESGLAGNTGELFF	TRBV29-1	TRBJ2-2	V
CASSPTGGLLINSPLHF	TRBV27	TRBJ1-6	6 m0
CASSQDISGGLLSDTQYF	TRBV4-3	TRBJ2-3	M
CASSQDLAGGLLSDTQYF	TRBV4-3	TRBJ2-3	M
CASSQDLAGGLLSYEQYF	TRBV4-3	TRBJ2-7	M
CASSSPQGGLLDSPLHF	TRBV6	TRBJ1-6	M
CASSTPIGGLLDNEQFF	TRBV6	TRBJ2-1	M
CASSQDITSGLLSYEQYF	TRBV4-3	TRBJ2-7	3 m0
CASQPGQKNTEAFF	TRBV6	TRBJ1-1	M
CASSLVPGQKYNSPLHF	TRBV7-8	TRBJ1-6	M
CASSQEGQKNEKLFF	TRBV4-3	TRBJ1-4	M
CASMTGQKNSPLHF	TRBV6	TRBJ1-6	M
CASSAPGQKTGNTIYF	TRBV7-6	TRBJ1-3	3 m0
CASSGGQKNEKLFF	TRBV6	TRBJ1-4	M
CASSLGQKNTEAFF	TRBV28	TRBJ1-1	M
CASSMGQKNQPQHF	TRBV6	TRBJ1-5	M
CASSSGQKNEKLFF	TRBV6	TRBJ1-4	M
CASSSGQKNTEAFF	TRBV6	TRBJ1-1	M
CASSTGQKNEKLFF	TRBV6	TRBJ1-4	M
CASSTGQKNQPQHF	TRBV6-5	TRBJ1-5	3 m0
CASSTGQKNQPQHF	TRBV6-5	TRBJ1-5	3 m3
CASSTGQKNTEAFF	TRBV6	TRBJ1-1	M
CASTPGQKNTEAFF	TRBV6	TRBJ1-1	M
CASTTGQKNTEAFF	TRBV6	TRBJ1-1	M
CATTSGQKNTEAFF	TRBV6	TRBJ1-1	M
CAISEETPNTEAFF	TRBV10-3	TRBJ1-1	M
CAISESTPNTEAFF	TRBV10-3	TRBJ1-1	M
CAISTDLPNTEAFF	TRBV10-3	TRBJ1-1	M
CAITTDNPNTEAFF	TRBV10-3	TRBJ1-1	M
CASQLTGAPNTEAFF	TRBV6	TRBJ1-1	M
CASRDGTPNTEAFF	TRBV6	TRBJ1-1	M
CASSAATPNTEAFF	TRBV6	TRBJ1-1	M
CASSFNGPNTEAFF	TRBV5-1	TRBJ1-1	V
CASSLGEPNTEAFF	TRBV7-8	TRBJ1-1	M
CASSPGTPNTEAFF	TRBV7-8	TRBJ1-1	M
CASSQATPNTEAFF	TRBV6	TRBJ1-1	M
CASSQGPNTEAFF	TRBV7-6	TRBJ1-1	2 m0
CASSSAHPNTEAFF	TRBV28	TRBJ1-1	M
CASSSAQPNTEAFF	TRBV6	TRBJ1-1	M
CASSSGQPNTEAFF	TRBV7-8	TRBJ1-1	M
CASSSPEPNTEAFF	TRBV6	TRBJ1-1	M
CASSTATPNTEAFF	TRBV6	TRBJ1-1	M
CASSTGHPNTEAFF	TRBV7-8	TRBJ1-1	M
CASSTTVTRPNTEAFF	TRBV7-2	TRBJ1-1	4 m3
CASSYEFPNTEAFF	TRBV6	TRBJ1-1	M
CASTDDRPNTEAFF	TRBV12	TRBJ1-1	M
CATSTENLGSPNTEAFF	TRBV15	TRBJ1-1	M
CASSLGGSYNEQFF	TRBV27	TRBJ2-1	4 m0
CASSQGGSYNEQFF	TRBV27	TRBJ2-1	V
CASSDGPGSTRPEYF	TRBV2	TRBJ2-7	M
CASSDGPNEQYF	TRBV11-3	TRBJ2-7	5 m3
CASSLSDGPNEKLFF	TRBV28	TRBJ1-4	5 m12
CASSRLAGGTDTQYF	TRBV7-3	TRBJ2-3	4 m0
CASSRLAGSTDTQYF	TRBV7-3	TRBJ2-3	M
CASSRLAGSTDTQYF	TRBV7-3	TRBJ2-3	V
CASSWRGGDEQYF	TRBV7-2	TRBJ2-7	M
CSASWTGGDEQYF	TRBV20-1	TRBJ2-7	4 m3
CSASWTGGDEQYF	TRBV20-1	TRBJ2-7	4 m12

Table SII: Motifs identified by GLIPH2 as shared with database TCRs. GLIPH2 results for TCR motifs identified as shared between subjects in this study and IE-1 specific and responsive TCRs from VDJdb (V) and McPAS-TCR (M).

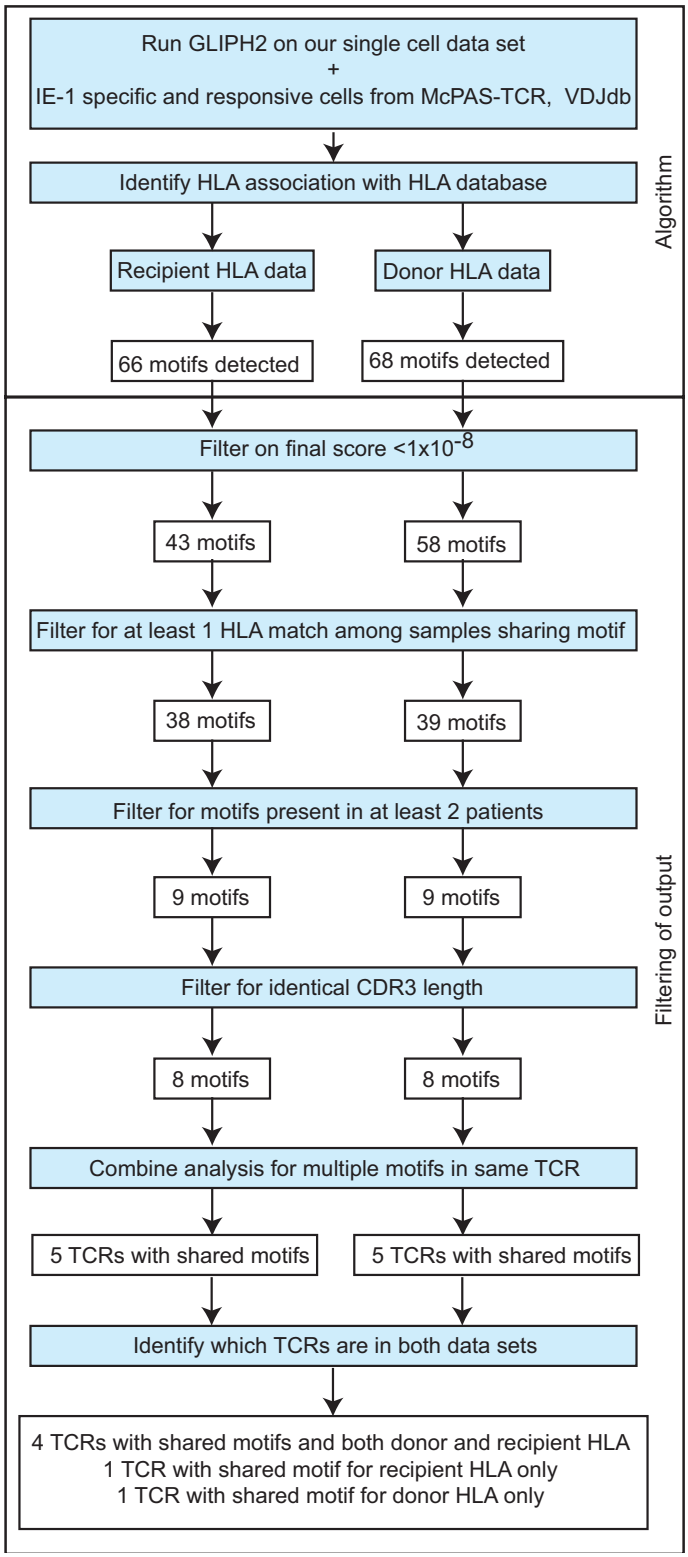

Figure S1: Schematic of GLIPH2 workflow: Steps completed by GLIPH2 algorithm (top) and filtering of output (bottom). Blue boxes indicate steps and white boxes indicate motifs detected after each step.