

Table S3: eQTLs associated with the response to apremilast.

Locus	SNP	P-value	Effect size*	Tissue/Cells
u. PDE4A	rs3745598	1.5x10 ⁻²	-0.06	monocyte_LPS
d. PDE4A	rs892085	1.3x10 ⁻²	-0.28	Tfh_memory
	rs74942924	6.2x10 ⁻³	0.50	macrophage_IFN γ
		4.9x10 ⁻³	0.71	macrophage_naive
		7.8x10 ⁻⁴	-1.95	Tfh_memory
		2.3x10 ⁻²	-0.53	Th1-17_memory
		4.2x10 ⁻²	-0.68	Th17_memory
		4.5x10 ⁻²	0.21	skin
	rs11085752	3.1x10 ⁻²	0.29	CD8_T-cell_naive
		1.5x10 ⁻²	0.25	Tfh_memory
		4.7x10 ⁻²	0.11	Th17_memory
	rs7935	5.9x10 ⁻³	0.37	CD8_T-cell_naive
		1.9x10 ⁻²	0.23	Tfh_memory
		7.2x10 ⁻³	0.15	Th17_memory
	rs12979813	4.7x10 ⁻²	0.04	blood
	rs420703	1.1x10 ⁻²	0.27	Cells_EBV-transformed_lymphocytes
		4.5x10 ⁻²	0.04	Skin_Sun_Exposed_Lower_leg
	rs322151	2.6x10 ⁻²	0.23	Cells_EBV-transformed_lymphocytes
	rs322144	2.9x10 ⁻²	0.36	CD8_T-cell_naive
	rs10424035	1.8x10 ⁻²	0.78	Th1_memory
u. PDE4B	rs883824	4.3x10 ⁻²	-0.09	CD8_T-cell_anti-CD3-CD28
PDE4B	rs61799396	4.3x10 ⁻²	0.07	Skin_Sun_Exposed_Lower_leg
		3.1x10 ⁻²	0.14	CD8_T-cell_naive
		4.8x10 ⁻²	0.15	Tfh_memory
		6.6x10 ⁻³	0.19	Th2_memory
	rs1937457	2.6x10 ⁻²	0.06	Skin_Sun_Exposed_Lower_leg
		4.5x10 ⁻²	0.13	Tfh_memory
		8.1x10 ⁻³	0.16	Th2_memory
	rs12757542	4.3x10 ⁻²	0.14	Th2_memory
		2.5x10 ⁻²	0.08	skin
	rs12406476	3x10 ⁻³	-0.07	Skin_Not_Sun_Exposed_Suprapubic
		2.8x10 ⁻²	-0.06	monocyte_Pam3CSK4
		1.3x10 ⁻³	0.10	CD8_T-cell_anti-CD3-CD28
		2x10 ⁻²	0.33	NK-cell_naive
		4.6x10 ⁻²	-0.08	skin
	rs12745871	4.3x10 ⁻²	-0.04	Whole_Blood
		5.5x10 ⁻³	-0.11	Skin
		8.1x10 ⁻⁴	0.12	CD8_T-cell_anti-CD3-CD28
		6.3x10 ⁻⁵	-0.11	Skin_Not_Sun_Exposed_Suprapubic
	rs2503174	4.4x10 ⁻²	0.08	monocyte_naive
		6.3x10 ⁻³	0.14	Th1_memory
	rs2485381	4.8x10 ⁻²	0.12	CD8_T-cell_naive
		3x10 ⁻²	0.30	NK-cell_naive
		6.9x10 ⁻⁴	0.18	Th1_memory
	rs1890196	5.6x10 ⁻³	0.07	monocyte_LPS

		3.1x10 ⁻²	-0.07	monocyte_Pam3CSK4
		3.2x10 ⁻²	-0.05	monocyte_R848
		4x10 ⁻²	-0.09	Treg_memory
d. PDE4B	rs11208847	4.9x10 ⁻²	-0.08	Th1-17_memory
u. PDE4C	rs10423674	4x10 ⁻²	0.21	Cells_EBV-transformed_lymphocytes
	rs2023878	1.2x10 ⁻²	0.35	Cells_EBV-transformed_lymphocytes
PDE4D	rs697076	4x10 ⁻²	-0.11	LCL [#]
		3x10 ⁻²	0.09	monocyte_LPS
		4.5x10 ⁻²	0.09	monocyte_Pam3CSK4
		2.2x10 ⁻²	0.19	B-cell_naive
	rs295943	2.5x10 ⁻²	-0.16	LCL
	rs177077	2.3x10 ⁻²	-0.18	neutrophil
		2.3x10 ⁻²	-0.12	LCL
	rs16890078	4.7x10 ⁻²	-0.21	neutrophil
		5.3x10 ⁻³	-0.22	monocyte_LPS
		4.3x10 ⁻³	-0.24	monocyte_Pam3CSK4
	rs2963821	3.9x10 ⁻²	0.14	monocyte
		2.6x10 ⁻⁵	0.25	neutrophil
CYP3A4	rs35599367	1.9x10 ⁻²	-0.36	Liver
u. CYP3A4	rs117406702	1.5x10 ⁻²	-0.25	Small_Intestine_Terminal_Ileum
ANRIL	rs1063192	1.7x10 ⁻²	-0.13	monocyte_Pam3CSK4
	rs10120688	1.6x10 ⁻²	-0.17	LCL
		2.8x10 ⁻²	0.08	B-cell_naive
LINC00941	rs12297445	2x10 ⁻⁵	-0.36	Skin_Sun_Exposed_Lower_leg
AKAP6	rs2031106	3.3x10 ⁻²	-0.10	Skin_Not_Sun_Exposed_Suprapubic
		3.8x10 ⁻²	-0.32	macrophage_Listeria
		2.7x10 ⁻²	0.38	CD8_T-cell_anti-CD3-CD28
	rs11624518	2.1x10 ⁻⁴	-0.65	macrophage_IFNg
		2.2x10 ⁻⁵	-0.53	macrophage_naive
		2.9x10 ⁻³	-0.36	macrophage_Salmonella
		2x10 ⁻²	-0.35	macrophage_Listeria
		3.3x10 ⁻²	0.30	CD8_T-cell_anti-CD3-CD28
APP	rs380417	4.8x10 ⁻²	0.08	neutrophil
		3.1x10 ⁻²	-0.05	CD4_T-cell_anti-CD3-CD28
	rs2829981	4.5x10 ⁻²	-0.07	monocyte
		2.1x10 ⁻²	-0.09	Skin_Not_Sun_Exposed_Suprapubic
		4.0x10 ⁻²	-0.07	Whole_Blood
	rs1783024	3.2x10 ⁻²	-0.08	neutrophil
		1.9x10 ⁻³	-0.14	Treg_memory
		2.0x10 ⁻²	-0.07	Treg_naive
	rs128648	1.6x10 ⁻²	-0.06	monocyte
		2.7x10 ⁻³	-0.12	neutrophil
		2.9x10 ⁻²	-0.06	Skin_Not_Sun_Exposed_Suprapubic
		2.8x10 ⁻²	-0.06	Whole_Blood
		1.6x10 ⁻²	-0.07	monocyte_IAV
	rs58908134	1.7x10 ⁻⁵	-0.11	monocyte
		1.3x10 ⁻⁷	-0.23	neutrophil
		8.0x10 ⁻⁵	-0.12	Whole_Blood
		3.6x10 ⁻⁴	-0.06	blood
		4.0x10 ⁻²	-0.07	monocyte_IAV
		1.6x10 ⁻²	-0.09	Treg_naive

SHANK2	rs35961474	3.9x10 ⁻²	0.69	LCL
ITSN1	rs2251854	5.2x10 ⁻²¹	0.47	monocyte
		4.1x10 ⁻¹²	-0.24	Skin_Not_Sun_Exposed_Suprapubic
		6.1x10 ⁻⁹	-0.18	Skin_Sun_Exposed_Lower_leg
		1.0x10 ⁻¹⁹	0.26	Whole_Blood
		2.1x10 ⁻³³	0.28	blood
		5.8x10 ⁻³	0.10	monocyte_IAV
		2.8x10 ⁻⁶	0.22	monocyte_LPS
		4.8x10 ⁻⁴	0.14	monocyte_naive
		3.8x10 ⁻⁵	0.17	monocyte_Pam3CSK4
		5.1x10 ⁻⁴	0.18	monocyte_R848
		3.6x10 ⁻²	-0.13	CD4_T-cell_anti-CD3-CD28
		1.9x10 ⁻⁹	0.21	monocyte_CD16_naive
		2.3x10 ⁻⁵	-0.07	skin
	rs2256797	3.2x10 ⁻⁸	-0.32	monocyte
		4.5x10 ⁻⁴	0.15	Skin_Not_Sun_Exposed_Suprapubic
		2.3x10 ⁻³	0.12	Skin_Sun_Exposed_Lower_leg
		3.7x10 ⁻¹²	-0.24	Whole_Blood
		1.4x10 ⁻⁷	-0.15	blood
		5.8x10 ⁻³	-0.16	monocyte_LPS
		2.2x10 ⁻²	-0.10	monocyte_naive
		2.4x10 ⁻⁴	-0.17	monocyte_Pam3CSK4
		9.7x10 ⁻⁴	-0.20	monocyte_R848
		1.7x10 ⁻⁴	-0.15	monocyte_CD16_naive
		2.3x10 ⁻³	0.06	skin
	rs2834269	9.1x10 ⁻³	0.09	Skin_Not_Sun_Exposed_Suprapubic
		2.8x10 ⁻²	-0.23	Treg_naive
	rs2834287	1.8x10 ⁻²	0.23	Th17_memory
		4.5x10 ⁻²	-0.27	Th1_memory
		4.6x10 ⁻²	0.04	skin
PIK3R1	rs831122	2.7x10 ⁻²	-0.11	monocyte_IAV
		4.7x10 ⁻²	-0.12	monocyte_LPS
		4.2x10 ⁻²	-0.13	monocyte_Pam3CSK4
		5.7x10 ⁻³	0.07	skin
AKAP12	rs10499266	1.5x10 ⁻²	-0.70	Th2_memory
	rs9397389	1.0x10 ⁻²	-0.37	macrophage_Salmonella
		2.7x10 ⁻²	0.27	LCL
MEOX2	rs10270030	2.8x10 ⁻²	-0.05	Skin_Not_Sun_Exposed_Suprapubic
ABL1	rs75764711	1.3x10 ⁻²	-0.14	monocyte
		4.2x10 ⁻³	-0.20	Skin_Sun_Exposed_Lower_leg
		4.5x10 ⁻²	-0.13	Whole_Blood
		9.1x10 ⁻⁴	-0.07	blood
		3.0x10 ⁻²	-0.14	monocyte_LPS
ARRB1	rs512797	1.2x10 ⁻²	0.14	macrophage_Listeria
		4.4x10 ⁻²	0.11	CD4_T-cell_anti-CD3-CD28
		6.2x10 ⁻³	0.14	CD4_T-cell_naive
		3.7x10 ⁻²	0.17	CD8_T-cell_anti-CD3-CD28
		1.3x10 ⁻²	0.11	CD8_T-cell_naive
		1.8x10 ⁻²	0.12	Treg_naive
	rs616714	4.3x10 ⁻⁴	-0.10	T-cell
		3.2x10 ⁻²	0.09	Skin_Sun_Exposed_Lower_leg

		1.4x10 ⁻²	-0.09	CD4_T-cell_naive
		6.9x10 ⁻³	-0.11	CD8_T-cell_anti-CD3-CD28
		3.5x10 ⁻³	-0.11	Th1-17_memory
		6.9x10 ⁻³	-0.09	Th17_memory
KLRK1	rs2617151	2.4x10 ⁻²	0.28	T-cell
		3.5x10 ⁻²	0.11	Skin_Not_Sun_Exposed_Suprapubic
		5.6x10 ⁻⁴	0.06	Whole_Blood
		9.2x10 ⁻²⁹	0.50	blood
		4.2x10 ⁻²	-0.64	B-cell_naive
		2.0x10 ⁻⁴	0.20	CD8_T-cell_anti-CD3-CD28
		1.5x10 ⁻⁸	0.44	CD8_T-cell_naive
		4.7x10 ⁻⁸	0.46	NK-cell_naive
		4.1x10 ⁻³	0.19	skin
ZBTB1	rs74056445	4.7x10 ⁻²	-0.14	macrophage_Salmonella
		9.5x10 ⁻³	-0.07	monocyte
		9.2x10 ⁻³	-0.12	Skin_Not_Sun_Exposed_Suprapubic
		2.7x10 ⁻³	-0.14	Skin_Sun_Exposed_Lower_leg
CREBBP (CBP)	rs2239316	5.1x10 ⁻³	0.03	blood
ATF1	rs1129406	2.6x10 ⁻⁹	-0.14	monocyte
		2.4x10 ⁻¹²	-0.27	neutrophil
		9.5x10 ⁻⁴	-0.04	T-cell
		4.1x10 ⁻⁵	0.09	Skin_Not_Sun_Exposed_Suprapubic
		2.0x10 ⁻¹¹	0.16	Skin_Sun_Exposed_Lower_leg
		2.5x10 ⁻³	-0.08	Whole_Blood
		1.6x10 ⁻⁴	-0.06	blood
		8.0x10 ⁻³	-0.04	monocyte_IAV
		7.3x10 ⁻³	-0.06	B-cell_naive
		1.5x10 ⁻²	-0.05	Tfh_memory
		3.2x10 ⁻³	0.06	skin
IKBA (NFKBIA)	rs696	7.3x10 ⁻³	0.10	CD8_T-cell_anti-CD3-CD28

Note: d./u.: downstream of/upstream of; *: positive and negative effect sizes refer to the increase and reduction of gene expression respectively; #LCL: EBV transformed lymphoblastoid B-cell lines.