

Supplemental Table 1. Recent genetic studies conducted on peripheral nervous system vasculitides.

Population	Vasculitide	Genes studied	Data	Associated SNPs/No association	PubMed ID
Primary Systemic Vasculitides					
Japan	AAV	CTLA-4, ETS1	Cases = 466 Controls = 1099	rs1128334 A allele of ETS1	29167552
China	AAV	HLA-DRB1, ARHGAP8, CD226, CTLA4, MOSPD2, PRTN3	Cases = 176 Controls = 100	rs3117242 T allele (HLA-DPB1)	26014903
China	AAV	PTPN22 (R620W)	Cases = 1399 Controls = 9934	A allele of PTPN22	25448792
China	AAV	TLR2	Cases = 195 Controls = 501	rs3804100 C allele & haplotype CG (rs3804100, rs3804099)	25180613
Sweden	AAV	C3, CTLA4, Fcγ-RIIa, IL1-RA	Cases = 105 Controls = 200	C3F allele PR3-ANCA	24356554
Korea	AAV	PTPN22 (C1858T)	Cases = 1922 Controls = 11505	rs2476601 T allele	22696186
Germany	AAV	TLR9	Cases = 863 Controls = 1344	rs352162, rs352140 and rs352139	23592712
India	AAV	HLA, DRB1/DQB1, PTPN22, CTLA-4	Cases = 120 Controls = 120	DRB1*03 and DQB1*02	32297471
Europe	AAV	Multiple genetic variants	Cases = 1986 Controls = 4723	rs141530233 and rs1042169 (HLA-DPB1), rs386699872 (SERPINA1) and PTPN22 loci	28029757
Without country restriction	AAV	PTPN22	Cases = 1399 Controls = 9934	A allele of R620W	25448792
UK	AAV	PTPN22, CTLA4, CD226	Cases = 641 Controls = 9115	rs3087243 of CTLA4 and rs2476601 of PTPN22	19951419
UK	AAV	Multiple genetic variants	Cases = 1233 Controls = 5884	HLA-DP, HLA-DQ, SERPINA1, PRTN3	22808956
Korea	AAV (IgAN, IgAV)	Intergenic region	Cases = 101 Controls = 26	G allele of rs9428555	34146253
	AAV SLE	PTPN22	Meta-analysis	T allele of C1858T	23076337
Poland	AAV WG	DNASE1	Cases = 54 Controls = 67	rs1053874 and rs8176935	31257985
Italy	AAV, CSS	PTPN22 (R620W)	Cases = 344 Controls = 945	620W for GPA and MPO-AAV	22237046
Europe	AAV, WG	PTPN22	Cases = 1922 Controls = 11505	T allele of rs2476601	22696186
UK	AAV	CAV1	Cases = 187 Controls = 599	Non-CC genotype of rs4730751	23894397
Netherland	AAV	GR gene & HSD11B1	Cases = 241	Haplotypes 1 and 4, ER22/23K+9β+TthIII1) of GR	30445609
Turkey, N. America, UK, China, South Asia and Italy	EGPA	Multiple genetic variants	Cases = 676 Controls = 6809	rs9274704 (HLA-DQ), rs72946301 (BCL2L11), rs1837253 (TSLP), intergenic; rs34574566	31719529
China	MPA	ULK1, PIK3CA	Cases = 208 Controls = 211	rs4964879 and rs9481(ULK1)	34820172
Japan	MPO-AAV	TERT, DSP	Cases = 432 Controls = 5558	rs2736100 A allele (TERT), rs2076295 G allele (DSP)	33076992
Japan	MPO-AAV	IRF5, STAT4	Cases = 409 Controls = 710	rs10954213 G allele (IRF5) for MPO-AAV	23985571
Germany	MPO-ANCA	CD18	Cases = 30 Controls = 76	C allele of (T65C)	11528520
USA	WG	PRTN3	Cases = 132 Controls = 89	No evidence	
USA	WG	AT	Cases = 433 Controls = 421	Z and S alleles	20827781
Germany	WG	PR3	Cases = 79 Controls = 129	No association	11115080
Germany	WG	PTPN22	Cases = 199 Controls = 399	620W allele	16320352

Germany	WG, AAV	CD266	Cases = 642 Controls = 1226	Gly307Ser change	19536154
Germany	WG, AAV	PTPN22	Cases = 199 Controls = 399	620W of PTPN22 allele	16320352
Korea	WG, BD	IL-10	Cases = 4121 Controls = 5504	IL-10 -1082G for WG & IL-10 -819C for BD	26213801
Germany	WG, CSS	LEPR, GHSR	Cases = 460 Controls = 878	Lys656Asn of LEPR gene	20185531
UK	WG, MPA	DRBI	Cases = 94 Controls = 90	No significant association	7731160
China	HSP	CDI8	Cases = 73 Controls = 156	C allele of rs235326	21269583
Finland	HSP	GWAS	Cases = 46 Controls = 18757	HLA-DQA1*01:01, DQB1*05:01, and DRB1*01:01	33591409
China	HSP	ACE (I/D)	Cases = 504 Controls = 706	D allele	30854921
Iran	HSP	HLA-DRB1	Cases = 30 Controls = 35	HLA-DRB1*O1, HLA-DRB1*11	29937904
China	HSP	IL-10	Cases = 182 Controls = 202	No association	28963667
China	HSP	TLR 4	Cases = 175 Controls = 186	A allele of rs1927914	28905155
Iran	HSP	CCL2, VEGF, ACE	Cases = 47 Controls = 74	T allele (CCL2;-2518C/T), C allele (VEGF;-634C/C)	28691415
China	HSP	eNOS	Cases = 423 Controls = 459	rs11771443 & rs1799983	28409662
China	HSP	MEF-V	Cases = 320 Controls = 342	rs3743930, rs28946580	27796522
India	HSP	HLA-DRB1	Cases = 43 Controls = 54	HLA - DRB1*11	27184863
Spain	HSP	IL1- β	Cases = 338 Controls = 635	T allele (rs16944)	26842496
China	HSP	HSP70-2, TNF- α	Cases = 265 Controls = 53	+1267G allele (HSP70-2),+308 A allele (TNF- α)	26547206
Spain	HSP	PTPN22, CSK	Cases = 329 Controls = 515	No association	26458874
Iran	HSP	CCL2	Cases = 36 Controls = 50	T allele of -2518C/ T (CCL2)	26234573
Taiwan	HSP	MCP1, RANTES	Cases = 85 Controls = 136	T alleles of -2518C/T (MCP1) and-403C/T (RANTES)	25839768
Turkey	HSP	MBL	Cases = 100 Controls = 100	No association	24576294
China	HSP	HLA-DRB1-01/7/11, ACE, RAS, eNOS, ICAM1, VEGF, MEFV	45 Studies	HLA-DRB1:01:07,11	23325094
China	HSP	iNOS	Cases = 513 Controls = 532	A allele of rs2297518	28593405
Spain	HSP	PTPN22	Cases = 57 Controls = 229	No association	18078626
Iran	HSP	IL-6	Cases = 46 Controls = 124	No association	17428355
Iran	HSP	MIF	Cases = 95 Controls = 122	No association	17181929
Spain	HSP	VEGF	Cases = 57 Controls = 229	G allele of rs1570360, C allele of rs2010963	16395752
Spain	HSP	NOS2A	Cases = 55 Controls = 251	CCTTTn allele	15940772
Sapin	HSP	IL-1 β	Cases = 49 Controls = 148	-511T allele	14760799
Spain	HSP	IL-1RN	Cases = 96 Controls = 109	allele 2 (ILRN*2)	12136897
Spain	HSP	CSK, TPN22	Cases = 329 Controls = 515	No significant association	26458874
Italy	HSP (PIgAN, IgAN)	ACE	Cases = 82	No significant association	9870486
Germany	CSS	CCL26 (eotaxin-3)	Cases = 161 Controls = 124	No significance	21266446
Italy	CV	NOTCH 4	Cases = 98 Controls = 98	rs2071286 T allele (NOTCH 4)	33721342
Italy	CV	IL-28 B	Cases = 106 Controls = 53	IL-28B	24293567
Italy	CV	FN gene	Cases = 65 Controls = 110	No significance	18810857
Italy	PN	CECR1	Cases = 48	CECR1 mutation	28522451
China	GPD	HLA-II genes	Cases = 140 Controls = 599	DRB1*1501	28342268

Turkey	GCA, BD, IgAV, TAK	IL-1	Cases = 1384 Controls = 2710	T allele of IL-1 (-889A/ T)	26695178
N. America, Turkey	GCA, TAK	HLA-DRB1, HLA-DQA1, IL-12B	Cases = 1434 Controls = 3814	HLA-DRB1/HLA-DQA1, HLA-B/MICA, rs755374 (IL-12B) for GCA	28277489
Spain	GCA, TKA	HLA-DQB1, HLA-DQA2	Cases = 2465 Controls = 4632	HLA-DQB1 & HLA-DQA2, rs16925200 (KDM4C)	29374629
Spain	GCA	VEGF	Cases = 290 Controls = 490	No association	35349405
Spain	GCA	Multiple genetic variants	Cases = 2134 Controls = 9125	HLA- II genes (rs9268905, rs9275592), PLG, P4HA2	28041642
Spain, Italy, Germany, Norway	GCA	IL33, ILR1	Cases = 1363 Controls = 3908	rs7025417 (IL33)	25409453
Spain, Italy, Germany, Norway	GCA	IL17A	Cases = 1266 Controls = 3779	rs2275913 & rs7747909	24919468
Spain	GCA	IFNGR1	Cases = 216 Controls = 460	No association	20412699
Australia	GCA	PTPN22	Cases = 209 Controls = 455	Minor allele of rs2476601	27110387
Spain, Germany, Norway, UK	GCA	PTPN22	Cases = 911 Controls = 8136	rs2476601	23946333
Europe	GCA	Multiple genetic variants	Cases = 2134 Controls = 9125	rs9268905, rs92275592 (HLA class-II), rs4252134 (PLG) and rs92275592 (P4HA2)	28041642
Spain, UK, North America, Italy, Norway and Germany	GCA	Multiple genetic variants	Cases = 1651 Controls = 15306	rs477515, rs2476601 (PTPN22), rs10160518 (LRRC32) and rs11564477 (REL)	25817017
Europe	GPA	168 SNPs	Cases = 880 Controls = 1969	rs3087243 and rs231735	22508400
Europe	GPA	Multiple genetic variants	Cases = 429 Controls = 1506 Cases = 528 Controls = 1228	rs9277554(DP β chain1) and rs9277341 (DP α chain), rs26595 (SENA6A)	23740775
Japan	TAK	HLA-B*52	Cases = 633 Controls = 5928	rs2322599, rs103294, rs17133698, and rs1713450, in PTK2B, LILRA3/LILRB2, DUSP22, and KLHL33 respectively	30498034
Mexico	TAK	PTPN22	Cases = 111 Controls = 314	CGT haplotype within PTPN22	30470857
Turkey	TAK	VPS8, SVEP1, CFL2, IL-12B, PTK2B, ETS2	Cases = 1226 Controls = 5444	Functional analysis identified ETS2 as causal gene	33308445
Turkey and North America	TAK	HLA-B*52	Cases = 339 Controls = 516 Cases = 112 Controls = 599	rs2524487 of HLA-B/MICA, rs113452171, rs189757452 (HLA-DQB1/HLA-DRB1), rs10919543 (FCGR2A/FCGRA3A) and rs56157332 (IL12 β)	23830517
Turkey and North America	TAK	Multiple genetic variants	Cases = 559 Controls = 489 Cases = 134 Controls = 1047	rs2669837 (IL-6), rs11666543 (RPS9/LILRB3), intergenic locus (rs2836878), PCSK5, LILRA3, PPM1G/NRBP1, and PTK2B	25604533
Japan	TAK	Multiple genetic variants	Cases = 167 Controls = 663 Cases = 217 Controls = 1322	rs6871626 (IL12 β), rs665268 (MLX), rs9263739 (HLA-B)	23830516
China	KD	CDH5	Cases = 1335 Controls = 1669	A allele of rs7404339	35571208
China	KD	MnSOD	Cases = 100 Controls = 102	A allele of rs4880 A	33124528

Japan, Korea, Taiwan	KD	IGHV	Cases = 3428 Controls = 7837	rs4774175, rs6423677 (IGHV)	33106546
Taiwan	KD	IP10	Cases = 354 Controls = 1709	C allele of rs3921 and G allele of rs4386624	32989803
Taiwan	KD	FAM167A-BCK HLA-DQB2-DOB, CD40	Cases = 681 Controls = 563	rs2254546 & rs4813003	32678208
China	KD	PPIA	Cases = 101 Controls = 105	C allele of rs17860041	32079425
China	KD	CD32a	11 studies	rs1801274	32072832
Iran	KD	TNF- α , CASP3, FCGR2A	25 studies	rs72689236 (CASPs), rs1801274 (FCGR2A)	31884867
China	KD	IL-10	13 studies	-1082A/G, -819T/C (IL-10)	31738634
China	KD	TNF- α	Cases = 841 Controls = 1741	G allele TNF- α -308 polymorphism	31261503
Europe, Japan	KD	HLA-C, HLA-B	Cases = 405 Controls = 6252 Cases = 428 Controls = 3379	rs6906846 (HLA-C), rs2254556 (HLA-B)	31122742
Korea	KD	BLK FCGR2A	Cases = 1011 Controls = 4553	rs6993775 (BLK)	30468029
China	KD	ABCC4	Cases = 775 Controls = 774	T allele of rs7986087	30363999
China	KD	TBXA2R	Cases = 694 Controls = 657	G allele of rs4528 (TBXA2R)	30179800
Korea	KD	EBF2	Cases = 295 Controls = 200	rs10866845 (EBF2)	29749135
China	KD	IL-10	6 studies	-592A/C (IL-10)	29656715
Korea	KD	Multiple genetic variants	Cases = 915 Controls = 4553	rs6993775(BLK), rs2078087 (NMNAT2), rs9380242 (HLA-C), rs9378199 (HLA-B), rs9266669 (MICA), rs6938467 (HCP5), rs17280682 (NLRP14)	28855716
Europe	RV	Multiple genetic variants	GWAS	Interferon- alpha/beta1 & IL12/23, rs14067530 (STAT4), rs2476601 (PTPN22), rs76428106 (FLT3)	35470158
China	KD	MnSOD	Cases = 100 Controls = 102	A allele of rs5746136	33124528
Chinese Han	KD	ADAM17	Cases = 392 Controls = 421	rs6705408, rs10495563, rs6432017	26833052
Japan	KD	ORAI1	Cases = 2544 Controls = 2414	rs3741596	26789410
Taiwan	KD	CD209	Cases = 381 Controls = 567	rs4804800, rs2287886 and rs7352407, CAG haplotype	25148534
China	KD	ITPKC	Cases = 223 Controls = 318	C allele of rs2290692	22361738
Europe	KD	Multiple genetic variants	Cases = 2173 Controls = 9383	rs1801274 (FCGR2A), rs2233152 (MIA), rs28493229 (ITPKC)	22081228
Japan and USA	KD	CASP3	Cases = 920 Controls = 1409	rs72689236	20423928
Europe	KD, IgAV	SEC14L5	Cases = 405 Controls = 6252 Cases = 570 Controls = 3726	rs3743841 of SEC14L5	33993232
Secondary systemic vasculitides					
Denmark	RV	PADI, HLA-DR4/1, PTPN22	Cases = 445 Controls = 553	R620W (PTPN22) for anti-CCP RA, T allele of	34733271
North America			Cases = 200 Controls = 100	rs1748033 (PAD4) for RA	
Poland	RV	VAV1	Cases = 422 Controls = 338	T allele of rs2546133 & G allele of rs2617822	32380774
Colombia	pSS	TAP, HLA, IL-10	Cases = 74 Controls = 76	HLA-DRB1*0301/DQB1*0201 haplotype, D6S439 microsatellite	15846589

Colombia	pSS	IL-10	Cases = 39 Controls = 15	IL-10. G9 allele	12233881
USA	pSS	HLA-DRB1/DRB3/DQA1	Cases = 75 Controls = 150	HLA-DR3, HLA-DW52a, HLA-DQA4	1685512
Spain	pSS	IL-10	Cases = 63 Controls = 150	GCC haplotype within IL-10	12209037
USA	pSS	HLA-DRBI(DR), HLA-DRB3(DRW52)	Cases = 75 Controls = 159	HLA-DR3, HLA-DW52a, HLA-DQA4	1685512
Korea	pSS, VA, SLE	CCR5-Δ32	Cases = 1881 Controls = 2391	No association	24599359
Taiwan	SLE	GAS6	Cases = 83 Controls = 89	T allele of rs1803628	22763415
Australia	SLE	TNFα-2	Cases = 17 Controls = 47	Not associated	11958574
Slovakia	SLE	APOE	Cases = 144 Controls = 93	APOE4 allele	15045621
Saudi Arabia	SLE	APOE	Cases = 118 Controls = 200	APOE4 allele and genotype E3/E4	27257397
Brazil	SLE, RV	IL28RA	Cases = 354 Controls = 249	G allele of rs4649203 for SLE	33269531
Germany	SLE/WG/CSS	UCP-2	Cases = 4625 Controls = 2841	A allele of rs659366	19387474
Bulgaria	DM	CD3Z	Cases = 36 Controls = 95	G allele of rs840015	33902375
China	DM	BANK1	Cases = 654 Controls = 1280	rs3733197	30145638
Asia	DM	Multiple genetic variants	Cases = 576 Controls = 6270	rs7919656 (WDFY4)	29331962
China	DM	HLA-DPB1	Cases = 127 Controls = 1566	rs9986765 & rs3750716	27153935
Australia	DM	PTPN22	Cases = 199 Controls = 455	PTPN22 minor allele ↑ DM	27312665
Brazil	DM	ACE(I/D)	Cases = 88 Controls = 99	D allele	24591530
Bulgaria	DM, SLE	XRCC1	Cases = 88 Controls = 94	↓	31855267
Netherlands, African Americans, Asians	SD	ANXA11	Cases = 113 Controls = 363	T allele of rs1049550	35563867
Iran	SD	BTNL2	Cases = 80 Controls = 80	AA genotype and A allele of rs2676530	35115755
Hungary	SD	CTO	Cases = 80 Controls = 133	Heterozygous for DUP24 (CTO)	33307063
Japan and Czech republic	SD	Multiple genetic variants	Cases = 700 Controls = 886 Cases = 265 Controls = 264	CCL24, STYXL1-SRRM3 and C1orf 141-IL23R	32826979
Greece	SD	TGF- β3	Cases = 103 Controls = 100	G allele of rs3917200 (TGF- β3)	32552203
Europe, African American	SD	Multiple genetic variants		7 SNPs within MAG1 7	32141793
Finland	SD	HLA-DRB1	Cases = 72 Controls = 150 Cases = 181 Controls = 150	AADACL3 and C1orf158	31921204
France	SD	BTNL2	Cases = 231 Controls = 271	No association	30872286
China	BD	PTPN2	Cases = 497 Controls = 697	rs1893217	24480412
Turkey	BD	PTPN22	Cases = 134 Controls = 177	No association was observed	17868256
Turkey	BD	VKORC1	Cases = 92 Controls = 89	No significant association	23362849
Japan, Turkey, Korea	BD	Multiple genetic variants	Cases = 612 Control = 740 Cases = 1215 Controls = 1279 Cases = 119 Controls = 14	rs12119179 (IL23R-IL12RB2), rs1554286 (IL10), rs1495965 and rs1800871 (IL23R-IL12RB2)	20622879

Turkey	BD	Multiple genetic variants	Cases = 1215 Controls = 1278	HLA-B*51, rs1518111 (IL10), rs924080 (IL23R-IL12RB2)	20622878
Spain	BD	Multiple genetic variants	Cases = 278 Controls = 1517 Cases = 130 Controls = 600	HLA-B*51, rs10889664 (IL23R), rs1874886 (IL12) and rs2848479 (JRKL/CNTN5)	27548383
Turkey and japan	BD	Multiple genetic variants	Cases = 1209 Controls = 1278 Cases = 1468 Controls = 1352	CCR1, STAT4, KLRC4, HLA-B*51 and ERPA1 genes	23291587
Korea and japan	BD	Multiple genetic variants	Cases = 379 Controls = 800 Cases = 363 Controls = 272	rs1608157, rs1522596, rs10266069, rs10256482 and rs2286900 (GIMAP)	23041938
Europe, Middle East, Turkey, Netherlands	BD	Multiple genetic variants	Cases = 336 Controls = 5843	6p21.33 (HLA) region, rs17810546 (IL12A)	25799145
Asia, Turkey, Europe	BD, HSP, KD	ACE (I/D)	Cases = 1184 Controls = 1464	D allele & DD + 1D genotype	22277255
Korea	BD, RV	ICAM 1	Cases = 1368 Controls = 1922	R allele (G241R) for R BD and E allele (K469E) for RA	27894415
Asia	IBD	IL-8, IL-10, IL-18	33 studies meta-analysis	rs4073 (IL-8), rs1800871, rs1800872 and rs1800896 (IL-10)	32781445
Croatia	IBD	IL-6 CRP	Cases = 132 Controls = 71	C allele of rs1800795 (IL-6)	32724277
Poland	IBD	MBL2	Cases = 40 Controls = 136	O allele (MBL2)	31703823
Iran	IBD	JAK2	Cases = 346 Controls = 206	No association	31069840
China	IBD	VEGF	Cases = 275 Controls = 495	A allele of rs699947	30098261
France	IBD	TLR2	Cases = 843 control 805	Short GTn repeat of intron 2	28388655
Netherlands	IBD	Multiple genetic variants	Cases = 92	SMAD5, IL10RA and ATG9A	27903283

☐ Indicate gene association studies
 ☐ Indicate genome wide association studies
 ☐ Indicate meta-analysis

AAV: ANCA-associated vasculitis, **EGPA:** Eosinophilic granulomatosis with polyangiitis, **MPA:** Microscopic polyangiitis, **MPO-ANCA:** Myeloperoxidase anti-neutrophil cytoplasmic antibody, **WG:** Wegner granulomatosis, **HSP:** Henoch-Schönlein purpura, **IgAV:** Immunoglobulin A vasculitis, **IgAN:** Immunoglobulin A nephropathy, **PigAN:** Primary IgA nephropathy, **CSS:** Churg Strauss syndrome, **CV:** Cryoglobulinemic vasculitis, **PN:** Polyarteritis nodosa, **GPD:** Goodpasture's disease, **GCA:** Giant cell arteritis, **GPA:** Granulomatosis with polyangiitis, **TAK:** Takayasu arteritis, **KD:** Kawasaki disease, **RV:** Rheumatoid vasculitis, **pSS:** Sjogren syndrome, **SLE:** Systemic lupus erythematosus, **DM:** Dermatomyositis, **SD:** Sarcoidosis, **BD:** Behçet's disease, **IBD:** Inflammatory Bowel disease. **ULK1:** unc-51 like autophagy activating kinase 1, **PIK3CA:** phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha, **TERT:** telomerase reverse transcriptase, **DSP:** desmoplakin, **CTLA-4:** cytotoxic T-lymphocyte associated protein 4, **ETS1:** ETS proto-oncogene 1 transcription factor, **HLA-DRB1:** major histocompatibility complex, class II, DR beta 1 **ARHGAP8:** Rho GTPase activating protein 8, **CD22:** CD22 molecule, **MOSPD2:** motile sperm domain containing 2, **PRTN3:** proteinase 3, **PTPN22:** protein tyrosine phosphatase non-receptor type 22, **C3:** complement C3, **Fcγ-RIIa:** Fc gamma receptor IIa, **IL1-RA:** interleukin 1 receptor antagonist, **IRF5:** interferon regulatory factor 5, **STAT4:** signal transducer and activator of transcription 4, **CDI8:** Cluster of differentiation 18, **CCL26:** C-C motif chemokine ligand 26, **ACE (I/D):** angiotensin I converting enzyme, **HLA-II:** human leukocyte antigen II, **NOTCH 4:** NOTCH like receptor 4, **FN:** fibronectin, **HLA-DQB1:** HLA class II, DQ beta 1, **HLA-DQA2:** HLA class II, DQ alpha 1, **TLR:** toll-like receptor, **CCL2:** C-C motif chemokine ligand 2, **VEGF:** vascular endothelial growth factor, **ACE:** angiotensin I converting enzyme, **eNOS:** Endothelial nitric oxide synthase, **MEF-V:** MEFV innate immunity regulator, pyrin, **HSP70-2:** Heat shock protein 70 (Hsp 70) family protein, **TNF-α:** Tumor necrosis factor-α, **CSK:** C-terminal Src kinase, **MCP1:** Monocyte chemoattractant protein-1, **RANTES:** Regulated upon Activation, Normal T Cell Expressed and Presumably Secreted, **MBL:** Mannose-binding lectin, **RAS:** Rat sarcoma virus, **ICAM1:**

intercellular adhesion molecule 1, **IL**: Interleukin **ILR**: Interleukin receptor, **CDH5**: cadherin 5, **MnSOD**: Manganese Superoxide Dismutase, **IGHV**: immunoglobulin heavy chain gene, **IP10**: Interferon gamma-induced protein 10, **FAM167A-BCK**: Family with sequence similarity 167 member A, **CD 40**: Cluster of differentiation 40, **PPIA**: peptidylprolyl isomerase A, **CASP3**: caspase 3, **FCGR2A**: Fc gamma receptor IIa, **HLA-C**: human leukocyte antigen C, **HLA-B**: major histocompatibility complex B, **BLK**: BLK proto-oncogene, Src family tyrosine kinase, **ABCC4**: ATP binding cassette subfamily C member 4, **TBXA2R**: thromboxane A2 receptor, **EBF2**: EBF transcription factor 2, **PADI**: Peptidyl arginine deiminase, type I, **HLA-DR4/1**: HLA DR isotype, **IL28RA**: Interleukin 28 receptor alpha subunit, **VAV1**: vav guanine nucleotide exchange factor 1, **ICAM1**: intercellular adhesion molecule 1, **CCR5-Δ32**: C-C motif chemokine receptor 5 delta 32, **TAP**: transporter associated with antigen processing, **HLA**: major histocompatibility complex, **CD3Z**: Cluster of differentiation 3Z molecule, **XRCC1**: X-ray repair cross complementing 1, **BANK1**: B cell scaffold protein with ankyrin repeats 1, **ANXA11**: annexin A11, **BTNL2**: butyrophilin like 2, **CTO**: Serum chitotriosidase, **TGF- β3**: transforming growth factor beta 3, **BTNL2**: Butyrophilin Like 2, **MnSOD**: Manganese Superoxide Dismutase, **DNASE1**: Deoxyribonuclease 1, **iNOS**: inducible nitric oxide synthase, **IFNGR1**: Interferon Gamma Receptor 1, **UCP-2**: uncoupling proteins 2, **MIF**: Macrophage Migration Inhibitory Factor, **NOS2A**: Nitric oxide synthase 2, **ADAM17**: A disintegrin and metalloprotease 17, **CAV1**: Caveolin 1, **SEC14L5**: SEC14 like lipid binding 5, **VPS8**: CORVET complex membrane-binding subunit VPS8, **SVEP1**: sushi, von Willebrand factor type A, EGF and pentraxin domain containing 1, **CFL2**: cofilin 2, **PTK2B**: protein tyrosine kinase 2 beta, **ETS2**: ETS proto-oncogene 2, transcription factor, **GR**: glucocorticoid receptor, **HSD11B1**: hydroxysteroid 11-beta dehydrogenase 1, **CECR1**: Cat eye syndrome critical region protein 1, **ORAI1**: ORAI calcium release-activated calcium modulator 1, **VKORC1**: vitamin K epoxide reductase complex subunit 1, **GAS6**: growth arrest specific 6, **ITPKC**: inositol-trisphosphate 3-kinase C, **LEPR**: leptin receptor, **GHSR**: growth hormone secretagogue receptor, **AT**: antitrypsin, **PR3**: proteinase 3, **CRP**: C-reactive protein, **MBL2**: mannose binding lectin 2, **JAK2**: Janus kinase 2.

Supplemental Table 2. Gene based drug targets for peripheral nervous system vasculitides			
Vasculitide type	Drug	Target	PUBMED ID
ANCA associated vasculitis	Rituximab	MS4A1	32990324
	Infliximab	TNF- α	32990324
	Mepolizumab	IL-5	32990324
	Abatacept	CTLA-4	32990324
Eosinophilic granulomatosis with polyangiitis	Mepolizumab	IL-5	30573961
	Tofacitinib	JAK1	27887955
	Benralizumab	IL-5	32348510
Polyarteritis nodosa	Infliximab	TNF- α	30972576
Giant cell arteritis	Tocilizumab	IL-6	27203632
	Baricitinib	JAK1/JAK2	29416384
	Upadacitinib	JAK1	33442231
	Secukinumab	IL-17A	33442231
	Anakinra	IL-1	28745999
	Abatacept	CTLA-4	28133925
	Ustekinumab	IL-12/IL-23	5920281
	Guselkumab	IL-23	35329914
	Bosentan	ET _A /ET _B	35329914
	Anakinra	IL-1 β R	32885390
Kawasaki Disease	Etanercept	TNF- α	31048415
	Infliximab	TNF- α	21774801
Rheumatoid vasculitis	Daratumumab	IGJ	2970240
Sjogren syndrome	Isalimumab	TNFR	31831255
	Ianalumab	BAFF	31831255
Systemic erythematosus lupus	Anifrolumab	IFN- α /IFN- β /IFN- ω	35030985
	Daratumumab	IGJ	2970240
	Obinutuzumab	BDCA2	33039962
	Baricitinib	JAK1/JAK2	33039962
	Telitacicept	TNFRSF13B	33536424
	Belimumab	BAFF	33536424
Sarcoidosis	Adalimumab	TNF- α	27454074
	Golimumab	IL-12/IL-23	25034562
	Etanercept	TNF- α	12853521
Inflammatory bowel disease	Spesolimab	IL-36	24355486
	Vedolizumab	Integrin α 4 β 7	27714831

MS4A1: Membrane Spanning 4-Domains A1, **TNFR:** Tumor necrosis factor receptor, **TNF- α :** Tumor necrosis factor- α , **IL:** interleukin, **CTLA-4:** cytotoxic T-lymphocyte associated protein 4, **JAK:** Janus kinase, **ET_A/ET_B:** Endothelin receptor antagonist, **IL-1 β R:** interleukin 1 beta receptor, **IGJ:** Immunoglobulin J, **BAFF:** B cell activating factor, **IFN- α :** interferon alpha, **IFN- β :** interferon beta, **IFN- ω :** interferon omega, **BDCA2:** Blood dendritic cell antigen 2, **TNFRSF13B:** TNF receptor superfamily member 13B, **Integrin α 4 β 7:** integrin heterodimer alpha 4 beta 7.