

Supplementary Table 1: Vasculitis patient demographics and laboratory data

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Parameter	Units (ref range)	8.1 mean (SEM)	8.2 mean (SEM)	p	adj p
BVAS score t0		13.8 (1.6)	13.3 (1.3)	0.59	ns
BVAS score t3months		2.2 (0.9)	2.7 (0.6)	0.64	ns
Gender		9M / 10F	15M / 25F	0.47	ns
Ethnicity		18 C / 1 A	40 C	1	ns
ANCA status		4MPO / 15PR3 / 1UK	16MPO / 22PR3	0.12	ns
Pre-existing disease		5Y / 14N	14Y / 26N	0.5	ns
Age	years	57.5 (4)	62 (2.4)	0.25	ns
Total IgG	g/l (6 - 13)	13.2 (1.1)	12.7 (0.7)	0.65	ns
CD3	% of PBMC	72.9 (3.3)	73.9 (2.6)	0.81	ns
CD4	% of PBMC	46.6 (2.1)	48.6 (2.6)	0.65	ns
CD8	% of PBMC	24.2 (3)	23.8 (2.4)	0.94	ns
CRP t0	mg/l (0-6)	67.6 (15.8)	58.1 (11.6)	0.65	ns
ESR t=0	mm/h (5 - 15)	62.3 (9.5)	63.5 (6.6)	0.86	ns
Total Leucocyte count t0	$\times 10^9/l$ (4 - 11)	12.5 (1.6)	11.3 (0.7)	0.79	ns
Neutrophil count t0	$\times 10^9/l$ (2 - 8)	9.97 (1.5)	9.14 (0.68)	0.98	ns
Lymphocyte t0	$\times 10^9/l$ (1 - 4.5)	1.62 (0.25)	1.36 (0.09)	0.63	ns
Serum Creatinine t0	$\mu\text{mol/l}$ (35 - 125)	174.6 (35.2)	233.1 (39.9)	0.37	ns
Serum Creatinine final	$\mu\text{mol/l}$ (35 - 125)	160.5 (33)	133.4 (15.8)	0.56	ns
Mean change SCr	%	plus 18 (23.5)	minus 21.2 (4.8)	0.56	ns
Renal involvement		11Y / 8N	28Y / 12N	0.36	ns
PR3 titre	<6	176.6 (63)	94.6 (46.9)	0.47	ns
MPO titre	<6	83.9 (41.3)	99.1 (32)	0.96	ns

adj p = Bonferroni adjusted p-value, ref range = reference range, SEM = standard error of mean, t0 = at time zero enrolment, t3months = at 3 month follow-up timepoint, M=male, F=female, ANCA = anti-neutrophil cytoplasmic antibody, MPO = myeloperoxidase, PR3 = proteinase3, WG = Wegener's granulomatosis, MPA = microscopic polyangiitis, ns = not significant, CRP = C-reactive protein, ESR = erythrocyte sedimentation rate, PBMC = peripheral blood mononuclear cells, BVAS = Birmingham Vasculitis Activity Score, mean change SCr = mean change in serum creatinine value between enrolment and 1000 days follow-up

Supplementary Table 2 : Vasculitis Cohort Therapy

		V8.1	%	V8.2	%	p
Prior therapy	Prednisolone	6/19	32	17/40	43	0.42
	Cyclophosphamide	4/19	21	10/40	25	0.74
	Rituximab	0/19	0	2/40	5	0.33
	Azathioprine	5/19	26	9/40	23	0.75
	Mycophenolate Mofetil	4/19	21	6/40	15	0.56
	Plasma Exchange	2/19	11	1/40	3	0.19
	IVIg	1/19	5	3/40	8	0.75
	Deoxyspergualin	1/19	5	2/40	5	0.97
	none	11/19	58	24/40	60	0.88
Current treatment t0	Prednisolone	8/19	42	15/40	38	0.73
	Mycophenolate Mofetil	2/19	11	2/40	5	0.43
	Azathioprine	0/19	0	3/40	8	0.24
	none	11/19	58	25/40	63	0.73
Induction therapy t0	Prednisolone	19/19	100	40/40	100	1
	Cyclophosphamide	8/19	42	22/40	55	0.35
	Rituximab	1/19	5	8/40	20	0.14
	Azathioprine	0/19	0	5/40	13	0.06
	Mycophenolate Mofetil	8/19	42	13/40	33	0.47
	Adalimumab	3/19	16	3/40	8	0.32
	Plasma Exchange	1/19	5	1/40	3	0.58
	IVIg	0/19	0	1/40	3	0.48
	Deoxyspergualin	4/19	21	5/40	13	0.39
Follow up therapy	Prednisolone	19/19	100	40/40	100	1
	Cyclophosphamide	10/19	53	22/40	55	0.86
	Rituximab	6/19	32	11/40	28	0.75
	Azathioprine	6/19	32	23/40	58	0.47
	Mycophenolate Mofetil	9/19	47	20/40	50	0.85
	Adalimumab	2/19	11	3/40	8	0.7
	Plasma Exchange	2/19	11	1/40	3	0.19
	IVIg	1/19	5	2/40	8	0.97
	Deoxyspergualine	4/19	21	5/40	13	0.39
	Methotrexate	2/19	11	5/40	13	0.83

t0 = at time zero enrolment, Prior therapy = therapy administered prior to enrolment, Current therapy = therapy being given at time of enrolment bleed, Induction therapy = therapy given after enrolment bleed to control t0 disease flare, Follow-up therapy = therapy given at any timepoint during subsequent follow-up. Note that the nature of therapy but not dosage is given and that, by definition, each flare of disease required increased immunosuppression with resulting higher cumulative doses during follow-up in subgroup 8.1.

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FC	FDR p	Gene Symbol	Alternative Gene Symbol	Genbank ID
5.244	9.04E-10	NME1	NME1	NM_000269
5.124	7.43E-09		#NA	S56528
4.839	7.92E-08	XTP2	XTP2	NM_015172
4.826	1.54E-14	TOB1	TOB1	NM_005749
4.713	8.91E-19	EXOSC8	OIP2	NM_181503
4.61	2.16E-14	PRDX2	PRDX2	NM_005809
4.584	2.26E-09	IL7R	IL7R	NM_002185
4.526	1.11E-09	DKFZP564J0863	LOC283241	NM_175893
4.433	1.31E-06	PTTG3	PTTG3	NM_021000
4.308	1.62E-08	NELL2	NELL2	NM_006159
4.275	2.66E-14	TMP21	TMP21	NM_006827
4.258	7.61E-10	CRTAM	CRTAM	NM_019604
4.213	9.92E-10		#NA	HSTCRA10
4.195	4.61E-05	CD8B1	CD8B1	NM_172100
4.169	7.18E-10	CD8A	CD8A	NM_001768
4.146	1.94E-20	BUB3	BUB3	NM_004725
4.144	5.30E-06	CD69	CD69	NM_001781
4.128	2.30E-13	PARP8	FLJ21308	NM_024615
4.107	3.80E-11	SLAMF6	KALI	NM_052931
4.002	4.85E-10		CIC	BC007568
3.993	2.84E-10	SAMD3	MGC35163	NM_152552
3.898	3.10E-10	NDUFA9	NDUFA9	NM_005002
3.896	9.24E-13	DOCK9	zizimin1	NM_015296
3.889	5.24E-09	PCNT2	PCNT2	NM_006031
3.857	1.10E-10	BTN3A1	BTN3A1	NM_007048
3.848	1.15E-07	ARID5B	.	XM_084482
3.834	1.89E-08	ETS1	ETS1	NM_005238
3.821	2.30E-13	TRA1	TRA1	NM_003299
3.803	5.69E-10	ITK	ITK	NM_005546
3.796	9.82E-12	APOBEC3C	APOBEC3C	NM_014508
3.788	2.61E-10	ZFP36L2	ZFP36L2	NM_006887
3.777	6.51E-09	SH2D1A	SH2D1A	NM_002351
3.768	3.23E-09		#NA	HSM803120
3.767	6.82E-11		FLJ40584	XM_069189
3.764	9.24E-13	CCND2	CCND2	NM_001759
3.751	6.59E-09	IL6ST	IL6ST	NM_002184
3.735	7.29E-11	ATP5I	ATP5I	NM_007100
3.705	3.14E-10	NDUFA6	NDUFA6	NM_002490
3.674	2.79E-14	DGKA	DGKA	NM_001345
3.658	8.27E-09	NUCB2	NUCB2	NM_005013
3.633	6.13E-07		TGFBR1	XM_038788
3.631	7.26E-14	HSPCA	HSPCA	NM_005348
3.616	1.58E-11	NFATC3	NFATC3	NM_004555
3.589	3.07E-10	TMEM14A	TMEM14A	NM_014051
3.58	1.96E-07	KLRG1	KLRG1	NM_005810
3.565	2.96E-10	KIAA1128	KIAA1128	NM_018999
3.561	4.08E-11	PRKACB	PRKACB	NM_002731

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3.543	8.43E-07	CXCR6	CXCR6	NM_006564
3.542	1.61E-12	PHC3	PHC3	NM_024947
3.541	2.58E-08	PPP1CB	PPP1CB	NM_002709
3.531	2.47E-10		#NA	S56526
3.529	1.51E-09		ATM	HSU67093
3.526	2.41E-06	GZMH	GZMH	NM_033423
3.524	1.39E-16	C6orf111	DKFZp564B0769	NM_032870
3.504	8.95E-13	SF3B3	SF3B3	NM_012426
3.5	1.54E-08	LY9	LY9	AF055708
3.492	4.72E-08	PIK3R1	PIK3R1	NM_181504
3.491	7.88E-12	CBFB	CBFB	NM_001755
3.479	1.39E-16	TMP21	TMP21	AA448691
3.465	7.20E-10	OXCT1	OXCT	NM_000436
3.459	7.52E-06	CD3G	CD3G	NM_000073
3.454	4.73E-15	ZNF91	ZNF91	NM_003430
3.44	7.17E-10	C6orf62	C6orf62	NM_030939
3.434	9.82E-16	MRPS31	MRPS31	NM_005830
3.431	1.69E-14	SAP18	SAP18	NM_005870
3.42	2.11E-10	OGT	OGT	NM_003605
3.419	5.67E-13	TBL1XR1	DC42	NM_030921
3.417	3.14E-09	ARHGAP15	ARHGAP15	NM_018460
3.417	5.74E-11	C6orf129	LOC154467	XM_166346
3.412	2.13E-08	TRGC2	TRG@	BC039725
3.402	1.95E-08		KIAA0268	XM_351341
3.392	8.42E-08	MARK3	MARK3	NM_002376
3.381	3.61E-11	FYN	FYN	NM_002037
3.378	5.77E-16	C20orf104	C20orf104	NM_016436
3.377	7.29E-11	FLJ21963	#NA	AF085967
3.375	2.14E-16	SF3A3	SF3A3	NM_006802
3.353	3.30E-16	ELF1	ELF1	NM_172373
3.352	5.53E-08	RBL2	RBL2	NM_005611
3.345	3.22E-09	GBP1	GBP1	NM_002053
3.335	4.09E-13	SCD4	SCD4	AL831891
3.33	3.18E-15	THY28	THY28	NM_014174
3.317	7.13E-11	PPIE	PPIE	NM_006112
3.317	2.59E-12	SEMA4D	SEMA4D	NM_006378
3.315	1.37E-09	LY9	LY9	NM_002348
3.314	8.80E-07	DJ328E19.C1.1	MGC8902;FLJ20719;NOTCH2	NM_015383
3.308	1.06E-11	DDX24	DDX24	NM_020414
3.304	2.14E-16	COMMD2	LOC51122	NM_016094
3.303	1.11E-08	DKFZp564C0469	DKFZp564C0469	AL050298
3.301	5.64E-13	NUP107	NUP107	NM_020401
3.283	4.56E-13	SSR2	SSR2	NM_003145
3.278	6.50E-09	UBE2L6	UBE2L6	NM_004223
3.277	8.55E-06	MAST3	KIAA0561	XM_038150
3.275	2.66E-13	FLJ20249	FLJ20249	XM_351302
3.27	2.54E-15	RAD21	RAD21	NM_006265
3.263	5.26E-09	ATM	ATM	NM_000051
3.26	2.93E-06	HIST1H4C	HIST1H4C	NM_003542

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3.254	5.64E-13	PRPF3	HPRP3P	NM_004698
3.247	1.26E-13	ACTR6	ACTR6	NM_022496
3.242	9.55E-10	C9orf52	FLJ33868	NM_152574
3.239	2.38E-10	MYCPBP	IRLB	XM_050909
3.229	7.11E-09	C1orf41	LOC51668	NM_016126
3.227	2.80E-11	CAB39	MO25	AF151824
3.225	1.02E-09	C3orf4	C3orf4	NM_019895
3.217	1.48E-12	CYFIP2	PRO1331	NM_030778
3.216	1.72E-11	FLJ20696	FLJ10652	NM_018169
3.216	1.10E-08	DKFZP564O1664	DKFZP564O1664	NM_030800
3.193	5.39E-13	HTATSF1	HTATSF1	NM_014500
3.192	1.53E-08	RPL4	RPL4	NM_000968
3.187	1.56E-13	TOP2B	TOP2B	NM_001068
3.18	2.08E-11		#NA	AK092450
3.18	7.05E-08		#NA;SF3B2	BC009445
3.173	3.73E-10	DKFZP564M182	DKFZP564M182	AJ007398
3.173	2.41E-11	KIAA1007	KIAA1007	NM_016284
3.15	3.23E-10	UBE2V2	UBE2V2	NM_003350
3.148	6.92E-07	PTTG1	PTTG1	NM_004219
3.132	3.22E-13	HNRPU	HNRPU	NM_004501
3.117	1.13E-10	MRPL51	MRPL51	NM_016497
3.117	4.15E-12	SDCCAG1	SDCCAG1	AK000913
3.114	3.81E-14	LARS	LARS	NM_020117
3.112	1.30E-08	NRAS	NRAS	NM_002524
3.109	1.03E-14	STAT4	STAT4	NM_003151
3.108	6.41E-08	PHC3	PHC3	AK095225
3.106	2.71E-08	TNIK	KIAA0551	XM_039796
3.104	1.53E-12	C20orf36	C20orf36	NM_018257
3.093	5.24E-09	C6orf195	C6orf195	NM_152554
3.09	2.20E-12	KBTBD4	FLJ10450	NM_018095
3.09	8.60E-09	C17orf27; KIAA1554	KIAA1554	XM_290768
3.088	6.37E-10		#NA	M28596
3.084	3.71E-11	PDE4B	PDE4B	NM_002600
3.081	2.84E-10	LOC202459	LOC202459	NM_145303
3.075	1.39E-12	C9orf55	FLJ20686	NM_017925
3.075	6.78E-14	MBNL1	MBNL1	NM_021038
3.066	1.44E-07	BBX	BBX	NM_020235
3.062	4.58E-13	MRPL42	MRPL42	NM_014050
3.054	2.12E-11	ABCE1	ABCE1	NM_002940
3.053	9.36E-12	EPRS	EPRS	NM_004446
3.052	3.32E-11	HNRPH1	HNRPH1	NM_005520
3.049	1.34E-13	PUM2	PUM2	NM_015317
3.047	6.82E-11	SLC3A1	SLC3A1	NM_000341
3.046	1.71E-06	GPR171	H963	NM_013308
3.032	8.50E-10	ZNF410	APA1	NM_021188
3.025	5.93E-07	SH2D1A	SH2D1A	AF100543
3.025	1.54E-14	ZNF512	KIAA1805	NM_032434
3.024	1.59E-10	DKFZP564O0523	DKFZP564O0523	NM_032120
3.019	3.22E-14	CIP29	CIP29	NM_033082

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3.018	6.27E-13	AEBP2	AEBP2	NM_153207
3.01	5.27E-09	EIF5B	IF2	NM_015904
3.006	3.38E-09	COX7A3	COX7A3	NM_183003
2.999	1.37E-10	SMARCA2	SMARCA2	NM_139045
2.999	1.21E-10	SOD1	SOD1	NM_000454
2.998	3.87E-06	KIAA0625	KIAA0625	NM_015046
2.995	6.51E-09		TRIP12	NM_004238
2.994	7.98E-07	C6orf133	KIAA0349	AB002347
2.991	2.70E-11	PMS1	PMS1	NM_000534
2.99	7.95E-11	DDB1	DDB1	NM_001923
2.987	2.31E-11	MGC45400	MGC45400	NM_153333
2.985	5.61E-11	HLC-8	FLJ20721	NM_017941
2.977	7.26E-11	MLLT3	MLLT3	NM_004529
2.975	3.94E-09	SEC8L1	SEC8	NM_021807
2.974	5.67E-13	ACTL6A	BAF53A	NM_004301
2.974	1.60E-14	EIF2B3	EIF2B3	NM_020365
2.971	8.61E-14	KIAA1449	KIAA1449	NM_020839
2.969	1.12E-13	PSIP1	PSIP2	NM_033222
2.968	2.08E-10	ATP5H	ATP5H	NM_006356
2.966	8.50E-14	DDX23	DDX23	NM_004818
2.964	7.92E-14	NOP5/NOP58	NOP5/NOP58	NM_015934
2.963	3.34E-09	NJMU-R1	NJMU-R1	NM_022344
2.961	4.19E-09	UBE2H	UBE2H	NM_003344
2.959	1.28E-05	STMN1	STMN1	NM_005563
2.958	5.01E-10	OCIL	LLT1	NM_013269
2.95	2.73E-09	CBLL1	CBLL1	NM_024814
2.95	9.77E-11	PEX19	PXF	NM_002857
2.939	2.12E-11	PRKCQ	PRKCQ	NM_006257
2.936	2.90E-10	LOC133619	LOC133619	NM_130809
2.932	2.69E-06	CD2	CD2	NM_001767
2.924	5.21E-12	LOC375251	LOC375248;KIAA1641	AK074570
2.922	2.12E-11	MRPL22	MRPL22	NM_014180
2.921	1.11E-13	RECQL	RECQL	NM_002907
2.914	1.25E-09	BPIL1	BPIL1	NM_025227
2.91	6.78E-09	ALCAT1	UNQ1849	AK023269
2.909	2.95E-12	DJ122O8.2	DJ122O8.2	NM_020466
2.905	3.59E-12	NFATC3	NFATC3	NM_173164
2.901	1.44E-09	TRIM22	TRIM22	NM_006074
2.894	5.28E-09	RNF34	RNF34	NM_025126
2.892	5.89E-09	PTPN4	PTPN4	NM_002830
2.889	2.04E-14	MORF4L1	MORF4L1	NM_006791
2.888	1.49E-14	KIF2	KIF2	NM_004520
2.887	3.23E-09	MYST4	MYST4	AJ299262
2.887	0.00022	FKSG14	FKSG14	NM_022145
2.886	8.05E-11	CFDP1	CFDP1	NM_006324
2.885	3.81E-14	BCAP31	BCAP31	NM_005745
2.878	3.45E-10	ABCD2	ABCD2	NM_005164
2.877	1.93E-12	H41	H41	NM_017548
2.876	4.36E-13	KIAA1627	KIAA1627	NM_020961

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2.873	4.19E-07	TCF7	TCF7	NM_003202
2.87	4.23E-11	STX17	FLJ20651	NM_017919
2.858	1.85E-09	KIAA1002; PR01365	KIAA1002	NM_014925
2.857	4.00E-11	ANKRD12	KIAA0874	NM_015208
2.852	6.28E-10	T3JAM	DJ434O14.3	NM_025228
2.849	3.24E-10	PDCL	PDCL	NM_005388
2.848	2.88E-07	BTN3A2	BTN3A2	NM_007047
2.842	2.31E-11	AXOT	AXOT	NM_022826
2.841	1.73E-11	PAXIP1L	PAXIP1L	NM_007349
2.84	1.14E-08	DKFZp761G058	DKFZp761G058	NM_152542
2.839	1.46E-07	KLRK1	D12S2489E	NM_007360
2.833	3.68E-09	FLJ14936	FLJ14936	NM_032864
2.83	1.89E-08		#NA	BC045794
2.825	1.39E-16	C17orf25	CGI-150	NM_016080
2.824	8.82E-10	PSMD14	PSMD14	BC009524
2.822	1.44E-09	GBP3	GBP3	NM_018284
2.819	8.67E-07	CRYZ	CRYZ	NM_001889
2.816	1.21E-10		HSPC056;#NA	BC007934
2.812	8.61E-12	HSA275986	HSA275986	NM_018403
2.81	6.03E-10	PAFAH1B1	PAFAH1B1	NM_000430
2.808	4.50E-12	ALG5	ALG5	NM_013338
2.807	1.09E-08		#NA	AK075484
2.806	5.70E-07	PDE7A	PDE7A	NM_002604
2.805	4.66E-06	RGS1	RGS1	NM_002922
2.804	4.63E-06	RHOH	ARHH	NM_004310
2.804	2.74E-09	PCTK2	PCTK2	NM_002595
2.803	0.00011	IGLV@	IGLV@	M12025
2.802	6.90E-10	LYRIC	LYRIC	NM_178812
2.802	1.92E-07	KIAA0226	KIAA0226	XM_032901
2.8	1.53E-12	C6orf162	C6orf162	NM_020425
2.8	6.61E-07	ATP6V1C2	ATP6V1C2	NM_144583
2.791	9.82E-12	TCF8	TCF8	NM_030751
2.789	5.00E-15	SF3A1	PCNXL3;SF3A1	NM_005877
2.788	7.11E-14	ZNF22	ZNF22	NM_006963
2.782	1.98E-07	SLAMF7	CRACC	NM_021181
2.778	1.45E-15	HSPC148	HSPC148	NM_016403
2.776	6.40E-11	CASP8	CASP8	NM_001228
2.774	4.86E-14	CRBN	LOC51185	NM_016302
2.771	1.81E-08	HBS1L	HBS1L	NM_006620
2.77	1.08E-12	HSPC051	HSPC051	NM_013387
2.767	3.71E-08	MAD2L1	MAD2L1	NM_002358
2.766	8.07E-05	COX6C	COX6C	NM_004374
2.765	2.13E-07	SARA2	LOC51128	NM_016103
2.758	6.60E-14	CCT3	CCT3	NM_005998
2.753	2.75E-09		LOC375443	XM_351608
2.752	5.77E-13	DAP3	DAP3	NM_004632
2.751	4.54E-07	ch-TOG	ch-TOG	NM_014756
2.75	5.01E-13	FLJ13291	FLJ13291	NM_032178
2.749	2.41E-10	EDD	DD5	NM_015902

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2.746	3.17E-11		FLJ13373	XM_352896
2.744	5.77E-16	PITPNB	PITPNB	NM_012399
2.742	1.09E-11	BTN3A3	BTN3A1;BTN3A3	NM_006994
2.74	2.36E-17	ZNF265	ZNF265	NM_005455
2.738	5.25E-15	CCNH	CCNH	NM_001239
2.738	6.74E-10		C20orf53	NM_178472
2.737	7.80E-10	C13orf12	C13orf12	NM_015932
2.736	3.65E-09	B4GALT3	B4GALT3	NM_003779
2.736	5.07E-13	LOC51321	LOC51321	NM_016627
2.734	2.31E-12	PSMD11	PSMD11	NM_002815
2.733	1.61E-09	STARD7	STARD7	NM_020151
2.732	9.61E-13	DDX46	DDX46	NM_014829
2.732	4.60E-13	NUCKS	NUCKS	NM_022731
2.731	1.58E-11	SKP1A	SKP1A	NM_006930
2.723	2.16E-07	MBP	MBP	BC030093
2.722	6.12E-10	CCT8	CCT8	NM_006585
2.722	1.12E-09	MBC2	MBC2	NM_015292
2.715	1.01E-05	MGC61571	MGC61571	NM_182523
2.714	2.30E-09	C21orf51	C21orf51	NM_058182
2.713	2.95E-12	MTAC2D1	MTAC2D1	NM_152332
2.712	4.82E-12	CAB39	MO25	NM_016289
2.707	4.97E-08	ZNF337	ZNF337	NM_015655
2.704	1.74E-09	MI-ER1	MI-ER1	NM_020948
2.704	2.76E-10	ACSL5	FACL5;ACSL5	NM_016234
2.703	1.96E-13	HDAC1	HDAC1	NM_004964
2.702	7.87E-10	STX8	STX8	NM_004853
2.701	2.37E-06	MSN	MSN	NM_002444
2.697	3.30E-12	MBNL1	MBNL1	BC005296
2.69	1.08E-06	EG1	EG1	AK024944
2.685	4.09E-13	ELYS	ELYS	NM_015446
2.68	2.77E-09	MRPL1	MRPL1	NM_020236
2.678	3.73E-10	SUPT16H	SUPT16H	NM_007192
2.676	2.56E-09	HCNGP	HCNGP	NM_013260
2.673	2.08E-09	MRPL48	MRPL48	NM_016055
2.671	9.74E-09	VRK1	VRK1	NM_003384
2.667	1.20E-15	DKFZp564K142	DKFZp564K142	NM_032121
2.666	4.28E-08	PAK2	PAK2	AF092132
2.666	1.29E-14		#NA	HSMR3
2.664	9.23E-09	CCT2	CCT2	NM_006431
2.662	4.58E-13	TAF9L	TAF9L	NM_015975
2.66	1.04E-09	RANBP2	RANBP2	NM_006267
2.649	4.45E-11	LOC57117	LOC57117	NM_020395
2.649	3.22E-13	MTRF1	MTRF1	BC027731
2.647	6.07E-17	FMR1	FMR1	NM_002024
2.644	6.78E-14	SCYE1	SCYE1	NM_004757
2.64	5.07E-13	LOC94431	RRN3;LOC94431	NM_145237
2.638	1.44E-10	FLJ38968	FLJ38968	NM_152316
2.637	1.30E-05	GZMA	GZMA	NM_006144
2.63	1.41E-06	EIF3S6	EIF3S6	NM_001568

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2.629	2.61E-10	SC4MOL	SC4MOL	NM_006745
2.627	4.62E-13	KCTD13	PDIP1	NM_178863
2.625	4.45E-05	ITM2A	ITM2A	NM_004867
2.625	1.24E-10	MGC24132	MGC24132	NM_152396
2.624	6.49E-09	MRPL27	MRPL27	NM_016504
2.622	7.51E-11	C18orf17	FLJ33761	AF363068
2.622	2.39E-08	TAF1	TAF1	AL713702
2.619	1.01E-07		#NA	AK023329
2.619	1.10E-08	POGZ	POGZ	NM_015100
2.618	5.84E-09	ACLY	ACLY	NM_001096
2.617	2.11E-07	FLJ10359	FLJ10359	AK095692
2.615	3.73E-05	AHNAK	MGC5395	X74818
2.613	7.48E-13	CSE1L	CSE1L	NM_001316
2.613	1.00E-07	PCNA	PCNA	NM_002592
2.613	3.18E-08	NIPBL	IDN3	NM_015384
2.612	3.96E-09	COG5	COG5	NM_006348
2.612	2.23E-09	CDC14A	CDC14A	NM_003672
2.611	2.76E-10	SNRPB2	SNRPB2	NM_003092
2.609	8.50E-10	USP1	USP1	NM_003368
2.605	3.42E-11	C14orf123	C14orf123	NM_014169
2.605	2.06E-12	ERBP	HSU15552	NM_014597
2.605	4.09E-13	YME1L1	YME1L1	NM_014263
2.603	9.27E-07	LPXN	LPXN	NM_004811
2.599	3.33E-11		ACYP1	XM_352906
2.598	7.35E-09		#NA	AF143872
2.596	7.79E-15	Ufc1	HSPC155	NM_016406
2.596	1.59E-07	FLJ35036	FLJ22332	XM_172341
2.595	1.03E-09	ASCC3L1	U5-200KD	NM_014014
2.595	2.46E-06	APOL3	APOL3	NM_014349
2.592	1.03E-12	TTC3	TTC3	NM_003316
2.591	1.06E-08	ADH5	ADH5	NM_000671
2.591	6.67E-11	PSMD10	PSMD10	NM_002814
2.588	1.54E-07	SIMP	SIMP	NM_178862
2.587	1.39E-08	LYRIC	LYRIC	N92734
2.586	6.27E-09	IAN4L1	IAN4L1	NM_018384
2.584	2.19E-10	CYFIP2	CYFIP2	NM_014376
2.583	4.01E-08	Rif1	DKFZP434D193	AK074349
2.582	2.41E-10	CUL4A	CUL4A	NM_003589
2.58	1.45E-06	SYNCRIP	NSAP1	NM_006372
2.579	1.03E-09	C20orf45	C20orf45	NM_016045
2.577	1.80E-09	U1SNRNPBP	U1SNRNPBP	NM_007020
2.576	1.93E-12	DOCK11	FLJ32122	NM_144658
2.575	1.09E-08	SLC4A7	SLC4A7	NM_003615
2.573	9.62E-14	UBE2V1	UBE2V1	NM_003349
2.571	8.12E-10	HSPC128	HSPC128	NM_014167
2.57	1.15E-11	FLJ20035	FLJ20035	NM_017631
2.569	1.92E-07	SIAT4A	LOC286167	BX537506
2.568	4.77E-09	PCF11	PCF11	NM_015885
2.568	3.20E-10		PAG	AK095177

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2.567	2.46E-07	INPP4B	INPP4B	NM_003866
2.567	3.59E-11	C13orf24	PIBF1	NM_006346
2.566	1.14E-10		FLJ20220	XM_352946
2.564	9.98E-11	MRPL45	MRPL45	NM_032351
2.562	2.76E-09	MLLT10	MLLT10	NM_004641
2.562	9.02E-08	ATF2	ATF2	NM_001880
2.562	3.43E-11	RAD51C	RAD51C	NM_002876
2.555	1.93E-09	RAD54B	RAD54B	NM_006550
2.553	2.55E-10	UBXD2	UBXD2	NM_014607
2.553	1.00E-12	RBM25	S164	XM_027330
2.547	4.65E-11	CDC23	CDC23	NM_004661
2.547	1.23E-05	FLJ30656	FLJ30656	NM_152344
2.547	7.57E-06	RPS3	RPS3	NM_001005
2.547	7.37E-08	TFRC	TFRC	NM_003234
2.547	9.49E-15	TAF9	TAF9	NM_003187
2.547	7.25E-10		#NA	BC015512
2.546	1.26E-09	RBMX	RBMX	NM_002139
2.545	2.34E-12	BAG5	BAG5	NM_004873
2.542	2.84E-08	STK38	STK38	NM_007271
2.54	1.10E-08	UMP-CMPK	UMP-CMPK	NM_016308
2.539	1.16E-10	BANF1	BANF1	NM_003860
2.537	3.71E-10	ATRX	ATRX	NM_000489
2.536	1.49E-07	AFURS1	FLJ20986	NM_024524
2.535	2.91E-08	ITGA6	ITGA6	NM_000210
2.535	3.69E-07	NASP	NASP	NM_002482
2.535	3.30E-12	HRB2	HRB2	NM_007043
2.534	5.72E-09	ARTS-1	ARTS-1	NM_016442
2.533	2.57E-10	GOSR2	GOSR2	NM_004287
2.532	5.14E-08	ANKRD17	GTAR;ANKRD17	NM_032217
2.529	5.02E-07	FKSG42	FKSG42	NM_032032
2.528	3.33E-11	HNRPC	HNRPC	NM_004500
2.527	5.83E-15	C9orf80	HSPC043	NM_021218
2.527	2.74E-11	H2AFV	.	NM_138635
2.525	5.98E-10	MKI67IP	MKI67IP	NM_032390
2.525	1.77E-11	Zep-2	KIAA1221	NM_032186
2.524	2.26E-09	FBXO3	FBXO3	NM_033406
2.524	2.94E-08	MAP3K7IP2	MAP3K7IP2	NM_015093
2.523	4.11E-10	RAP140	RAP140	NM_015224
2.519	1.05E-07	IREB2	IREB2	XM_039114
2.519	1.02E-09	LOC133957	LOC133957	NM_145265
2.516	3.87E-05	HRMT1L1	HRMT1L1	NM_001535
2.514	1.10E-06	SOS1	SOS1	NM_005633
2.514	2.21E-14	RIP	MGC4189	NM_032308
2.512	4.48E-10	BCLAF1	BTF	NM_014739
2.51	1.12E-11	RAD9B	RAD9B	NM_152442
2.507	7.31E-12	PTPN22	PTPN22	NM_015967
2.504	2.14E-08	C14orf32	C14orf32	NM_144578
2.504	2.09E-08	MYCPBP	IRLB	AK091368
2.503	1.22E-07	CHD9; AD013	BC022889	AF150735

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2.5	5.68E-08	FALZ	FALZ	NM_004459
2.498	6.32E-08	POLR1C	POLR1C	NM_004875
2.497	3.54E-08	RBM6	RBM6	NM_005777
2.495	1.19E-08	SDCCAG33	SDCCAG33	NM_005786
2.495	7.50E-11	C6orf32	C6orf32	NM_015864
2.494	1.48E-12	MRPS9	MRPS9	NM_182640
2.492	5.50E-11	SP192	SP192	NM_021639
2.492	6.70E-10	LOC85865	LOC85865	NM_033107
2.492	8.39E-08	C7orf6	FLJ39885	NM_152703
2.49	4.08E-11	EBAG9	EBAG9	NM_004215
2.49	1.34E-13	BRD8	BRD8	NM_006696
2.49	1.43E-11	FLJ20487	FLJ20487	NM_017841
2.489	1.16E-05	BTLA	BTLA	NM_181780
2.487	5.52E-11	GART	GART	AF008655
2.484	1.62E-11	STK17B	STK17B	NM_004226
2.484	1.12E-13	KIAA0663	.	NM_014827
2.484	3.17E-11	SORL1	SORL1	NM_003105
2.483	8.71E-10	RNASEL	RNASEL	NM_021133
2.481	2.69E-07	ATR	ATR	NM_001184
2.479	2.93E-10	MKLN1	MKLN1	NM_013255
2.477	5.77E-13	USP16	USP16	NM_006447
2.476	2.38E-09		FLJ10381	NM_018080
2.475	5.63E-08	ADAR	ADAR	NM_001111
2.474	8.49E-13	SMAP	SMAP	NM_014267
2.473	5.45E-07	PRKR	PRKR	NM_002759
2.469	3.80E-09	HRPT2	C1orf28	NM_024529
2.468	1.52E-08	PHF6	PHF6	NM_032335
2.465	1.22E-10	SRPK1	SRPK1	NM_003137
2.464	3.17E-11	HP1-BP74	HP1-BP74	NM_016287
2.461	1.08E-10	RBBP7	RBBP7	NM_002893
2.461	3.68E-10	LOC151534	LOC151534	NM_138482
2.458	5.82E-09	KIAA0746	KIAA0746	XM_045277
2.457	7.41E-08	TA-PP2C	TA-PP2C	NM_139283
2.455	3.17E-11	PARK7	PARK7	NM_007262
2.451	6.69E-09	PRKCBP1	PRKCBP1	AA480906
2.451	2.00E-09	CENTD1	CENTD1	NM_015230
2.449	1.64E-08	RWDD3	RWDD3	NM_015485
2.448	9.39E-11		UREB1	NM_031407
2.447	1.26E-09	ARMC8	HSPC056;#NA	NM_014154
2.445	2.65E-10	TPR	TPR	NM_003292
2.444	5.79E-11	FLJ10154	.	NM_018011
2.444	2.47E-06		MRPL47	AF285120
2.443	2.27E-08	MGC14288	MGC14288	NM_032901
2.443	8.00E-13	FLJ31153	FLJ31153	NM_144600
2.442	2.02E-09	DDX17	KDEL3	BC029553
2.44	6.09E-13	TMF1	TMF1	NM_007114
2.44	1.72E-09	BZW1	BZW1	NM_014670
2.439	1.89E-08	GBP2	GBP2	NM_004120
2.439	6.09E-10	NOD27	NOD27	AK090439

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2.437	2.74E-08	RAB7L1	RAB7L1	NM_003929
2.435	3.97E-08		TCR	HSY15200
2.432	3.23E-10	TCERG1	TCERG1	NM_006706
2.432	1.15E-12	ZNF258	ZNF258	BC029439
2.431	8.29E-10	PILRB	PILRB	NM_013440
2.431	2.55E-09	PHIP	PHIP	NM_017934
2.431	5.12E-07		#NA	HSU52054
2.429	5.73E-13	COL5A2	COL5A2	NM_000393
2.428	3.31E-07	NAP1L1	NAP1L1	NM_004537
2.427	1.64E-07	TRIP3	TRIP3	NM_004773
2.425	2.73E-09	KIAA0553	KIAA0553	XM_290758
2.423	8.64E-10	AE2	DKFZp434D177	NM_032264
2.422	1.28E-09	CETN3	CETN3	NM_004365
2.422	7.87E-10	TDE1	TDE1	NM_006811
2.421	1.97E-09	CREB1	CREB1	NM_004379
2.42	1.21E-06	POLR3K	POLR3K	NM_016310
2.419	7.92E-14	SEPT15;SEP15	SEPT15;SEP15	NM_004261
2.419	1.08E-05	TACC1	TACC1	NM_006283
2.419	3.24E-10	FLJ38663	FLJ38663	NM_152269
2.417	3.59E-12	SFRS2	SFRS2	NM_003016
2.417	1.07E-10	BCCIP	BCCIP	NM_016567
2.415	5.79E-09	MGC21654	MGC21654	NM_145647
2.415	2.91E-05	MCM7	MCM7	NM_005916
2.413	4.18E-05	IFITM1	.	NM_003641
2.409	8.56E-08	VBP1	VBP1	NM_003372
2.407	8.80E-10	HIBCH	HIBCH	NM_014362
2.407	2.88E-10	NSUN4	FAAH;MGC22960	BC016907
2.405	1.86E-10	ERCC5	ERCC5	NM_000123
2.405	1.44E-10	GNAS	GNAS	NM_000516
2.404	1.19E-05	MGC19764	MGC19764	NM_144975
2.403	1.85E-09	PARP1	C12orf6	NM_020367
2.403	3.20E-11	FARSLB	FRSB	NM_005687
2.402	3.43E-10	NONO	NONO	NM_007363
2.402	4.45E-08	KIAA0090	KIAA0090	NM_015047
2.4	7.21E-08		#NA	AF052160
2.399	1.95E-08	PPP3CA	PPP3CA	NM_000944
2.396	7.13E-11	AKAP11	AKAP11	NM_016248
2.394	8.37E-08	GNA13	GNA13	NM_006572
2.394	1.43E-07	FLJ31033	FLJ31033	XM_037817
2.393	8.50E-09	ATAD1	FLJ14600	NM_032810
2.392	1.42E-08	GALC	GALC	U77631
2.392	1.47E-08	SMC4L1	SMC4L1	NM_005496
2.39	4.34E-09		LOC350498	BC018088
2.387	4.60E-10	BIRC6	BIRC6	NM_016252
2.386	3.59E-12	SLC7A6; LAT3; LAT-2; y+LAT-2; KIAA0245	SLC7A6	NM_003983
2.385	1.86E-09	KNTC1	KNTC1	NM_014708
2.385	2.84E-10	FLJ22028	FLJ22028	NM_024854

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2.384	1.04E-11	C20orf13	C20orf13	NM_017714
2.384	3.09E-12	COX7A2	COX7A2	NM_001865
2.384	3.79E-14	SON	SON	NM_032195
2.383	1.20E-12	SHFM1	SHFM1	NM_006304
2.382	1.51E-10	UBE1C	UBE1C	NM_003968
2.381	4.61E-09	KCMF1	KCMF1	NM_020122
2.381	1.48E-12	RPN2	RPN2	NM_002951
2.38	4.77E-07	TXK	TXK	NM_003328
2.378	5.72E-07	MGEA5	MGEA5	NM_012215
2.378	2.90E-09	FLJ25005	FLJ25005	NM_152334
2.377	2.98E-09	HIF1A	HIF1A	NM_001530
2.376	1.69E-09	SMU1	SMU-1	NM_018225
2.375	9.97E-10	PSMA3	PSMA3	NM_002788
2.375	4.90E-09	LOC257106	LOC257106	NM_181720
2.374	3.21E-10	DCTN6	DCTN6	NM_006571
2.369	6.16E-05	CHI3L2	CHI3L2	NM_004000
2.369	9.29E-11	XBP1	XBP1	NM_005080
2.368	0.00247	IGLV@	IGL	AF047240
2.368	9.44E-10	MIS12	MIS12	NM_024039
2.368	2.72E-06	PAN3	LOC255967	NM_175854
2.366	1.88E-10	ZNF638	NP220	NM_014497
2.366	7.28E-12	XRCC5	XRCC5	NM_021141
2.365	1.39E-06	PFDN4	PFDN4	NM_002623
2.363	5.01E-13	IARS	IARS	NM_013417;NM_002161
2.362	2.09E-07	CSNK2A1	CSNK2A1	NM_001895
2.361	1.82E-09	C20orf9	C20orf9	NM_016004
2.361	5.08E-12	FOXP1	FOXP1	NM_032682
2.358	3.64E-14	DC2	DC2	NM_021227
2.357	8.85E-08	LOC151963	LOC151963	NM_178496
2.357	6.34E-06	CCNE2	CCNE2	NM_004702
2.355	1.37E-07	HSPE1	HSPE1	NM_002157
2.354	1.97E-09	NSEP1	NSEP1	NM_004559
2.354	3.12E-06	UBAP1	UBAP1	NM_016525
2.353	3.42E-09	TRIP15	TRIP15	NM_004236
2.353	3.84E-13	NFX1	NFX1	NM_147133
2.352	4.15E-12	EEF1E1	EEF1E1	NM_004280
2.351	1.16E-11	TAF12	TAF12	NM_005644
2.351	1.17E-10	C5orf3	C5orf3	NM_018691
2.349	1.52E-05	ACSL6	FACL6	NM_015256
2.349	5.87E-11	RAPGEF6	PDZGEF2	NM_016340
2.349	1.02E-05	USP28	USP28	NM_020886
2.348	1.01E-09	C5orf5	C5orf5	NM_016603
2.347	5.03E-09	RBBP6	RBBP6	NM_006910
2.347	2.99E-12	SEC31L1	KIAA0905	NM_014933
2.345	4.48E-15	POP5	POP5	NM_015918
2.345	2.55E-10	GNB1	GNB1	NM_002074
2.345	5.09E-08	RBM4	RBM4	NM_002896
2.342	6.50E-12	TGDS	TGDS	NM_014305

Supplementary Table 3. Gene expression signature defining prognostic subgroups in AAV. 1228 genes showing differential expression between subgroups 8.1 and 8.2 in a cohort of 59 AAV patients with fold-change greater than 2 and FDR-corrected p-value <0.05. Fold-change (FC) and FDR-corrected p-value (FDR p) are given for each gene along with Gene Symbol and Genbank Accession identifier.

2.342	2.40E-09	HMG20A	HMG20A	NM_018200
2.339	2.68E-10		KIAA1411	NM_020819
2.337	9.49E-15	TDP1	TDP1	NM_018319
2.337	1.34E-13	FAM18B	FAM18B	NM_016078
2.336	9.00E-07		FLJ31131	NM_152535
2.335	9.51E-09	BPNT1	BPNT1	NM_006085
2.335	6.36E-09	KIAA1219	KIAA1219	XM_028835
2.334	9.86E-11	APG12L	APG12L	NM_004707
2.334	1.58E-11	TLK1	TLK1	NM_012290
2.334	4.29E-11	TIP120A	TIP120A	NM_018448
2.333	9.33E-08		KIAA0100	XM_351114
2.333	1.36E-07	KIAA1160	KIAA1160	NM_020701
2.332	2.60E-11	C6orf75	MDS024	NM_021820
2.331	5.89E-07	FLJ23577	FLJ23577;KPL2	NM_144722
2.33	7.68E-05	na	LOC197135	XM_113825
2.329	1.03E-07	C14orf129	C14orf129	NM_016472
2.328	2.40E-09	EPC1	EPC1	NM_025209
2.328	1.19E-07	FLJ32942	FLJ32942	NM_144594
2.327	2.25E-06	NCOA3	NCOA3	NM_006534
2.327	1.29E-10	BAPX1	BAPX1	NM_001189
2.327	1.51E-09	BTN2A1	BTN2A1	NM_007049
2.326	2.20E-10	KIAA0052	KIAA0052	NM_015360
2.322	4.62E-07	CNAP1	CNAP1	NM_014865
2.322	2.15E-08		LOC284580	AK094426
2.322	1.85E-05	CREBL1	CREBL1	NM_004381
2.321	2.39E-08	AP3M2	AP3M2	NM_006803
2.321	6.34E-10	LOC401152	LOC344984	BC017399
2.321	9.25E-13	DLD	DLD	NM_000108
2.32	5.28E-09	TBL1XR1	IRA1	NM_024665
2.319	1.06E-11	DBI	DBI	NM_020548
2.317	8.30E-08	SLK	SLK	NM_014720
2.316	3.17E-11	CDC10	CDC10	NM_001788
2.316	1.21E-08	PRKCB1	PRKCB1	NM_002738
2.314	9.66E-12	SDCCAG1	SDCCAG1	NM_004713
2.312	1.83E-09	KIFAP3	KIFAP3	NM_014970
2.312	6.07E-07		C14orf61	NM_177527
2.31	5.67E-13	ERH	ERH	NM_004450
2.309	0.00010	BAL	BAL	NM_031458
2.309	5.21E-12	RANBP5	KPNB3	NM_002271
2.307	3.48E-07	PTTG2	PTTG2	NM_006607
2.305	2.02E-11		FLJ20343	BF667436
2.304	5.33E-09	RNF19	RNF19	NM_015435
2.304	7.52E-08	COH1	COH1	NM_152564
2.303	1.83E-09	CBX5	CBX5	NM_012117
2.302	1.09E-08	ZNFN1A5	PEGASUS	NM_022466
2.301	9.00E-11	MGC3794	MGC3794	NM_152902
2.301	3.73E-08	ARNT	ARNT	NM_001668
2.299	1.02E-07	STK16	STK16	NM_003691

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2.299	2.06E-07		HIC	AF054589
2.298	1.70E-11	SLC38A1	SLC38A1	NM_030674
2.298	1.04E-05	PIP5K2C	PIP5K2C	NM_024779
2.298	4.70E-07	FLJ13231	FLJ13231	NM_023073
2.296	2.02E-08	OSGEPL1	OSGEPL1	NM_022353
2.296	6.56E-10	DKFZP434I116	DKFZP434I116	NM_015496
2.295	4.56E-06	MAP4K5	MAP4K5	NM_006575
2.295	3.36E-08	MGC39518	MGC39518	NM_173822
2.293	1.21E-10	SET	SET	NM_003011
2.291	8.29E-10	PLEKHK1	RTKN2	NM_145307
2.29	2.72E-08	MGC13272	MGC13272	NM_032355
2.285	7.69E-12	PLRG1	PLRG1	NM_002669
2.285	1.23E-09	C14orf108	C14orf108	NM_018229
2.285	4.30E-08	DDX6	DDX6	AK021715
2.284	2.65E-10	LOC123169	LOC123169	NM_138792
2.283	1.59E-09	ELOVL3	ELOVL3	NM_152310
2.282	4.47E-08	KIAA2010	FLJ20707	NM_017936
2.281	2.50E-06	DSCR5	DSCR5	NM_016430
2.28	0.00064	IGKC	IGKC	L12091
	6			
2.279	8.82E-10	RSU1	RSU1	NM_012425
2.279	1.16E-05		#NA	AA625894
2.279	1.09E-08		KIAA1277	XM_353688
2.278	8.68E-07	C6orf106	MGC4614;FLJ22195	NM_022758
2.276	1.62E-08	ZNF292	ZNF292	AK023626
2.272	1.28E-10	PRKCH; PKCL; PKC-L; PRKCL; MGC5363; MGC26269; nPKC-eta	PRKCH	S74620
2.271	8.49E-09	JARID1A	RBBP2	NM_005056
2.271	0.00089		#NA	AF058068
	4			
2.27	1.10E-08	CCDC5	LOC115106	NM_138443
2.27	4.23E-12	POLR2B	POLR2B	NM_000938
2.27	9.82E-09	AARS	AARS	NM_001605
2.27	2.05E-08	PIGF	PIGF	NM_002643
2.269	1.03E-09	LOC54499	LOC54499	NM_019026
2.268	2.26E-10	FLJ10637	FLJ10637	NM_018164
2.268	3.12E-10	MGC33371	MGC33371	NM_144664
2.266	1.02E-07	ANKRD10	ANKRD10	NM_017664
2.266	0.00011	SIAT4A	SIAT4A	NM_003033
	9			
2.266	1.33E-10	CDR2	CDR2	XM_071866
2.265	7.87E-10	LSM3	LSM3	NM_014463
2.265	1.61E-12	RBM8A	RBM8A	BC017770
2.263	1.60E-08	PIK3R4	PIK3R4	NM_014602
2.263	5.68E-13	CDC26	CDC26	NM_139286
2.263	1.63E-10	SCP2	SCP2	NM_002979
2.262	2.29E-05	RPE	RPE	NM_006916
2.262	3.41E-09		MGC19556	NM_033551

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2.26	5.07E-06	DLG3	DLG3	NM_021120
2.26	1.47E-10	FLJ12484	FLJ12484	NM_022767
2.26	3.86E-08	DKFZp547B1713	DKFZp547B1713	NM_152379
2.259	2.31E-09	PS1D	PS1D	NM_016505
2.258	3.94E-08	FLJ21439	FLJ21439	NM_025137
2.256	2.92E-07	SHOC2	SHOC2	NM_007373
2.255	7.16E-11	C14orf130	C14orf130	NM_018108
2.254	1.04E-11	SEC63	SEC63	NM_007214
2.253	5.49E-07		SQV7L	XM_351842
2.253	1.13E-07	AP2B1	AP2B1	NM_001282
2.253	2.49E-11	NT5E	NT5E	NM_002526
2.25	2.64E-07	ATIC	ATIC	NM_004044
2.249	1.86E-07	CDK3	CDK3	NM_001258
2.248	1.09E-08	C20orf111	C20orf111	NM_016470
2.248	2.03E-07	TTC12	FLJ20535	NM_017868
2.248	1.23E-09	INPP5B	INPP5B	M74161
2.248	1.74E-09	RNF14	RNF14	NM_004290
2.247	7.87E-10	FLJ20534	FLJ20534	NM_017867
2.245	1.06E-06	SLC25A29	YY1	BC051735
2.244	4.76E-10	SH2BP1	SH2BP1	NM_014633
2.244	9.65E-10	FLJ30525	FLJ30525	NM_144584
2.244	6.37E-09	MGC15606	MGC15606	NM_145037
2.242	9.70E-05	CDKN3	CDKN3	NM_005192
2.242	5.72E-10	ARID4B	RBP1L1	NM_016374
2.241	1.86E-08	LCMT1	LCMT1	NM_016015
2.241	5.03E-09	RAP80	.	NM_016290
2.239	7.86E-09	CDKL1	CDKL1	NM_004196
2.238	2.92E-08	ILF2	ILF2	NM_004515
2.238	9.74E-09	MTRR	MTRR	NM_002454
2.237	3.93E-07	MLL3	MLL3	NM_021230
2.236	3.23E-10	PDHA1	PDHA1	NM_000284
2.235	1.20E-07	HMGCL	HMGCL	NM_000191
2.234	9.00E-07	WDR20	WDR20	NM_144574
2.234	6.89E-09	FLJ25692	.	NM_173518
2.233	2.34E-06	KIAA0478	.	NM_014870
2.233	1.91E-05	PSMC4	PSMC4	NM_006503
2.231	2.75E-09	LETMD1	HCCR1	NM_015416
2.23	3.98E-09	C10orf118	FLJ10188	NM_018017
2.229	3.28E-07	SFRS11	SFRS11	NM_004768
2.229	7.92E-11	SDCCAG8	SDCCAG8	NM_006642
2.228	1.79E-09	TARDBP	AF311304;TARDBP	NM_031214
2.227	7.32E-12	FNBP4	FNBP4	NM_015308
2.227	6.00E-15	ZNF226	ZNF226	NM_016444
2.226	5.68E-08	CDK5RAP1	CDK5RAP1	NM_016082
2.225	4.23E-10	C6orf70	FLJ11152	AK002014
2.225	2.88E-07	SOS1	SOS1	H64325
2.225	2.50E-06		#NA	HSTCRA031
2.224	9.33E-08	ARFGAP3	ARFGAP3	NM_014570
2.223	1.11E-13	C9orf78	LOC51759	NM_016482

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2.223	7.78E-07	LOC144363	KRAS2	AK095164
2.221	1.01E-11	COPB	COPB	NM_016451
2.22	3.40E-06	OK/SW-cl.56	OK/SW-cl.56	NM_178014
2.219	1.79E-11	ATP5J2	ATP5J2	NM_004889
2.219	9.24E-13	WINS1	WINS1	NM_018148
2.217	1.33E-10	C9orf5	C9orf5	NM_032012
2.217	2.12E-10	C10orf125	LOC282969	XM_208461
2.216	1.16E-10	FLJ22490	FLJ22490	BC029445
2.216	3.07E-09	EPS15	EPS15	NM_001981
2.215	2.44E-06	ARIH1	ARIH1	NM_005744
2.215	3.69E-10		EIF4B	NM_018507
2.214	4.79E-07	CCNG1	CCNG1	NM_004060
2.213	4.16E-10	C20orf43	C20orf43	NM_016407
2.213	1.42E-08	CDC5L	CDC5L	NM_001253
2.212	5.39E-09	USP7	USP7	NM_003470
2.211	9.23E-09	ZNF30	DKFZp686N19164	XM_028742
2.209	3.13E-07	TCEB2	TCEB2	NM_007108
2.209	4.25E-06	USP4	USP4	NM_003363
2.209	2.64E-10	SON	SON	NM_003103
2.208	3.76E-08	CDC16	CDC16	NM_003903
2.208	6.74E-09	IMPA1	IMPA1	NM_005536
2.208	2.80E-08	IQWD1	PC326	NM_018442
2.208	5.26E-07	FLJ12892	FLJ12892	NM_022757
2.207	0.00010	GBP5	GBP5	NM_052942
	2			
2.207	1.34E-08	FLJ10980	FLJ10980	XM_035527
2.206	3.30E-09	PRPF4	PRPF4	NM_004697
2.204	4.05E-08	DZIP3	DZIP3	NM_014648
2.203	8.11E-07	AP3S2	AP3S2	NM_005829
2.202	2.93E-09		USP24	XM_038933
2.201	6.78E-09	SMAD2	MADH2	NM_005901
2.201	3.06E-08	RNF10	RNF10	NM_014868
2.2	1.14E-05	VPS13C	FLJ10381;KIAA1421	AB037842
2.2	8.97E-08	MOCS2	MOCS2	NM_004531
2.2	0.00162		#NA	AF060132
2.2	0.0017	FLJ31951	FLJ31951	NM_144726
2.2	0.00017	IL2RG	IL2RG	NM_000206
	9			
2.199	4.64E-13	SDAD1	FLJ10498	NM_018115
2.198	5.70E-11	MYCBP2	PAM	AK000968
2.198	1.13E-10		KIAA0117	XM_290939
2.198	0.0068	IGKC	IGKC	L40695
2.197	4.37E-07		FLJ14743	XM_042708
2.197	7.91E-10	DNMT3A	DNMT3A	NM_022552
2.196	3.51E-07	BAZ1A	BAZ1A	NM_013448
2.195	4.86E-09	PIGC	PIGC	NM_002642
2.193	7.96E-11	FLJ10520	FLJ10520	NM_018124
2.19	6.90E-09		PHF14	NM_014660
2.189	1.57E-07	ARFGEF2	ARFGEF2	NM_006420

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2.189	1.17E-06	TSPYL1	TSPYL	AL136629
2.188	0.000107		KIAA0114	XM_353348
2.187	2.45E-09	CGI-119	CGI-119	NM_016056
2.185	1.44E-07	CENTB2	CENTB2	NM_012287
2.185	1.19E-08	FLJ32440	FLJ32440	NM_173685
2.184	2.58E-09	FXR1	FXR1	NM_005087
2.184	6.90E-10	CDC42	CDC42	NM_001791
2.182	4.97E-08	BCL2	BCL2	NM_000633
2.182	7.50E-09	ELMO1	ELMO1	NM_014800
2.181	2.82E-08	RAB21	RAB21	NM_014999
2.18	4.01E-09	RASA2	RASA2	NM_006506
2.18	3.89E-08	MACF1	MACF1	NM_012090
2.179	2.99E-12	SIN3A	SIN3A	NM_015477
2.178	1.92E-11	CGI-94	CGI-94	NM_016037
2.178	6.48E-08	DER1	PRO2577;MGC3067	NM_018630
2.178	7.30E-10	CGI-30	CGI-30	NM_015958
2.177	1.22E-09	MBIP	MBIP	NM_016586
2.177	1.82E-05	MADP-1	MADP-1	NM_033114
2.176	5.02E-11	LOC440138	KIAA0266	NM_021645
2.176	7.25E-08	ATM	ATM	NM_138293
2.175	2.73E-09	TTF1	TTF1	NM_007344
2.175	9.87E-09	USP18	USP18	NM_017414
2.174	4.19E-10	SCFD1	SCFD1;C14orf163	NM_016106
2.173	1.49E-06	STAT1	STAT1	NM_007315
2.173	3.94E-12	C14orf1	C14orf1	NM_007176
2.172	2.44E-09	NIF3L1	NIF3L1	NM_021824
2.171	9.34E-12	KIAA0372	KIAA0372	NM_014639
2.171	6.68E-07	KLF12	KLF12	NM_016285
2.171	0.00594	IGKC	IGKC	AJ388654
2.17	5.32E-07	NAPG	NAPG	NM_003826
2.168	3.34E-07	NR1D2	NR1D2	NM_005126
2.168	1.14E-05	KIAA1117	KIAA1117	NM_015018
2.167	7.62E-10	RNUT1	RNUT1	NM_005701
2.167	4.57E-08	LOC400986	KIAA1641	AL832977
2.166	5.22E-08	ATF7IP	ATF7IP	NM_018179
2.166	6.32E-10	SORL1	SORL1	AA424516
2.165	3.54E-08	STAT3	STAT3	BC029783
2.165	2.51E-08	SNAPC3	SNAPC3	NM_003084
2.165	8.52E-11	DKFZp761C169	DKFZp761C169	NM_022913
2.163	5.24E-06	HCP5	HCP5	NM_006674
2.163	2.75E-07	FLJ22301	FLJ22301	NM_024836
2.163	1.60E-08	SGPP1	SGPP1	NM_030791
2.163	8.70E-08	MRCL3	MRCL3	NM_006471
2.162	4.18E-09	C13orf22	D13S106E	NM_005800
2.161	8.29E-08	FLJ20696	FLJ10652	AB046771
2.161	2.61E-06	ZNF600	ZNF28	U52096
2.16	4.72E-11	HSPC176	LOC51693	NM_016209
2.16	3.24E-10	FLJ10379	FLJ10379	NM_018079

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2.16	6.83E-07		FLJ10514;C20orf27	AK022713
2.16	8.68E-07	DKFZp686L07201	#NA	BX537532
2.16	1.82E-08	YWHAB	YWHAB;GW128	NM_003404
2.159	2.69E-08	EIF3S7	EIF3S7	NM_003753
2.159	4.26E-07	ETEA	ETEA	NM_014613
2.158	1.12E-11	XAB1	MBDin	NM_007266
2.158	3.61E-08	RPF1	RPF1	NM_025065
2.157	4.14E-09	UBE2S	E2-EPF	NM_014501
2.157	2.80E-11	TRNT1	TRNT1	NM_016000
2.157	1.85E-08	C10orf110	HT009	NM_018470
2.156	7.46E-09	VIK	VIK	NM_138494
2.154	0.00034	KIAA0650	KIAA0650	BC006008
	2			
2.153	7.47E-07	KLHL5	CRIP1;ZFP36L1	AF123320
2.153	2.76E-09	PPP1R12A	PPP1R12A	NM_002480
2.15	0.00011	SFXN1	SFXN1	NM_022754
	6			
2.15	1.58E-08	SDS3	SDS3	BC030252
2.149	2.35E-09	DPP4	DPP4	NM_001935
2.149	0.00018	RDX	RDX	NM_002906
	7			
2.148	6.52E-08	RNF137	RNF137	NM_018073
2.148	1.88E-06	C6orf130	C6orf130	NM_145063
2.147	5.52E-11	CIR	.	NM_004882
2.147	1.38E-06	DDX19	DDX19	NM_007242
2.146	9.73E-05	CD3D	CD3D	NM_000732
2.146	8.12E-10	DEK	DEK	NM_003472
2.145	8.97E-08	NRD1	NRD1	NM_002525
2.144	1.28E-09	DGUOK	DGUOK	NM_001929
2.143	1.32E-08	DCLRE1C	DCLRE1C	NM_022487
2.141	5.18E-12	XPO1	XPO1	NM_003400
2.14	9.16E-06	MPI	MPI	NM_002435
2.14	1.07E-07	DNAJC7	DNAJC7	NM_003315
2.138	8.04E-08	TYMS	TYMS	N66132
2.138	5.51E-10	JIK	JIK	NM_016281
2.138	7.48E-09	LOC339316	LOC339316	BC043286
2.137	8.40E-09	HMGB2	HMGB2	NM_002129
2.135	7.96E-10	LGALS8	LGALS8	NM_006499
2.135	2.43E-08	UGP2	UGP2	NM_006759
2.135	1.03E-09	MGC61716	MGC61716	NM_182501
2.134	3.26E-09	dJ383J4.3	dJ383J4.3	BC033154
2.134	8.77E-07	EIF4A2	EIF4A2	NM_001967
2.133	6.70E-10	HSPC023	HSPC023	NM_014047
2.133	2.12E-10	KLEIP	AB026190	NM_014458
2.132	4.96E-07	CREBBP	CREBBP	NM_004380
2.132	1.14E-10	CGI-07	CGI-07	NM_015938
2.132	6.42E-08	SSB	SSB	NM_003142
2.131	3.83E-06	EIF3S2	EIF3S2	NM_003757
2.131	2.60E-09	QP-C	QP-C	NM_014402

Supplementary Table 3. Gene expression signature defining prognostic subgroups in AAV. 1228 genes showing differential expression between subgroups 8.1 and 8.2 in a cohort of 59 AAV patients with fold-change greater than 2 and FDR-corrected p-value <0.05. Fold-change (FC) and FDR-corrected p-value (FDR p) are given for each gene along with Gene Symbol and Genbank Accession identifier.

2.131	4.14E-09	AP1GBP1	AP1GBP1	NM_080551
2.13	1.59E-11	LNPEP	LNPEP	NM_005575
2.13	1.84E-11	DKFZP564G2022	DKFZP564G2022	NM_015497
2.13	5.14E-08	ADHFE1	ADHFE1	NM_144650
2.129	1.25E-09	SEDL	SEDL	NM_014563
2.128	4.22E-10	MORF4L2	MORF4L2	NM_012286
2.128	3.61E-08	TERF2IP	TERF2IP	NM_018975
2.128	6.05E-09	ATP1A1	ATP1A1	NM_000701
2.127	6.89E-08	TNFAIP8	GG2-1	NM_014350
2.126	3.05E-06	CGI-37	CGI-37	NM_016101
2.126	2.00E-09	FBXO34	FBXO34	NM_017943
2.126	8.79E-07	ZNF294	ZNF294	AK001915
2.126	8.04E-11	FLJ21657	FLJ21657	NM_022483
2.126	2.64E-09	HNRPUL1	E1B-AP5	NM_007040
2.125	6.16E-08	HSPD1	HSPD1	NM_002156
2.125	1.63E-09		#NA	BC037888
2.124	1.22E-10	CSPG6	CSPG6	NM_005445
2.124	1.83E-08	FYB	FYB	NM_001465
2.123	3.41E-09	USP52	USP52	NM_014871
2.123	3.34E-13	CYP20A1	CYP20A1	NM_020674
2.123	5.84E-14	SF3B5	SF3B5	NM_031287
2.123	5.70E-10	RPA1	RPA1	NM_002945
2.121	3.93E-07	NGLY1	NGLY1	NM_018297
2.121	8.99E-11	FLJ21919	FLJ21919	NM_023015
2.121	1.97E-11		CGI-30	NM_017685
2.121	1.61E-12	PFAAP5	CG012	AA699390
2.121	9.62E-14	NFATC3	NFATC3	NM_173163
2.12	3.77E-05	TP53TG3	TP53TG3	NM_015369
2.12	1.37E-06	RPS18	RPS18	NM_022551
2.118	2.67E-07	KIS	KIS	AL137257
2.115	2.12E-05	HERC5	CEB1	NM_016323
2.113	4.92E-12	C19orf13	DKFZP434D1335	NM_015578
2.113	4.00E-11	SELT	SELT	NM_016275
2.113	4.18E-09	FLJ20272	FLJ20272	NM_017735
2.113	1.11E-07	VPS41	VPS41	NM_080631
2.112	4.15E-12	NHP2L1	NHP2L1	NM_005008
2.112	6.40E-11	AP1GBP1	AP1GBP1	NM_007247
2.112	3.07E-06	HNRPR	HNRPR	NM_005826
2.112	3.07E-12	PPIG	PPIG	NM_004792
2.111	3.95E-09	ABCF2	ABCF2	NM_005692
2.111	9.79E-07	SDBCAG84	SDBCAG84	NM_015966
2.111	1.62E-11	EZH1	EZH1	NM_001991
2.111	9.48E-06	IL10RA	IL10RA	NM_001558
2.111	4.71E-08	LOC127253	LOC127253	XM_059122
2.11	2.09E-09	C10orf78	LOC119392	NM_145247
2.11	1.70E-11	WAC	WAC	NM_016628
2.11	8.32E-09	DDX39	DDX39	NM_005804
2.108	9.65E-15	EIF4G2	EIF4G2	NM_001418
2.107	2.33E-08	TAP1	TAP1	NM_000593

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2.106	2.41E-08	ING3	ING3	NM_019071
2.105	3.52E-09	CHD7	KIAA1416	AK000364
2.105	7.70E-06	CCR5	CCR5	NM_000579
2.105	2.63E-08	SSBP1	SSBP1	NM_003143
2.105	2.11E-08	HSHIN1	HSHIN1;KIAA1046	NM_014928
2.104	4.29E-11	THOC2	THOC2	XM_047325
2.104	1.98E-07	C21orf66	C21orf66	NM_013329
2.103	2.76E-09	RPS6KB1	RPS6KB1	NM_003161
2.102	9.13E-09	MRPL13	MRPL13	NM_014078
2.102	7.30E-10	USP34	USP34	BC022783
2.102	6.56E-12	USP9X	USP9X	NM_004652
2.102	1.22E-07	SARA1	SARA1	NM_020150
2.101	2.11E-08	HARSL	HARSL	NM_012208
2.1	4.56E-06	MYO9A	#NA	BC039397
2.099	5.73E-06	MGC3248	MGC3248	NM_032486
2.099	0.00050	RPS21	RPS21	NM_001024
2.098	2.24E-10	ZNF258	ZNF258	NM_007167
2.097	8.35E-11	CSTL1	CSTL1	NM_138283
2.096	5.00E-05		#NA	CD522594
2.095	2.60E-09		LOC375797	XM_353502
2.092	4.47E-10	UBE4A	UBE4A	NM_004788
2.092	2.91E-06	P29	P29	BC015824
2.091	7.56E-09	CSNK2A2	CSNK2A2	AK090752
2.09	2.70E-10	NEDD5	NEDD5	NM_004404
2.09	9.48E-10	LKAP	LKAP	NM_019081
2.09	4.10E-05	MT1F	MT1F	NM_005949
2.089	5.35E-07	PCAF	PCAF	NM_003884
2.089	7.57E-06	C21orf66	C21orf66	NM_058191
2.089	3.41E-09	SR140	SR140	XM_031553
2.088	3.50E-05	TIMM10	TIMM10	NM_012456
2.088	2.25E-06	HSPC150	HSPC150	NM_014176
2.088	7.30E-10	MTM1	MTM1	NM_000252
2.087	1.67E-10	ZNF277	ZNF277	NM_021994
2.087	3.82E-08	TMEM32	LOC93380	NM_173470
2.086	4.10E-05	HTLF	HTLF	NM_002158
2.085	1.39E-16	MTO1	MTO1	NM_012123
2.084	4.11E-07	USP34	USP34	XM_291018
2.084	3.62E-07	FLJ11088	FLJ11088	NM_018318
2.084	6.97E-09	ZCCHC7	FLJ22611	NM_032226
2.084	6.53E-05		#NA	HSVA51A_140
2.082	1.04E-09	XPO4	XPO4	NM_022459
2.082	4.73E-09	SYNE1	SYNE1	NM_015293
2.081	1.56E-09	TIAL1	TIAL1	NM_003252
2.08	4.90E-09	ZMYM1	FLJ23151	NM_024772
2.08	4.11E-07	SPTLC1	SPTLC1	NM_178324
2.079	2.54E-05	CD226	CD226	NM_006566
2.079	4.81E-09	VAMP8	VAMP8	NM_003761
2.079	3.41E-09	TWISTNB	TWISTNB	AK090846

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2.078	7.66E-11	CGI-116	CGI-116	NM_016053
2.078	1.78E-08	MAK3	MAK3P	NM_025146
2.078	3.04E-06	C20orf71	C20orf71	NM_178466
2.078	2.92E-09	MGC20806	MGC20806	NM_144999
2.077	6.67E-13	GTF2H3	GTF2H3	NM_001516
2.077	3.58E-06	USP14	USP14	NM_005151
2.076	8.54E-11	PCM1	PCM1	NM_006197
2.076	4.11E-07	WDR35	KIAA1336	NM_020779
2.075	1.67E-12	LOC284591	LOC284591	BC015393
2.073	2.17E-06	FLJ12270	FLJ12270	XM_290704
2.073	3.67E-07	INPP4A	INPP4A	NM_001566
2.072	1.72E-10	DNAJA2	DNAJA2	NM_005880
2.072	6.78E-08	NYD-SP28	NYD-SP28	NM_033124
2.071	6.54E-10	HSA9761	HSA9761	NM_014473
2.07	0.00039	PSMD5	LOC253039	AK096706
2.07	2.25E-08	ARID1A	SMARCF1	NM_006015
2.069	1.17E-06	HMGN4	HMGN4	NM_006353
2.069	1.33E-06		#NA	HSM801128
2.068	1.11E-08	ABCE1	ABCE1	AB062293
2.067	1.24E-07	PCAF	PCAF	N74637
2.065	3.78E-05	RPL10A	RPL10A	NM_007104
2.065	8.14E-09	NS3TP1	NS3TP1	NM_019048
2.064	4.14E-07	MYL6	MYL6	NM_021019
2.064	1.28E-07	CYCS	CYCS	NM_018947
2.062	3.13E-08	HSPC163	HSPC163	NM_014184
2.062	9.39E-11	SRP9	SRP9	NM_003133
2.061	2.58E-09	SFRS2IP	SFRS2IP	NM_004719
2.061	6.92E-07	RAB5B	RAB5B	NM_002868
2.06	2.97E-11	KPNA5	KPNA5	NM_002269
2.06	0.00144	BTG1	BTG1	NM_001731
2.059	3.17E-11	AKAP8	AKAP8	NM_005858
2.059	2.31E-09	C10orf117	AD24	NM_022451
2.058	3.70E-09	DDHD2	KIAA0725	AB018268
2.058	1.30E-09	MGC40499	MGC40499	NM_152755
2.055	4.20E-07	SERPINI1	SERPINI1	NM_005025
2.055	8.87E-09	THUMPD3	DKFZP434F091	NM_015453
2.055	1.33E-09	CIRH1A	CIRH1A	NM_032830
2.055	6.32E-09	PHAX	PHAX	NM_032177
2.054	1.44E-08	TRERF1	TReP-132	AF111801
2.054	3.32E-11	LOC317671	LOC317671	NM_173362
2.053	4.90E-06	L3MBTL2	L3MBTL2	NM_031488
2.053	1.25E-09	PFDN1	PFDN1	NM_002622
2.052	9.96E-09	PPP2R5A	PPP2R5A	NM_006243
2.052	0.00165	PTGER2	PTGER2	NM_000956
2.052	9.60E-05	HADHB	HADHB	NM_000183
2.051	8.01E-10	ZMPSTE24	ZMPSTE24	NM_005857
2.051	1.32E-10	PACE-1	PACE-1	NM_020423
2.05	3.01E-05	LOC51326	LOC51326	NM_016632

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2.05	5.52E-08	C22orf19	C22orf19	NM_003678
2.049	1.06E-09	ARCNI	ARCNI	NM_001655
2.048	1.97E-07	CSNK1G3	CSNK1G3	NM_004384
2.048	4.61E-08	FLJ25059	FLJ25059	NM_144981
2.047	6.11E-09	DLG1	DLG1	NM_004087
2.047	1.49E-07	ITM2C	ITM2C	NM_030926
2.047	1.30E-10	MGC17337	MGC17337	NM_080655
2.047	3.50E-05	MGC15763	MGC15763	NM_138381
2.047	7.67E-06	ADCY7	ADCY7	NM_001114
2.046	4.45E-08	P66beta	P66beta	NM_020699
2.046	1.82E-08	FLJ36674	FLJ36674	NM_173622
2.046	2.23E-07	LOC255743	LOC255743	XM_171089
2.043	1.17E-10	C14orf92	C14orf92	NM_014828
2.043	4.81E-10	AIM1	AIM1	XM_166300
2.042	5.69E-10	ORC3L	ORC3L	NM_012381
2.042	1.62E-09	DDX26	DDX26	NM_012141
2.041	2.76E-06	TTC10	TG737	NM_006531
2.041	6.36E-09	PJA2	PJA2	NM_014819
2.041	1.71E-08		PEN2;PEN-2	NM_018468
2.041	3.86E-08	SMARCE1	SMARCE1	NM_003079
2.041	2.62E-05		#NA	HSTCRGAAQ
2.04	3.52E-09	FLJ21616	FLJ21616	NM_024567
2.04	2.86E-08	ZNF571	HSPC059	NM_016536
2.04	2.48E-07	AAK1	AAK1	NM_014911
2.039	2.28E-09	C1QDC1	EEG1;C1QDC1	NM_023925
2.039	2.94E-08	MVK	MVK	NM_000431
2.038	1.34E-10	CD28	CD28	NM_006139
2.038	7.66E-10	ZNF317	ZNF317	NM_020933
2.038	3.17E-11	MRPS21	MRPS21	NM_018997
2.037	6.62E-07	KIAA0020	XTP5	NM_014878
2.037	2.57E-11	PAG	PAG	NM_018440
2.037	6.23E-06	KIAA0555	KIAA0555	NM_014790
2.034	1.91E-09	EIF2S1	EIF2S1	NM_004094
2.034	6.09E-10	MDS025	MDS025	NM_021825
2.033	1.91E-09	METAP1	METAP1	NM_015143
2.033	4.69E-07	CD48	CD48	BC030224
2.032	6.51E-06	HNRPK	HNRPK	NM_002140
2.031	3.07E-10	UBCE7IP5	FLJ13149	NM_021826
2.031	3.96E-08	C14orf139	C14orf139	NM_024633
2.031	7.67E-06	TMEM14B	TMEM14B	NM_030969
2.031	2.87E-10	ZNF207	ZNF207	NM_003457
2.03	1.01E-09	CGRRF1	CGRRF1	NM_006568
2.03	1.22E-06	CYLC1	CYLC1	XM_088636
2.03	4.24E-06	DOCK2	DOCK2	NM_004946
2.029	4.27E-08	USP8	.	NM_005154
2.029	4.34E-10	PARP6	LOC56965	NM_020213
2.029	6.61E-08	THADA	FLJ21877;LOC375199	XM_351433
2.028	1.74E-09	LCHN	LCHN	AB032973
2.028	0.0074	MSC	MSC	NM_005098

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2.028	9.41E-09	PTPN1	PTPN1	NM_002827
2.028	4.90E-05	PAM	PAM	NM_000919
2.027	3.50E-10	VDP	VDP	NM_003715
2.026	5.72E-07	CLGN	CLGN	NM_004362
2.025	1.72E-07	HERC1	HERC1	NM_003922
2.025	3.24E-10		LQFBS-1	XM_352971
2.025	1.70E-08		#NA	AL080216
2.025	1.23E-07	HSPDP3; HSP60P3	HSPDP1;HSPDP3	M34661
2.024	3.35E-08	NDUFB4	NDUFB4	NM_004547
2.024	1.33E-10	HECA	HECA	NM_016217
2.024	0.00017	RBM20	LOC282996	AL832084
2.023	5.85E-05	NFKB1	NFKB1	NM_003998
2.023	4.47E-10	SKIIP	SNW1	NM_012245
2.021	3.01E-10	HECTD1	HECTD1	NM_015382
2.021	1.94E-06	KIAA1712	KIAA1712	NM_030633
2.02	9.51E-09	PIM2	.	NM_006875
2.02	0.00013	LSM5	LSM5	NM_012322
	4			
2.018	3.49E-08	RANBP9	RANBP9	NM_005493
2.018	2.30E-09	BRIX	BRIX	NM_018321
2.018	1.04E-11	C14orf11	C14orf11	NM_018453
2.017	3.52E-07	C6orf51	C6orf51	NM_138408
2.017	1.57E-07	KIAA1971	KIAA1971	XM_058720
2.017	2.36E-07	JMJD2C	GASC1	NM_015061
2.016	3.34E-05	FLJ14639	FLJ14639	NM_032815
2.016	2.76E-10	C14orf150	LOC112840	NM_080666
2.016	6.41E-08	FAM33A	LOC348235	NM_182620
2.016	9.39E-11	NUP160	NUP160	XM_113678
2.016	2.57E-10	WHSC1L1	WHSC1L1	NM_017778
2.015	2.76E-06	DJ971N18.2	DJ971N18.2	NM_021156
2.015	1.82E-07	CCRN4L	CCRN4L	BC021963
2.015	2.14E-06	PSME4	PSME4	D38521
2.013	6.32E-09	PAK1IP1	PAK1IP1	NM_017906
2.013	1.43E-11	FLJ14007	FLJ14007	NM_024699
2.012	6.92E-08	MTHFD1	MTHFD1	NM_005956
2.011	3.02E-06	LCK	LCK	NM_005356
2.011	4.77E-07	HSPC047	POLR2J2;HSPC047	NM_014147
2.011	6.19E-07	OAS2	OAS2	NM_002535
2.01	1.11E-06	NDUFB8	NDUFB8	NM_005004
2.009	1.61E-10	PCBP2	DKFZP564J157	NM_005016
2.009	4.45E-06	LUC7L	LUC7L	NM_018032
2.009	4.80E-07	ZNF567	MGC45586	NM_152603
2.008	1.98E-09	PARP4	ADPRTL1	NM_006437
2.007	7.32E-07	LOC96610	LOC96610;KIAA0187	NM_080926
2.007	1.68E-05	NRBF2	NRBF-2	NM_030759
2.006	3.05E-08	NDRG3	NDRG3	NM_022477
2.006	3.51E-06	HSPA8	HSPA8	NM_006597
2.005	8.04E-11	PSMB3	PSMB3	NM_002795
2.003	0.00047	KLRD1	KLRD1	NM_007334

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	3			
2.002	5.20E-08	LRRFIP1	LRRFIP1	NM_004735
2.002	1.33E-08	CGI-72	CGI-72	NM_016018
2.001	6.15E-07	NT5C2	NT5C2	NM_012229
2.001	0.00013		FLJ13409	XM_351837
	9			
2.001	0.00044	RPS15A	RPS15A	NM_001019
	4			
2.001	1.11E-07	XPOT	XPOT	NM_007235
2	8.00E-10	MCM3	MCM3	NM_002388
2	5.24E-06	SRPK2	SRPK2	XM_353827
2	0.0039	FLJ35036	FLJ35036;FLJ22332	AK092355
0.5	9.46E-10		#NA	AY032661
0.5	2.66E-12	na	LOC340549	XM_293332
0.499	6.02E-09	LOC340109	LOC340109	BC039509
0.498	2.97E-11	KIAA0922	KIAA0922	NM_015196
0.498	4.37E-07		MGC10646	XM_352953
0.498	6.25E-10	TCEAL3	MGC15737	NM_032926
0.498	8.72E-10	POU2F2	POU2F2	NM_002698
0.496	1.31E-07	KIAA1881	KIAA1881	AB067468
0.496	1.74E-08	CSAG2	TRAG3	NM_004909
0.496	6.29E-08	DKFZp434H0512	LOC347256	AL137620
0.496	2.27E-07	IL11	IL11	NM_000641
0.495	1.01E-06	CALM3	CALM3	NM_005184
0.495	1.06E-12	ZYX	ZYX	NM_003461
0.494	2.06E-05	NAB2	NAB2	NM_005967
0.494	2.01E-09	RRAS	RRAS	NM_006270
0.494	3.63E-07	FLJ37078	FLJ37078	NM_153043
0.494	8.12E-10		#NA	HSM802661
0.493	3.22E-07	ZNF578	FLJ31384	NM_152472
0.493	3.89E-08		LOC339546	AK093202
0.492	1.33E-09	PNPLA5	LOC150379	NM_138814
0.492	1.88E-08	CMKOR1	#NA	AF086410
0.492	6.38E-12		LOC374623	XM_350987
0.491	1.14E-14	UNQ5783	UNQ5783	AK057142
0.491	2.13E-09	ALDH3B1	ALDH3B1	NM_000694
0.49	1.45E-07	SLA/LP	SLA/LP	NM_016955
0.489	5.75E-07	MGC33584	REPIN1	NM_173680
0.488	2.02E-08	IFNA13	IFNA13	NM_006900
0.486	1.98E-06		#NA	AK092192
0.486	3.17E-11		#NA	BC037858
0.486	3.17E-11		#NA	BC041856
0.485	2.00E-09	FIBCD1	FLJ14810	NM_032843
0.482	2.24E-06	VIAAT	VIAAT	NM_080552
0.482	3.22E-07	FLJ16124	#NA	BC038723
0.482	2.60E-09		#NA	AK054990
0.482	2.02E-07	UGT2B10	UGT2B10;UGT2B28;UGT2B11	NM_001075
0.481	1.83E-07	pp14356	pp14356	AF318340

Supplementary Table 3. Gene expression signature defining prognostic subgroups in AAV. 1228 genes showing differential expression between subgroups 8.1 and 8.2 in a cohort of 59 AAV patients with fold-change greater than 2 and FDR-corrected p-value <0.05. Fold-change (FC) and FDR-corrected p-value (FDR p) are given for each gene along with Gene Symbol and Genbank Accession identifier.

0.481	1.41E-09	F12	F12	NM_000505
0.481	2.44E-06		#NA	HSPSG12UT_3586
0.478	8.55E-08	C14orf166B	LOC145497	AK058106
0.477	6.95E-08	NFKBIL2	NFKBIL2	NM_013432
0.477	3.27E-08	DKFZp761A052	DKFZp761A052	NM_017602
0.477	4.63E-10	KRT14	KRT14	NM_000526
0.477	2.02E-11	PRDM11	PRDM11	NM_020229
0.475	8.86E-09	TIGD1	EIF4EL3	NM_145702
0.475	2.69E-08	PYGL	PYGL	NM_002863
0.474	2.53E-07	FTHFD	FTHFD	NM_012190
0.474	8.76E-08	GPBAR1	GPBAR1	NM_170699
0.474	8.26E-06		#NA	BC038546
0.471	4.67E-06		#NA	AK057798
0.471	4.69E-07	FLJ34658	FLJ34658	BC035012
0.471	1.56E-13	DF	DF	NM_001928
0.47	2.00E-09	GABRA3	GABRA3	NM_000808
0.47	4.79E-07	URP	URP	AK090630
0.469	3.96E-09		#NA	AK094154
0.468	2.98E-10	MMP25	MMP25	NM_022718
0.468	3.66E-07		#NA	AK021981
0.465	0.00028	ROPN1	ROPN1	NM_017578
0.465	8.41E-08	LOC400752	#NA	BC006119
0.464	1.60E-06	MUC5AC	MUC5AC	AJ292079
0.464	9.11E-12		#NA	BC017939
0.463	2.57E-06	MGC15613	MGC15613	BC007589
0.462	1.39E-08	FLJ20701	FLJ20701	NM_017933
0.46	1.92E-09		LOC376528	XM_352268
0.459	2.33E-10	LOC63928	LOC63928	NM_022097
0.459	4.91E-07	LOC114977	LOC114977	BC014148
0.459	1.01E-09	LOC285758	LOC285758	BC037331
0.458	8.52E-11	HSPC142	HSPC142	NM_014173
0.458	5.00E-08	LOC387601	LOC387601	AK091990
0.458	1.38E-09	CACNB3	.	NM_000725
0.457	2.25E-07	CD164L1	CD164L1	NM_020404
0.456	2.29E-09	DKFZP434I2117	DKFZP434I2117	NM_031478
0.455	6.86E-08	ERAF	ERAF	NM_016633
0.453	6.80E-08	MAWBP	MAWBP	NM_022129
0.453	3.22E-13	COMMD4	FLJ20452	NM_017828
0.451	6.23E-12		LOC342885	XM_292775
0.45	1.10E-05	VIT	VIT	NM_053276
0.45	1.35E-05	CTF1	CTF1	NM_001330
0.449	2.93E-11	C11orf11	C11orf11	NM_006133
0.449	2.90E-09	APRG1	APRG1	NM_178343
0.448	6.60E-07	RAB13	RAB13	NM_002870
0.447	2.73E-08	MGC13102	MGC13102	NM_032323
0.446	8.69E-08	CLDN4	CLDN4	NM_001305
0.445	2.03E-08	LOC90522	LOC90522	NM_033557
0.444	2.88E-09	ERBB4	#NA	AK024204

Supplementary Table 3. Gene expression signature defining prognostic subgroups in AAV. 1228 genes showing differential expression between subgroups 8.1 and 8.2 in a cohort of 59 AAV patients with fold-change greater than 2 and FDR-corrected p-value <0.05. Fold-change (FC) and FDR-corrected p-value (FDR p) are given for each gene along with Gene Symbol and Genbank Accession identifier.

0.443	2.72E-08	DNAJC4	DNAJC4	NM_005528
0.442	4.09E-06	ACSL3	.	NM_004457
0.442	1.59E-06		LOC376003	XM_352027
0.441	2.57E-08		#NA	BC006216
0.44	4.75E-08	PRX	PRX	NM_020956
0.44	1.23E-09	LPPR2	LPPR2	NM_022737
0.44	1.33E-08	MXD3	MXD3	NM_031300
0.44	3.34E-10		PGR6	XM_293092
0.439	3.06E-07	TETTRAN	TETTRAN	NM_001120
0.439	1.79E-13	LGALS9	LGALS9	NM_002308
0.438	1.99E-08	ATXN3	MJD	U63332
0.438	2.22E-07	CDA	CDA	NM_001785
0.438	6.13E-09	STX7	#NA	AF075045
0.438	1.62E-09		#NA	AK094472
0.436	6.40E-07	STX1B2	STX1B2	NM_052874
0.435	1.44E-09	TFEB	TFEB	NM_007162
0.435	1.75E-10		LOC90326	XM_352932
0.433	6.37E-09	RGS12	RGS12	NM_002926
0.43	2.70E-07	POLA2	POLA2	NM_002689
0.428	7.37E-11		#NA	AK057863
0.427	2.81E-08	PRDM7	PRDM7	NM_052996
0.425	6.62E-07	CYP4A11	CYP4A11	NM_000778
0.425	1.90E-07	CTSL	CTSL	NM_001912
0.424	3.66E-08	UNKL	UNKL	NM_024023
0.423	4.12E-05	C14orf58	C14orf58	NM_017791
0.423	7.56E-09		#NA	AF258587
0.421	9.15E-07		#NA	BC020897
0.42	9.13E-09		#NA	AK093454
0.416	8.05E-10	SFTPA1	SFTPA2;SFTPA1	NM_005411
0.416	4.55E-07		#NA	AF085920
0.416	3.58E-07	FLJ35258	FLJ35258	AF086519
0.415	2.63E-08		HCG4	NM_018985
0.412	7.43E-08	LOC161931	LOC161931	NM_139174
0.412	7.44E-05	PSMB10	PSMB10	NM_002801
0.408	5.61E-06	ERVWE1; Env-W; HERVW; HERV-W; HERV-W-ENV	ERVWE1	NM_014590
0.407	3.21E-09	ATP8B2	ATP8B2	X58235
0.407	1.95E-09		#NA	AK022266
0.401	2.01E-09	CALCB	CALCB	XM_350824
0.398	5.22E-06	MGC14798	MGC14798	NM_080650
0.398	1.21E-10	PIP5K2B	#NA	AK095097
0.395	1.18E-06		#NA	AK074886
0.38	1.65E-08	ULBP3	ULBP3	NM_024518
0.38	1.04E-07		#NA	AF086134
0.378	1.74E-08	FLJ00254	FLJ00254	AK074181
0.378	1.39E-08	KIAA1651	KIAA1651	AB051438
0.377	5.94E-09		LOC374466	XM_353032
0.373	1.81E-09	POLR3F	POLR3F	NM_006466

Supplementary Table 3. Gene expression signature defining prognostic subgroups in AAV. 1228 genes showing differential expression between subgroups 8.1 and 8.2 in a cohort of 59 AAV patients with fold-change greater than 2 and FDR-corrected p-value <0.05. Fold-change (FC) and FDR-corrected p-value (FDR p) are given for each gene along with Gene Symbol and Genbank Accession identifier.

0.371	2.33E-15	PLA2G12A	PLA2G12	NM_030821
0.371	2.18E-05		#NA	AK098724
0.37	3.30E-12	MGC4093	MGC4093	NM_030578
0.366	6.40E-11	MFGE8	MFGE8	NM_005928
0.364	1.96E-09	C8orf20	FLJ22246	NM_025232
0.36	5.82E-08	MYOHD1	FLJ22865	NM_025109
0.354	1.48E-08	DKFZP434H2010	DKFZP434H2010	NM_032129
0.354	9.07E-10		#NA	AK022088
0.353	1.69E-12	SLPI	SLPI	NM_003064
0.343	7.33E-10		#NA	BC039680
0.342	1.85E-09	KCND3	KCND3	NM_172198
0.334	3.58E-09		MECT1	H43707
0.331	4.26E-11	ZNF562	FLJ20079	NM_017656
0.326	1.07E-08	FAM48A	P38IP;DES	AJ130894
0.323	2.97E-09	C21orf127	LOC150035	AK021678
0.322	2.33E-10	ADAM17	ADAM17	NM_003183
0.314	4.07E-10	APOL4	APOL4	NM_030643
0.313	9.62E-09		LOC284646	XM_211573
0.31	3.21E-09	CST9L	CST9L	NM_080610
0.304	1.16E-07	CATX-2	CATX-2	AF083118
0.304	6.96E-08		LOC131086	XM_067193
0.3	1.01E-08		#NA	AF304443
0.297	4.13E-10		#NA	AK094159
0.296	3.90E-08	PAPD4	#NA	AF086115
0.274	5.60E-08		TIMM8A	NM_032696
0.262	2.10E-11		FLJ00310	BC012753
0.261	1.05E-10	ANKRD20A	DKFZp434A171	NM_032250
0.25	6.44E-10	FLJ90724	FLJ90724	AY188774
0.22	2.69E-08		HSU88895	NM_015870
0.174	7.65E-08		MGC10997	NM_032655

Supplementary Table 4: SLE patient cohort demographics and laboratory data

Parameter	Units (ref range)	S8.1 Mean (SEM)	S8.2 mean (SEM)	p	adj p
Cohort size		7	18	na	na
age	years	42.6 (4.3)	43.3 (3.2)	0.98	ns
Gender		7F / 0M	14F / 4M	0.17	ns
Ethnicity		7Caucasian	16Caucasian	0.36	ns
Serum Cr t0	µmol/l (35 - 125)	115 (42)	92 (12)	0.95	ns
Serum Cr final	µmol/l (35 - 125)	114 (30)	114 (13)	0.45	ns
CRP t0	mg/l (0 - 6)	6 (2)	9 (4)	0.89	ns
ESR t0	mm/h (5 - 15)	16 (3)	34 (8)	0.08	ns
Total leucocytes t0	x10 ⁹ /l (4 - 11)	7.5 (1.1)	6 (0.5)	0.24	ns
Neutrophils t0	x10 ⁹ /l (2 - 8)	5.1 (0.8)	4.3 (0.4)	0.3	ns
Lymphocytes t0	x10 ⁹ /l (1 - 4.5)	1.73 (0.47)	1.22 (0.14)	0.54	ns
ANA titre t0	iu (0 - 0.9)	4.0 (1.1)	3.3 (0.6)	0.67	ns
Total IgG titre t0	g/l (6 - 13)	9.76 (1.14)	14.29 (1.54)	0.02	ns
CD4 t0	% of PBMC	37.9 (4.2)	50.3 (2.9)	0.04	ns
CD8 t0	% of PBMC	41.7 (3.6)	24.4 (3.5)	0.008	ns
CD3 t0	% of PBMC	81.3 (4.3)	77.3 (3.8)	0.44	ns
Anti-dsDNA titre t0	iu/ml (0 - 10)	57 (16)	383 (187)	0.77	ns
C3 level t0	g/l (0.8 - 2.14)	0.93 (0.12)	1.03 (0.1)	0.66	ns
C4 level t0	g/l (0.13 - 0.6)	0.2 (0.03)	0.21 (0.04)	0.84	ns
ANA status		6/7	16/18	0.83	ns
ds DNA status		5/7	11/18	0.63	ns
ENA status		5/7	9/18	0.33	ns
Low C3/4		2/7	8/18	0.47	ns

adj p = Bonferroni adjusted p-value, ref range = reference range, SEM = standard error of mean, t0 = at time zero enrolment, t3months = at 3 month follow-up timepoint, M=male, F=female, ns = p>0.05, CRP = C-reactive protein, ESR = erythrocyte sedimentation rate, PBMC = peripheral blood mononuclear cells, SCr = serum creatinine, anti-dsDNA = anti-double-stranded DNA antibodies, BILAG = British Isles Lupus Assessment Group score, ACR = American College of Rheumatology, Anti-Phos Ab = Anti-phospholipid antibody positive at any timepoint during follow-up, ENA = extractable nuclear antigen, serum Cr = serum creatinine, ANA = anti-nuclear antibody, Low C3/4 = hypocomplementaemia at any timepoint during follow-up, Renal involvement = biopsy-proven renal SLE involvement at any timepoint during follow-up, Pre-existing disease = diagnosis of SLE made prior to enrolment disease flare, Current treatment t0 = any therapy being taken at time of enrolment, No ACR criteria = mean no of ACR classification criteria met (at any timepoint during follow-up)

Supplementary Table 4: SLE patient cohort demographics and laboratory data

Anti-Phos Ab	0/7	3/18	0.29	ns
No. ACR criteria	5.4	5.3	0.46	ns
Renal involvement	3/7	8/18	0.94	ns
Pre-existing	7/7	13/18	0.006	ns
Current therapy t0	5/7	7/18	0.14	ns
BILAG score t0	19.4	15.1	0.04	ns

adj p = Bonferroni adjusted p-value, ref range = reference range, SEM = standard error of mean, t0 = at time zero enrolment, t3months = at 3 month follow-up timepoint, M=male, F=female, ns = p>0.05, CRP = C-reactive protein, ESR = erythrocyte sedimentation rate, PBMC = peripheral blood mononuclear cells, SCr = serum creatinine, anti-dsDNA = anti-double-stranded DNA antibodies, BILAG = British Isles Lupus Assessment Group score, ACR = American College of Rheumatology, Anti-Phos Ab = Anti-phospholipid antibody positive at any timepoint during follow-up, ENA = extractable nuclear antigen, serum Cr = serum creatinine, ANA = anti-nuclear antibody, Low C3/4 = hypocomplementaemia at any timepoint during follow-up, Renal involvement = biopsy-proven renal SLE involvement at any timepoint during follow-up, Pre-existing disease = diagnosis of SLE made prior to enrolment disease flare, Current treatment t0 = any therapy being taken at time of enrolment, No ACR criteria = mean no of ACR classification criteria met (at any timepoint during follow-up)

Supplementary Table 5: SLE cohort 1

		8.1	%	8.2	%	p	adj p
Prior therapy	Cyclophosphamide	4/7	57	3/18	17	0.040	ns
	Rituximab	3/7	43	0/18	0	0.003	0.021
	Mycophenolate Mofetil	7/7	100	5/18	28	0.001	0.007
	Azathioprine	4/7	57	4/18	22	0.090	ns
	Methotrexate	0/7	0	1/18	6	0.520	ns
	Hydroxychloroquine	0/7	0	3/18	17	0.250	ns
Current therapy t0	Prednisolone	5/7	71	5/18	28	0.050	ns
	Mycophenolate Mofetil	3/7	43	2/18	11	0.070	ns
	Azathioprine	0/7	0	2/18	11	0.360	ns
	Methotrexate	0/7	0	1/18	6	0.520	ns
	Hydroxychloroquine	1/7	14	1/18	6	0.470	ns
Induction therapy t0	Cyclophosphamide	2/7	29	3/18	17	0.500	ns
	Rituximab	7/7	100	5/18	28	0.001	0.007
	Mycophenolate Mofetil	2/7	29	3/18	17	0.500	ns
	Azathioprine	0/7	0	5/18	28	0.120	ns
	Methotrexate	0/7	0	1/18	6	0.520	ns
	Hydroxychloroquine	1/7	14	7/18	39	0.240	ns
	Prednisolone	7/7	100	17/18	94	0.52	ns
FollowUp therapy	Cyclophosphamide	3/7	43	3/18	17	0.170	ns
	Rituximab	7/7	100	5/18	28	0.001	0.01
	Mycophenolate Mofetil	4/7	57	7/18	39	0.410	ns
	Azathioprine	0/7	0	5/18	28	0.120	ns
	Methotrexate	0/7	0	1/18	6	0.520	ns
	Hydroxychloroquine	1/7	14	6/18	33	0.340	ns
	Prednisolone	7/7	100	17/18	94	0.520	ns

t0 = at time zero enrolment, ns = $p > 0.05$, adj p = Bonferroni-adjusted p-value, Prior therapy = therapy administered prior to enrolment, Current therapy = therapy being given at time of enrolment bleed, Induction therapy = therapy given after enrolment bleed to control t0 disease flare, Follow-up therapy = therapy given at any timepoint during subsequent follow-up. Note that the nature of therapy but not dosage is given and that, by definition, each flare of disease required increased immunosuppression with resulting higher cumulative doses during follow-up in subgroup 8.1.

Supplementary Table 6: Control Demographics

	Control 1	C8.1 ^a	C8.2 ^a	P ^b	Control 2	Control 3
Number	22	4	18		18	27
Mean Age	47.5	45	48.1	0.64	44.7	39.4
(range)	(25 – 76)	(40 – 58)	(25 – 76)		(20 – 70)	(21 - 76)
Sex	12F/10M	2F/2M	10F/8M	0.84	12F/6M	23F/4M
Ethnicity	Caucasian	Caucasian	Caucasian		Caucasian	Singaporean

^a number of 8.1 and 8.2 individuals in the Control 1 cohort

^b p value refers to the comparison of the 8.1 and 8.2 individuals in the Control 1 cohort

Supplementary Tables 7a and b

Distribution	Matched genes / n	% of total list
Log Normal	6	1.5
Bimodal	40	10.2
Normal	311	79.3
Left skew	13	3.3
Right skew	20	5.2
Exponential	2	0.5
Uniform	0	0
Total	392	100

Supplementary Table 7a: Gene expression density distributions matched to genes defining a randomly assigned subdivision of the AAV cohort

Distribution	Matched genes	% of total list
Log Normal	112	6
Bimodal	1251	67.3
Normal	266	14.3
Left skew	190	10.2
Right skew	36	1.9
Exponential	1	0.1
Uniform	4	0.2
Total	1860	100

Supplementary Table 7b: Gene expression density distributions matched to genes defining subgroups 8.1 and 8.2