

## Supplemental Table S2. Association of genetic variants with disease progression *in vivo*.

Estimates of CD4 T cell gradient offsets and time in years from CD4 to decline from 500 to 200 cells/mm<sup>3</sup>. (A) by genotype or haplotype, (B) by carrier status. 11=homozygous common allele, 12=heterozygous, 22=homozygous rare allele. Obs= observations.

### A

gene	obs	alleles/ haplotypes	gradient offset	95% CI	Wald test p	Time in years for CD4 to decline from 500 to 200	
CCR5 -59029A	196	11				3.8	
	402	12	0.01	-0.29	0.32	0.93	3.9
	223	22	-0.20	-0.55	0.14	0.25	3.5
CCR5 d32	713	11				3.7	
	133	12	0.33	0.03	0.62	0.03	4.3
CCR2 64I	686	11				3.6	
	149	12	0.32	0.03	0.62	0.03	4.2
	9	22	-0.61	-1.81	0.58	0.32	2.9
CX3CR1 280M	623	11				3.8	
	199	12	-0.19	-0.46	0.09	0.18	3.5
	25	22	-0.14	-0.91	0.62	0.71	3.6
RANTES -403A	568	11				3.7	
	243	12	0.03	-0.24	0.29	0.84	3.8
	31	22	-0.16	-0.75	0.43	0.59	3.5
RANTES -28G	811	11				3.7	
	33	12	0.42	-0.17	1.00	0.16	4.6
	0	22					
RANTES In1.1	633	11				3.7	
	202	12	0.11	-0.16	0.38	0.41	3.9
	11	22	0.44	-0.36	1.25	0.28	4.6
RANTES Haplotypes*	570	1				3.7	
	242	2	-0.03	-0.29	0.23	0.83	3.7
	33	3	0.41	-0.18	0.99	0.18	4.6
MIP1a 459T	454	11				3.8	
	332	12	-0.04	-0.29	0.20	0.72	3.7
	55	22	-0.36	-0.82	0.10	0.13	3.3
IL4 589T	586	11				3.8	
	213	12	-0.13	-0.42	0.15	0.36	3.6
	46	22	-0.26	-0.8	0.27	0.33	3.4
IL10 -3575A	365	11				3.6	
	382	12	0.04	-0.21	0.30	0.74	3.7
	90	22	0.22	-0.16	0.59	0.25	4.0
IL10 -592A	471	11				3.7	
	300	12	0.00	-0.25	0.25	0.99	3.7
	67	22	0.05	-0.41	0.50	0.84	3.8
SDF1 3'A	564	11				3.8	
	236	12	-0.27	-0.55	0.01	0.06	3.4
	30	22	-0.08	-0.71	0.55	0.80	3.7
PML -225T	709	11				3.8	
	125	12	-0.21	-0.53	0.11	0.20	3.4
	9	22	-0.33	-1.48	0.82	0.58	3.3
PPIA 1604G	732	11				3.7	
	109	12	0.07	-0.27	0.41	0.67	3.9
	5	22	-0.72	-2.34	0.90	0.38	2.8
PPIA 1650G	620	11				3.9	
	201	12	-0.25	-0.54	0.03	0.08	3.5
	25	22	-0.72	-1.64	0.20	0.13	2.9
PPIA haplotypes**	1	530				4.0	
	2	203	-0.41	-0.71	-0.11	0.01	3.3
	3	114	-0.07	-0.42	0.27	0.67	3.8
TSG101 -183C	625	11				3.9	
	202	12	-0.27	-0.55	0.01	0.06	3.4
	22	22	-0.62	-1.43	0.19	0.13	3.0
bTRC 507S	781	11				3.7	
	67	12	0.01	-0.45	0.46	0.98	3.7
	3	22	0.96	-3.95	5.87	0.70	6.6

Modelled square root CD4 as a linear function of time, adjusted for sex,age, IDU  
gradient offset is difference of gradient compared to homozygous common allele ie group=11  
genetic group only modifies gradient not intercept, RE at patient level for gradient offset, except where noted

RANTES haplotypes\*

1= Reference

2=-403A and In1.1 carrying haplotypes

3=-28G carrying haplotypes

PPIA haplotypes\*\*

1=Reference

2=1650G carrying haplotypes

3=1604G carrying haplotypes

**B**

gene	obs	alleles	gradient offset	95%	CI	Wald test p	Time in years for CD4 to decline from 500 to 200
CCR5 -59029A	196	11					3.8
	625	12 and 22	-0.06	-0.35	0.23	0.67	3.7
CCR5 d32	713	11					3.7
	133	12	0.33	0.04	0.62	0.03	4.3
CCR2 64I	686	11					3.7
	158	12 and 22	0.28	-0.01	0.56	0.06	4.2
CX3CR1 280M	623	11					3.8
	224	12 and 22	-0.18	-0.45	0.08	0.18	3.5
RANTES -403A	568	11					3.7
	274	12 and 22	0.01	-0.24	0.26	0.94	3.7
RANTES -28G	811	11					3.7
	33	12	0.42	-0.17	1	0.16	4.6
RANTES In1.1	633	11					3.7
	213	12 and 22	0.13	-0.14	0.39	0.35	3.9
MIP1a 459T	454	11					3.8
	387	12 and 22	-0.09	-0.33	0.15	0.47	3.7
IL4 589T	586	11					3.8
	259	12 and 22	-0.17	-0.43	0.09	0.21	3.6
IL10 -3575A	365	11					3.6
	472	12 and 22	0.08	-0.16	0.32	0.51	3.8
IL10 -592A	471	11					3.7
	367	12 and 22	0.01	-0.22	0.25	0.91	3.8
SDF1 3'A	564	11					3.9
	266	12 and 22	-0.26	-0.53	0	0.05	3.4
PML -225T	709	11					3.8
	134	12 and 22	-0.22	-0.53	0.09	0.17	3.5
PPIA 1604G	732	11					3.7
	114	12 and 22	0.03	-0.3	0.37	0.86	3.8
PPIA 1650G	620	11					3.9
	226	12 and 22	-0.32	-0.6	-0.04	0.02	3.4
TSG101 -183C	625	11					3.9
	224	12 and 22	-0.30	-0.57	-0.03	0.03	3.4
bTRC 507S	781	11					3.7
	70	12 and 22	0.02	-0.44	0.47	0.95	3.7