

SNP	Chr	Closest Gene	Alleles	GADA		I-A2A		PCA		TPOA		T1D	
				P	OR	P	OR	P	OR	P	OR	P	OR
rs3890745	1p36.32	<i>MMEL1</i>	T>C	-	-	-	-	-	-	-	-	-	-
rs186037*	1p36.12	<i>C1QA</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs11805303	1p31.3	<i>IL23R</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs11209032	1p31.3	<i>IL23R</i>	G>A	-	-	-	-	-	-	-	-	-	-
rs3790565*	1p31.3	<i>IL12RB2</i>	T>C	-	-	-	-	-	-	-	-	-	-
rs672797	1p31.1	<i>AL158218.11</i>	A>C	-	-	-	-	-	-	-	-	-	-
rs2476601*	1p13.2	<i>PTPN22</i>	G>A	-	-	-	-	-	-	2.1e-05	1.2	2.1e-111	2
rs11264798	1q23.1	<i>FCRL3</i>	G>C	-	2.7e-08	1.4	-	-	-	0.00035	0.84	-	-
rs7528684*	1q23.1	<i>FCRL3</i>	T>C	-	1.1e-11	0.66	-	-	-	-	-	-	-
rs2794520*	1q23.2	<i>CRP</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs2274910	1q23.3	<i>ITLN1</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs1079109*	1q23.3	<i>HSPA6</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs12118043*	1q23.3	<i>FCGR2B</i>	C>A	-	-	-	-	-	-	-	-	-	-
rs10489185*	1q24.2	<i>SELP</i>	C>A	-	-	-	-	-	-	-	-	-	-
rs9286879	1q24.3	<i>FASLG</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs10127728*	1q25.1	<i>TNFSF4</i>	G>T	-	-	-	-	-	-	-	-	-	-
rs10798269*	1q25.1	<i>RPL26P11</i>	G>A	-	-	-	-	-	-	-	-	-	-
rs2811558*	1q25.3	<i>NMNAT2</i>	G>T	-	-	-	-	-	-	-	-	-	-
rs2702180	1q25.3	<i>NCF2</i>	T>C	-	-	-	-	-	-	-	-	-	-
rs10801047	1q31.2	<i>RP11-309H21.1</i>	T>A	-	-	-	-	-	-	-	-	-	-
rs2816316	1q31.2	<i>RGS1</i>	A>C	-	-	-	-	-	-	-	-	0.00011	0.9
rs11584383	1q32.1	<i>KIF21B</i>	T>C	-	-	-	-	-	-	-	-	-	-
rs3024505*	1q32.1	<i>IL10</i>	G>A	-	-	-	-	-	-	-	-	4.7e-10	0.83
rs12139795*	1q32.2	<i>CR2</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs9782955*	1q42.3	<i>LYST</i>	C>T	-	-	-	-	-	-	-	-	0.003	0.92
rs780094	2p23.3	<i>GCKR</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs13385731*	2p22.3	<i>RASGRP3</i>	T>C	-	-	-	-	-	-	-	-	-	-
rs13015714	2q12.1	<i>IL18R1</i>	T>G	-	-	-	-	-	-	-	-	-	-
rs917997	2q12.1	<i>IL18RAP</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs1990760*	2q24.2	<i>IFIH1</i>	T>C	-	0.0036	0.85	-	0.0007	1.4	-	-	2.2e-14	1.2
rs3821236	2q32.3	<i>STAT1</i>	G>A	-	-	-	-	-	-	-	-	7e-05	1.1
rs7574865	2q32.3	<i>STAT4</i>	G>T	-	-	-	-	-	-	0.01	0.8	0.00038	0.9
rs6752770*	2q32.3	<i>STAT4</i>	A>G	-	-	-	-	-	-	-	-	8.1e-05	1.1
rs3087243	2q33.2	<i>CTLA4</i>	G>A	-	-	-	-	-	-	0.0011	1.2	2.3e-17	1.2
rs3828309	2q37.1	<i>ATG16L1</i>	G>A	-	-	-	-	-	-	-	-	-	-
rs12620999*	2q37.3	<i>COPS8</i>	T>C	-	-	-	-	-	-	-	-	-	-
rs11568821*	2q37.3	<i>PDCD1</i>	G>A	-	0.0035	0.77	-	-	-	-	-	-	-
rs6441961	3p21.31	<i>CCR2</i>	C>T	-	-	-	-	-	-	-	-	0.00028	0.91

SNP	Chr	Closest Gene	Alleles	GADA		I-A2A		PCA		TPOA		T1D	
				P	OR	P	OR	P	OR	P	OR	P	OR
rs730566*	3p21.31	<i>CCDC51</i>	C>A	-	-	-	-	-	-	-	-	-	-
rs9858542	3p21.31	<i>APEH</i>	G>A	-	-	-	-	-	-	-	-	-	-
rs3197999	3p21.31	<i>MST1</i>	G>A	-	-	-	-	-	-	-	-	-	-
rs6445975*	3p14.3	<i>PXK</i>	T>G	0.0088	1.2	-	-	-	-	-	-	-	-
rs17810546	3q25.33	<i>IL12A</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs1464510	3q28	<i>LPP</i>	C>A	-	-	-	-	-	-	-	-	-	-
rs6853274*	4q24	<i>BANK1</i>	C>A	-	-	-	-	-	-	-	-	-	-
rs17388568	4q27	<i>ADAD1</i>	G>A	-	-	-	-	-	-	-	-	6e-06	1.1
rs2069762	4q27	<i>IL2</i>	A>C	-	-	-	-	-	0.0045	1.2	-	5.4e-07	0.89
rs6822844	4q27	<i>IL21</i>	G>T	-	-	-	-	-	-	-	-	-	-
rs2141258*	4q35.1	<i>CCDC111</i>	G>T	-	-	-	-	-	-	-	-	-	-
rs6897932	5p13.2	<i>IL7R</i>	C>T	-	-	-	-	-	-	-	-	0.0026	1.1
rs4613763	5p13.1	<i>SNORA63</i>	T>C	-	-	-	-	-	-	-	-	-	-
rs1050152	5q31.1	<i>SLC22A4</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs6596075	5q31.1	<i>SLC22A5</i>	C>G	-	-	-	-	-	-	-	-	-	-
rs2188962	5q31.1	<i>AC116366.4</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs10077785	5q31.1	<i>IRF1</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs11747270	5q33.1	<i>ZNF300</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs10036748*	5q33.1	<i>TNIP1</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs6887695*	5q33.3	<i>IL12B</i>	G>C	-	-	-	-	-	0.005	1.1	-	-	-
rs6908425	6p22.3	<i>CDKAL1</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs11755393*	6p21.31	<i>UHRF1BP1</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs11755527	6q15	<i>BACH2</i>	C>G	-	-	-	-	-	9.7e-07	1.2	-	3.1e-08	1.1
rs6568431*	6q21	<i>PRDM1</i>	C>A	-	-	-	-	-	-	-	-	-	-
rs633724*	6q21	<i>ATG5</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs6920220*	6q23.3	<i>TNFAIP3</i>	G>A	-	-	-	-	-	-	-	-	6.5e-05	1.1
rs1738074	6q25.3	<i>TAGAP</i>	C>T	-	-	-	-	-	-	-	-	0.00051	1.1
rs2301436	6q27	<i>FGFR1OP</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs6959703*	7p21.3	<i>GLCC1</i>	T>C	-	-	-	-	-	-	-	-	-	-
rs10156091	7p21.3	<i>ICAI</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs1861525*	7p15.2	<i>CYCS</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs10245867*	7p15.1	<i>JAZF1</i>	G>T	-	-	-	-	-	-	-	-	0.0011	1.1
rs921916*	7p12.2	<i>IKZF1</i>	T>C	-	-	-	-	-	-	-	-	-	-
rs10488630*	7q32.1	<i>IRF5</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs11250113*	8p23.1	<i>XKR6</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs13277113*	8p23.1	<i>BLK</i>	G>A	-	-	-	-	-	-	-	-	-	-
rs10903340*	8p23.1	<i>C8orf14</i>	T>G	-	-	-	-	-	-	-	-	-	-
rs868541*	8q12.1	<i>LYN</i>	C>T	-	-	-	-	-	-	-	-	-	-

SNP	Chr	Closest Gene	Alleles	GADA		I-A2A		PCA		TPOA		T1D	
				P	OR	P	OR	P	OR	P	OR	P	OR
rs1551398	8q24.13	<i>TRIB1</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs10758669	9p24.1	<i>AL158147.17</i>	A>C	-	-	-	-	-	-	-	-	-	-
rs2812378	9p13.3	<i>CCL21</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs6478108	9q32	<i>TNFSF15</i>	T>C	-	-	-	-	-	-	-	-	-	-
rs3761847	9q33.2	<i>TRAF1</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs12722495	10p15.1	<i>IL2RA</i>	A>G	0.0066	0.73	-	-	-	-	-	-	1.4e-38	0.62
rs4750316	10p15.1	<i>PRKCCQ</i>	G>C	-	-	-	-	-	-	-	-	-	-
rs11013210*	10p12.2	<i>ARMC3</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs2666236	10p11.22	<i>NRP1</i>	G>A	-	-	-	-	-	-	-	-	1.3e-05	0.9
rs3936503	10p11.21	<i>CCNY</i>	G>A	-	-	-	-	-	-	-	-	-	-
rs1913517*	10q11.22	<i>LRRC18</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs10995271	10q21.2	<i>ATQL4</i>	G>C	-	-	-	-	-	-	-	-	-	-
rs224136	10q21.2	<i>ATQL4</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs11190140	10q24.2	<i>NKX2-3</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs10886462	10q26.11	<i>GRK5</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs4963128*	11p15.5	<i>PHRF1</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs1004446	11p15.5	<i>IGF2AS</i>	A>G	-	-	-	-	-	-	-	-	2.5e-23	1.4
rs10836304*	11p13	<i>APIP</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs7927894	11q13.5	<i>LRRC32</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs503425*	11q23.3	<i>DDX6</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs6590330*	11q24.3	<i>ETS1</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs1805721*	12p13.31	<i>KLRG1</i>	G>A	-	-	-	-	-	-	0.0087	2.8	0.0022	0.93
rs11175593	12q12	<i>LRRK2</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs1701704	12q13.2	<i>IKZF4</i>	T>G	-	-	-	-	-	-	-	-	4.5e-18	0.8
rs2292239	12q13.2	<i>ERBB3</i>	G>T	-	-	-	-	-	-	-	-	2.9e-27	1.3
rs1678542	12q13.3	<i>KIF5A</i>	C>G	-	-	-	-	-	-	-	-	0.00012	1.1
rs3184504*	12q24.12	<i>SH2B3</i>	C>T	0.0017	1.2	-	-	-	-	0.003	1.2	2e-38	1.3
rs428073*	12q24.23	<i>TAOK3</i>	T>C	-	-	-	-	-	-	-	-	-	-
rs662739*	12q24.31	<i>SPPL3</i>	C>T	-	-	-	-	-	-	0.00077	0.82	-	-
rs10847697*	12q24.32	<i>SLC15A4</i>	G>A	-	-	-	-	-	-	-	-	-	-
rs3764147	13q14.11	<i>C13orf31</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs7333671*	13q22.1	<i>KLF12</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs916977	15q13.1	<i>HERC2</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs4778640*	15q25.1	<i>STARD5</i>	A>G	-	-	-	-	-	-	-	-	-	-
rs12708716*	16p13.13	<i>CLEC16A</i>	A>G	-	-	-	-	-	-	-	-	5e-14	1.2
rs4788084	16p11.2	<i>IL27</i>	C>T	-	-	0.0031	1.2	-	-	-	-	1.4e-08	0.87
rs9888739*	16p11.2	<i>ITGAM</i>	C>T	-	-	-	-	-	-	-	-	-	-
rs2076756	16q12.1	<i>CARD15</i>	A>G	-	-	-	-	-	-	-	-	-	-

SNP	Chr	Closest Gene	Alleles	GADA			IA-2A			PCA			TPOA			T1D		
				P	OR	P	OR	P	OR	P	OR	P	OR	P	OR			
rs991804	17q12	<i>CCL2</i>	C>T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rs2872507	17q12	<i>ORMDL3</i>	G>A	-	-	-	-	-	-	-	-	-	-	-	2.2e-06	-	1.1	
rs7216389	17q12	<i>GSDMB</i>	C>T	-	-	-	-	-	-	-	-	-	-	-	4.1e-05	-	1.1	
rs744166	17q21.2	<i>STAT3</i>	A>G	-	-	-	-	-	-	-	-	-	-	-	0.0023	-	0.93	
rs2542151	18p11.21	<i>PTPN2</i>	T>G	-	-	-	-	-	-	-	-	-	-	-	3.8e-13	-	1.3	
rs763361	18q22.2	<i>CD226</i>	C>T	-	-	-	-	-	-	-	-	-	-	-	1.3e-09	-	0.89	
rs4807569	19p13.3	<i>SBNO2</i>	A>C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rs2304256*	19p13.2	<i>TYK2</i>	A>G	-	-	-	-	-	-	-	-	-	-	-	1.3e-10	-	-	
rs2867437*	20q12	<i>PTPRT</i>	C>A	-	-	-	-	-	-	-	-	-	-	-	0.00061	-	1.1	
rs1569723	20q13.12	<i>CD40</i>	A>C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rs4809330	20q13.33	<i>TNFRSF6B</i>	G>A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rs1736135	21q21.1	<i>CYCSP42</i>	T>C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rs2836878	21q22.2	<i>PSMG1</i>	G>A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rs3788013	21q22.3	<i>UBASH3A</i>	C>A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rs762421	21q22.3	<i>ICOSLG</i>	A>G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rs5754217*	22q11.21	<i>UBE2L3</i>	G>T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rs743777	22q12.3	<i>IL2RB</i>	A>G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rs2071725*	22q13.2	<i>TTL12</i>	G>A	-	-	-	-	-	-	-	-	-	-	-	1.7e-06	-	1.1	
rs4830808*	Xp22.2	<i>TLR8</i>	C>T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rs5979785*	Xp22.2	<i>TMSB4X</i>	T>C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
rs3027898*	Xq28	<i>IRAK1</i>	A>C	-	-	-	-	-	-	-	-	-	-	-	0.00083	-	0.92	
rs2071649*	Xq28	<i>OPN1LW</i>	A>C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table S3: Genome-wide scan p -values and estimated minor allele odds ratios (OR) for GADA, IA-2A, PCA, TPOA and T1D associations for 135 SNPs associated with an autoimmune disorders [30,31] (excluding SNPs in the HLA locus or only T1D associated). When available, we used follow-up genotyping data in the maximum available sample size in the JDRF/WT T1D case control collection. The symbol * indicates that the SNP has been associated with systemic lupus erythematosus (see [31,32]). Only p -values and odds ratios more significant than 0.01 are shown (false discovery rate of 27%). The column Gene only refers to the nearest, or most likely candidate gene, and in most cases the causal gene may actually differ.