

Supplementary Information

Genetic variations in Toll-like receptors (TLRs 3/7/8) are associated with systemic lupus erythematosus in a Taiwanese population

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Table 1 Association of TLR 7 and TLR8 SNPs with SLE clinical phenotypes and autoantibodies in the male SLE patients

Clinical characteristics	TLR7						TLR8		
	rs3853839		rs5935436		rs179010		rs3764880		
	Type of analysis ^a		Type of analysis ^a		Type of analysis ^a		Type of analysis ^a		
		P _{FDR} ^b	OR (95%CI)	P _{FDR} ^b	OR (95%CI)	P _{FDR} ^b	OR (95%CI)	P _{FDR} ^b	OR (95%CI)
Oral ulcer	+ vs. -		C vs.G		C vs.T		T vs.C		A vs.G
		0.9587	1.05 (0.20-5.65)	0.9587	0.98 (0.04-23.05)	0.2182	3.29 (0.94-11.50)	0.9587	1.22 (0.22-6.70)
	+ vs. Normal		G vs.C		C vs.T		T vs.C		G vs.A
		0.4797	1.72 (0.38-7.87)	0.4797	1.00 (0.06-17.49)	0.1056	3.36 (1.08-10.43)	0.4797	1.98 (0.43-9.05)
Arthritis	+ vs. -		G vs.C		C vs.T		C vs.T		G vs.A
		0.3115	3.45 (0.81-14.74)	0.8650	1.28 (0.08-21.35)	0.8650	1.14 (0.43-3.05)	0.3115	2.83 (0.64-12.45)
	+ vs. Normal		G vs.C		C vs.T		T vs.C		G vs.A
		0.0546	3.55 (1.07-11.76)	0.7331	1.42 (0.18-10.90)	0.7331	1.23 (0.62-2.44)	0.0514	4.09 (1.24-13.53)
Malar rash	+ vs. -		G vs.C		C vs.T		C vs.T		G vs.A
		0.8988	1.19 (0.31-4.57)	0.8988	1.20 (0.07-20.01)	0.1509	2.88 (1.05-7.92)	0.8988	1.54 (0.37-6.33)
	+ vs. Normal		G vs.C		C vs.T		C vs.T		G vs.A
		0.3404	1.94 (0.74-5.10)	0.7534	1.38 (0.18-10.60)	0.6829	1.28 (0.61-2.71)	0.1618	2.89 (1.00-8.32)
Discoid rash	+ vs. -		G vs.C		C vs.T		T vs.C		G vs.A
		0.9002	1.30 (0.25-6.86)	0.9002	1.28 (0.05-29.86)	0.9002	1.35 (0.43-4.21)	0.9002	1.11 (0.21-5.97)
	+ vs. Normal		G vs.C		C vs.T		T vs.C		G vs.A
		0.4330	2.20 (0.49-9.82)	0.4330	1.23 (0.07-21.30)	0.4330	1.64 (0.60-4.48)	0.4330	2.53 (0.57-11.28)
Photosensitivity	+ vs. -		G vs.C		T vs.C		T vs.C		G vs.A
		0.5136	2.15 (0.25-18.80)	0.5136	4.50 (0.26-77.14)	0.5136	1.50 (0.44-5.09)	0.5136	4.70 (0.25-86.95)
	+ vs. Normal		G vs.C		T vs.C		T vs.C		G vs.A
		0.3866	3.45 (0.44-26.99)	0.4577	2.17 (0.27-17.56)	0.3866	1.80 (0.60-5.44)	0.1530	8.66 (0.51-147.60)
Pleural effusion	+ vs. -		G vs.C		C vs.T		C vs.T		G vs.A
		0.5064	2.15 (0.25-18.80)	0.5064	0.89 (0.04-21.01)	0.0753	8.87 (1.07-73.45)	0.2641	4.70 (0.25-86.95)

	+ vs. Normal	G vs.C	C vs.T	C vs.T	G vs.A
		0.2794 3.45 (0.44-26.99)	0.4971 0.92 (0.05-16.16)	0.1573 5.23 (0.67-40.85)	0.1530 8.66 (0.51-147.60)
Pericardial effusion	+ vs. -	G vs.C	T vs.C	T vs.C	A vs.G
		0.5533 2.40 (0.28-20.85)	0.5192 4.50 (0.26-77.14)	0.9851 1.01 (0.29-3.50)	0.5192 2.40 (0.51-11.24)
	+ vs. Normal	G vs.C	T vs.C	T vs.C	G vs.A
		0.6960 3.76 (0.48-29.21)	0.7816 2.17 (0.27-17.56)	0.7816 1.31 (0.42-4.07)	0.7816 1.20 (0.33-4.43)
Ascites	+ vs. -	C vs.G	C vs.T	C vs.T	A vs.G
		0.7199 3.06 (0.25-37.35)	0.8582 0.19 (0.01-5.19)	0.8582 1.25 (0.11-14.51)	0.7199 3.50 (0.28-43.16)
	+ vs. Normal	C vs.G	C vs.T	T vs.C	A vs.G
		0.9674 1.59 (0.14-17.69)	0.9674 0.23 (0.01-4.75)	0.9674 1.05 (0.09-11.66)	0.9674 1.39 (0.13-15.45)
Nephritis	+ vs. -	C vs.G	C vs.T	C vs.T	A vs.G
		0.4011 2.33 (0.45-12.02)	0.6236 2.00 (0.12-33.51)	0.2297 2.42 (0.86-6.80)	0.2297 4.89 (0.57-41.79)
	+ vs. Normal	G vs.C	C vs.T	C vs.T	G vs.A
		0.7845 1.41 (0.64-3.11)	0.8110 1.69 (0.22-12.92)	0.8779 1.05 (0.54-2.03)	0.7845 1.62 (0.73-3.57)
Neuropsychiatric manifestations	+ vs. -	G vs.C	C vs.T	C vs.T	G vs.A
		0.7300 1.69 (0.19-15.03)	0.7300 0.71 (0.03-16.92)	0.1866 6.82 (0.81-57.41)	0.7300 1.47 (0.16-13.23)
	+ vs. Normal	G vs.C	C vs.T	C vs.T	G vs.A
		0.4083 2.82 (0.35-22.48)	0.5353 0.77 (0.04-13.68)	0.4083 4.28 (0.54-34.07)	0.4083 3.25 (0.41-25.89)
Leukopenia (WBC count < 3500/uL)	+ vs. -	G vs.C	C vs.T	T vs.C	G vs.A
		0.4720 2.57 (0.65-10.16)	0.7852 1.54 (0.09-25.72)	0.4720 1.86 (0.66-5.21)	0.7852 1.22 (0.30-5.03)
	+ vs. Normal	G vs.C	C vs.T	T vs.C	G vs.A
		0.1004 2.82 (0.98-8.08)	0.6761 1.54 (0.20-11.80)	0.1684 1.65 (0.87-3.14)	0.1004 2.53 (0.97-6.59)
Anemia (Hb < 9 g/dL)	+ vs. -	C vs.G	C vs.T	C vs.T	G vs.A
		0.7402 1.33 (0.24-7.32)	0.7402 0.80 (0.03-18.97)	0.5398 3.27 (0.65-16.52)	0.7402 1.67 (0.19-14.89)
	+ vs. Normal	G vs.C	C vs.T	C vs.T	G vs.A
		0.6607 1.41 (0.30-6.61)	0.6607 0.85 (0.05-15.01)	0.6457 2.14 (0.46-10.02)	0.6457 3.61 (0.46-28.47)
Thrombocytopenia (Plat count <10 ⁵ /uL)	+ vs. -	G vs.C	T vs.C	C vs.T	G vs.A

		0.3159	5.66 (0.67-47.81)	0.6753	2.00 (0.12-33.51)	0.6753	1.25 (0.44-3.55)	0.6753	1.99 (0.38-10.47)
	+ vs. Normal	G vs.C		T vs.C		T vs.C		G vs.A	
		0.1118	6.90 (0.92-51.72)	0.8733	1.18 (0.15-9.22)	0.8733	1.12 (0.47-2.69)	0.1118	3.79 (0.88-16.38)
Complement depressed	+ vs. -	G vs.C		T vs.C		T vs.C		A vs.G	
		1.0000	1.00 (0.19-5.39)	0.9538	1.02 (0.04-24.00)	1.0000	1.05 (0.30-3.65)	0.9538	2.18 (0.25-19.18)
	+ vs. Normal	G vs.C		T vs.C		T vs.C		G vs.A	
		0.3327	1.72 (0.79-3.75)	0.9796	1.02 (0.23-4.50)	0.3672	1.38 (0.77-2.47)	0.3175	1.98 (0.91-4.31)
Anti-dsDNA	+ vs. -	C vs.G		T vs.C		C vs.T		A vs.G	
		0.8232	1.21 (0.23-6.42)	0.6376	1.20 (0.05-28.07)	0.6376	1.52 (0.48-4.85)	0.6376	2.60 (0.30-22.65)
	+ vs. Normal	G vs.C		T vs.C		T vs.C		G vs.A	
		0.3721	1.69 (0.77-3.69)	0.9587	1.04 (0.24-4.60)	0.7033	1.21 (0.67-2.19)	0.3635	1.94 (0.89-4.23)
Anti-Sm	+ vs. -	C vs.G		T vs.C		T vs.C		G vs.A	
		0.5704	2.27 (0.49-10.52)	0.4472	5.28 (0.23-122.27)	0.6469	1.40 (0.50-3.96)	0.6469	1.43 (0.31-6.62)
	+ vs. Normal	G vs.C		T vs.C		T vs.C		G vs.A	
		0.5230	1.38 (0.51-3.72)	0.4426	2.08 (0.46-9.43)	0.3753	1.68 (0.77-3.67)	0.2978	2.89 (0.86-9.75)
Anti-RNP	+ vs. -	G vs.C		T vs.C		T vs.C		G vs.A	
		0.6498	1.83 (0.32-10.32)	0.7848	1.48 (0.09-24.88)	0.6498	1.62 (0.56-4.69)	0.5200	4.76 (0.53-42.39)
	+ vs. Normal	G vs.C		T vs.C		T vs.C		G vs.A	
		0.1557	3.45 (0.80-14.88)	0.9068	1.13 (0.14-8.81)	0.2205	1.78 (0.78-4.06)	0.0565	8.30 (1.11-62.05)
Anti-SSA	+ vs. -	C vs.G		C vs.T		C vs.T		G vs.A	
		0.7585	1.27 (0.27-5.92)	0.7585	1.69 (0.10-28.93)	0.7585	1.43 (0.42-4.83)	0.4468	3.47 (0.71-16.99)
	+ vs. Normal	G vs.C		C vs.T		T vs.C		G vs.A	
		0.9712	1.15 (0.46-2.90)	0.9712	1.04 (0.13-8.06)	0.1250	2.10 (0.98-4.51)	0.1250	3.01 (0.89-10.13)
Anti-SSB	+ vs. -	C vs.G		T vs.C		T vs.C		G vs.A	
		0.6966	1.43 (0.24-8.65)	0.6966	5.14 (0.29-92.27)	0.6966	1.58 (0.33-7.59)	0.6966	1.63 (0.17-15.48)
	+ vs. Normal	C vs.G		T vs.C		T vs.C		G vs.A	
		0.9410	1.06 (0.21-5.32)	0.3976	3.71 (0.43-31.69)	0.2804	3.51 (0.83-14.86)	0.4957	2.53 (0.31-20.75)

Anti-cardiolipin IgG	+ vs. -	C vs.G	C vs.T	C vs.T	A vs.G
		0.7601 1.32 (0.22-7.87)	0.7601 0.65 (0.02-20.61)	0.4156 2.70 (0.63-11.55)	0.4156 2.83 (0.53-15.00)
Anti-cardiolipin IgM	+ vs. Normal	G vs.C	C vs.T	C vs.T	G vs.A
		0.7946 1.57 (0.34-7.26)	0.7946 0.92 (0.05-16.16)	0.7946 1.43 (0.38-5.35)	0.9067 1.08 (0.29-4.05)
Anti-cardiolipin IgG	+ vs. -	C vs.G	C vs.T	C vs.T	A vs.G
		0.7564 2.53 (0.22-29.25)	0.7579 0.19 (0.01-6.59)	0.7564 1.96 (0.19-20.44)	0.7564 2.06 (0.18-23.21)
Anti-cardiolipin IgM	+ vs. Normal	C vs.G	C vs.T	C vs.T	G vs.A
		0.9581 1.06 (0.11-10.28)	0.9581 0.31 (0.02-6.08)	0.9581 1.43 (0.15-13.85)	0.9581 1.08 (0.11-10.47)

^aThe analysis was done by comparing allele frequencies in different clinical subgroups as described in the methods section. ^b P_{FDR} : The p-value was adjusted after the FDR correction.

Table 2 Association of TLR 7 and TLR8 SNPs with SLE clinical phenotypes and autoantibodies in the female SLE patients

Clinical characteristics	TLR7						TLR8							
	rs3853839		rs5935436		rs179010		rs3764880							
	Type of analysis ^a		Type of analysis		Type of analysis		Type of analysis ^a							
	P_{FDR}^b	OR (95%CI)	P_{FDR}^b	OR (95%CI)	P_{FDR}^b	OR (95%CI)	P_{FDR}^b	OR (95%CI)						
Oral ulcer	+ vs. -	G vs.C	C vs.T	C vs.T	G vs.A	0.6589	1.17 (0.85-1.60)	0.3192	1.72 (0.89-3.34)	0.6589	1.09 (0.86-1.39)	0.0828	1.56 (1.10-2.21)	
		GG vs.CC+CG	CC vs.CT+TT	CC vs.CT+TT	additive	0.4059	1.22 (0.86-1.75)	0.2134	1.90 (0.95-3.82)	0.4059	1.22 (0.88-1.70)	0.0816	1.55 (1.10-2.20)	
	+ vs. Normal	G vs.C	C vs.T	T vs.C	G vs.A	0.0378	1.49 (1.10-2.02)	0.7986	1.26 (0.65-2.46)	0.8567	1.05 (0.83-1.33)	0.0300	1.65 (1.17-2.32)	
		GG vs.CC+CG	CC vs.CT+TT	TT vs.CC+CT	GG vs.AA+AG	0.0196	1.62 (1.15-2.30)	0.5501	1.40 (0.70-2.83)	0.5501	1.23 (0.78-1.94)	0.0196	1.70 (1.17-2.48)	
Arthritis	+ vs. -	G vs.C	C vs.T	T vs.C	G vs.A	0.5250	1.22 (0.92-1.61)	0.7771	1.16 (0.69-1.95)	0.7771	1.10 (0.88-1.37)	0.3168	1.34 (1.00-1.79)	
		additive	additive	additive	GG vs.AA+AG	0.4936	1.22 (0.92-1.60)	0.7414	1.15 (0.69-1.92)	0.7414	1.10 (0.88-1.36)	0.1369	1.47 (1.06-2.03)	
	+ vs. Normal	G vs.C	T vs.C	T vs.C	G vs.A	0.0084	1.43 (1.15-1.78)	0.6067	1.15 (0.74-1.79)	0.2100	1.16 (0.97-1.38)	0.0693	1.32 (1.04-1.67)	
		GG vs.CC+CG	additive	additive	GG vs.AA+AG	0.0074	1.52 (1.18-1.96)	0.6041	1.14 (0.74-1.77)	0.1987	1.16 (0.97-1.38)	0.0325	1.41 (1.08-1.84)	
Malar rash	+ vs. -	G vs.C	C vs.T	T vs.C	G vs.A	0.7255	1.05 (0.80-1.38)	0.6200	1.37 (0.82-2.28)	0.6200	1.10 (0.89-1.36)	0.6200	1.16 (0.87-1.54)	
		additive	CC vs.CT+TT	TT vs.CC+CT	GG vs.AA+AG	0.7042	1.05 (0.80-1.38)	0.5193	1.49 (0.88-2.53)	0.5193	1.34 (0.88-2.04)	0.5312	1.17 (0.84-1.61)	
	+ vs. Normal	G vs.C	T vs.C	T vs.C	G vs.A	0.0474	1.36 (1.09-1.70)	0.9001	1.04 (0.65-1.66)	0.1952	1.17 (0.98-1.40)	0.1830	1.26 (0.99-1.60)	

		GG vs.CC+CG	additive	additive	GG vs.AA+AG
		0.0364 1.45 (1.11-1.88)	0.8572 1.04 (0.66-1.66)	0.1985 1.16 (0.97-1.39)	0.1684 1.31 (0.99-1.71)
Discoid rash	+ vs. -	C vs.G	C vs.T	T vs.C	G vs.A
		0.9404 1.05 (0.74-1.49)	0.9404 1.81 (0.81-4.02)	0.9404 1.14 (0.87-1.50)	0.9404 1.10 (0.76-1.60)
		CC+CG vs.GG	CC vs.CT+TT	TT vs.CC+CT	AG+GG vs.AA
		0.8368 1.12 (0.76-1.67)	0.4904 1.78 (0.79-3.99)	0.1189 1.77 (1.10-2.85)	0.7528 1.95 (0.45-8.47)
	+ vs. Normal	G vs.C	C vs.T	T vs.C	G vs.A
		0.4314 1.27 (0.90-1.78)	0.5731 1.37 (0.61-3.07)	0.4314 1.25 (0.95-1.64)	0.4314 1.27 (0.88-1.84)
		additive	CC vs.CT+TT	TT vs.CC+CT	additive
		0.3941 1.28 (0.91-1.80)	0.5090 1.38 (0.61-3.12)	0.0680 1.85 (1.15-2.98)	0.3941 1.28 (0.88-1.85)
Photosensitivity	+ vs. -	G vs.C	T vs.C	C vs.T	G vs.A
		0.5462 1.29 (0.92-1.81)	0.5462 1.39 (0.79-2.44)	0.8964 1.03 (0.80-1.33)	0.8964 1.06 (0.75-1.49)
		additive	additive	CC+CT vs.TT	AG+GG vs.AA
		0.5074 1.28 (0.92-1.80)	0.5074 1.38 (0.79-2.41)	0.8404 0.95 (0.58-1.54)	0.8404 1.12 (0.37-3.41)
	+ vs. Normal	G vs.C	T vs.C	T vs.C	G vs.A
		0.0264 1.61 (1.16-2.24)	0.4404 1.55 (0.89-2.71)	0.5881 1.10 (0.86-1.41)	0.4404 1.23 (0.88-1.72)
		additive	additive	additive	additive
		0.0251 1.63 (1.17-2.28)	0.3872 1.53 (0.89-2.66)	0.5795 1.09 (0.85-1.39)	0.4417 1.23 (0.88-1.72)
Pleural effusion	+ vs. -	G vs.C	T vs.C	T vs.C	G vs.A
		0.7301 1.07 (0.76-1.51)	0.7301 1.21 (0.66-2.23)	0.1794 1.29 (0.99-1.68)	0.7301 1.08 (0.75-1.55)
		CG+GG vs.CC	CT+TT vs.CC	additive	additive
		0.6585 1.64 (0.48-5.56)	0.6585 1.28 (0.69-2.40)	0.1943 1.28 (0.99-1.66)	0.7024 1.07 (0.75-1.54)
	+ vs. Normal	G vs.C	T vs.C	T vs.C	G vs.A
		0.1106 1.40 (1.00-1.97)	0.3628 1.41 (0.76-2.60)	0.0852 1.37 (1.05-1.78)	0.3309 1.25 (0.87-1.79)
		additive	additive	additive	additive
		0.0997 1.41 (1.00-1.99)	0.3123 1.43 (0.77-2.68)	0.0713 1.36 (1.05-1.76)	0.3123 1.25 (0.87-1.79)
Pericardial effusion	+ vs. -	G vs.C	T vs.C	T vs.C	G vs.A

		0.2388	1.71 (1.04-2.81)	0.4668	1.52 (0.76-3.05)	0.3510	1.31 (0.94-1.82)	0.4668	1.31 (0.81-2.12)
			additive		additive		additive		GG vs.AA+AG
	+ vs. Normal	0.2179	1.70 (1.04-2.79)	0.4196	1.51 (0.76-2.99)	0.3372	1.30 (0.94-1.79)	0.2890	1.50 (0.87-2.59)
			G vs.C		T vs.C		T vs.C		G vs.A
		0.0132	2.15 (1.31-3.53)	0.1977	1.74 (0.86-3.52)	0.1110	1.42 (1.02-1.97)	0.1977	1.49 (0.92-2.41)
			additive		additive		additive		additive
		0.0134	2.19 (1.33-3.61)	0.1708	1.80 (0.87-3.70)	0.1119	1.41 (1.02-1.96)	0.1708	1.49 (0.93-2.41)
Ascites	+ vs. -		C vs.G		C vs.T		C vs.T		A vs.G
		1.0000	1.05 (0.58-1.90)	1.0000	1.12 (0.34-3.66)	1.0000	1.12 (0.69-1.81)	1.0000	1.31 (0.73-2.34)
			CC+CG vs.GG		additive		CC+CT vs.TT		AA+AG vs.GG
	+ vs. Normal	0.8158	1.23 (0.63-2.41)	0.8830	1.12 (0.35-3.58)	0.8158	1.51 (0.53-4.30)	0.8158	1.44 (0.73-2.81)
			G vs.C		T vs.C		T vs.C		A vs.G
		1.0000	1.27 (0.70-2.30)	1.0000	1.09 (0.33-3.59)	1.0000	1.01 (0.62-1.63)	1.0000	1.10 (0.62-1.97)
			additive		additive		TT vs.CC+CT		additive
		0.9746	1.28 (0.70-2.33)	0.9746	1.09 (0.33-3.66)	0.7310	0.80 (0.28-2.30)	0.9746	1.10 (0.61-1.98)
Nephritis	+ vs. -		C vs.G		T vs.C		T vs.C		G vs.A
		0.8813	1.09 (0.83-1.43)	0.8813	1.18 (0.70-1.98)	0.8813	1.11 (0.90-1.38)	1.0000	1.00 (0.75-1.33)
			additive		additive		additive		AG+GG vs.AA
	+ vs. Normal	0.8307	1.09 (0.83-1.42)	0.8307	1.17 (0.70-1.96)	0.8307	1.11 (0.90-1.37)	0.8562	0.92 (0.37-2.30)
			G vs.C		T vs.C		T vs.C		G vs.A
		0.2028	1.28 (1.02-1.60)	0.3066	1.30 (0.84-2.02)	0.2517	1.18 (0.98-1.42)	0.3066	1.18 (0.93-1.50)
			GG vs.CC+CG		additive		additive		GG vs.AA+AG
		0.1174	1.37 (1.05-1.77)	0.2901	1.31 (0.84-2.03)	0.2569	1.17 (0.98-1.40)	0.2766	1.23 (0.94-1.61)
Neuropsychiatric manifestations	+ vs. -		G vs.C		T vs.C		T vs.C		G vs.A
		0.9439	1.02 (0.71-1.47)	0.3162	1.81 (1.01-3.25)	0.9439	1.04 (0.78-1.38)	0.9439	1.19 (0.80-1.77)
			CG+GG vs.CC		CT+TT vs.CC		CT+TT vs.CC		AG+GG vs.AA
		0.2894	4.48 (0.60-33.18)	0.2715	1.78 (0.96-3.31)	0.8449	1.06 (0.71-1.58)	0.3166	3.64 (0.49-27.22)

	+ vs. Normal	G vs.C	T vs.C	T vs.C	G vs.A
		0.2692 1.35 (0.94-1.94)	0.1866 1.94 (1.08-3.49)	0.4455 1.16 (0.87-1.54)	0.2692 1.36 (0.92-2.02)
		CG+GG vs.CC	additive	CT+TT vs.CC	additive
		0.2124 5.36 (0.73-39.40)	0.1559 1.96 (1.09-3.54)	0.4406 1.20 (0.81-1.78)	0.2474 1.37 (0.92-2.03)
Leukopenia (WBC count < 3500/uL)	+ vs. -	C vs.G	T vs.C	T vs.C	A vs.G
		1.0000 1.02 (0.78-1.34)	1.0000 1.00 (0.60-1.67)	1.0000 1.08 (0.87-1.34)	1.0000 1.08 (0.81-1.44)
		CC+CG vs.GG	CT+TT vs.CC	CT+TT vs.CC	AA+AG vs.GG
		0.9531 1.02 (0.75-1.40)	0.9531 1.09 (0.64-1.86)	0.9531 1.05 (0.78-1.42)	0.9531 1.04 (0.75-1.43)
	+ vs. Normal	G vs.C	T vs.C	T vs.C	G vs.A
		0.0978 1.31 (1.05-1.64)	0.4199 1.21 (0.77-1.89)	0.3678 1.16 (0.97-1.39)	0.3678 1.14 (0.90-1.44)
		GG vs.CC+CG	additive	TT vs.CC+CT	additive
		0.0723 1.38 (1.07-1.80)	0.3882 1.22 (0.78-1.93)	0.2298 1.27 (0.89-1.81)	0.3462 1.14 (0.90-1.44)
Anemia (Hb < 9 g/dL)	+ vs. -	C vs.G	C vs.T	T vs.C	A vs.G
		1.0000 1.00 (0.75-1.34)	1.0000 1.09 (0.63-1.89)	0.9782 1.11 (0.89-1.39)	0.9782 1.12 (0.83-1.51)
		additive	additive	additive	AA vs.AG+GG
		0.9771 1.00 (0.75-1.34)	0.9771 1.09 (0.63-1.88)	0.9543 1.11 (0.89-1.39)	0.1934 2.37 (0.95-5.88)
	+ vs. Normal	G vs.C	T vs.C	T vs.C	G vs.A
		0.2414 1.32 (1.01-1.73)	0.6732 1.14 (0.66-1.97)	0.2414 1.21 (0.97-1.50)	0.6732 1.09 (0.82-1.44)
		GG vs.CC+CG	CT+TT vs.CC	additive	AG+GG vs.AA
		0.1141 1.38 (1.01-1.89)	0.6274 1.15 (0.66-2.00)	0.2289 1.20 (0.97-1.49)	0.6274 0.68 (0.31-1.48)
Thrombocytopenia (Plat count <10 ⁵ /uL)	+ vs. -	G vs.C	T vs.C	C vs.T	A vs.G
		1.0000 1.00 (0.73-1.37)	1.0000 1.21 (0.69-2.12)	1.0000 1.03 (0.81-1.32)	1.0000 1.01 (0.73-1.40)
		CG+GG vs.CC	CT+TT vs.CC	CC+CT vs.TT	AA+AG vs.GG
		0.8146 1.24 (0.45-3.36)	0.8146 1.28 (0.72-2.28)	0.8146 1.43 (0.86-2.38)	0.8989 0.98 (0.68-1.41)
	+ vs. Normal	G vs.C	T vs.C	T vs.C	G vs.A
		0.4224 1.33 (0.99-1.80)	0.5319 1.39 (0.80-2.43)	0.5920 1.09 (0.86-1.39)	0.5319 1.16 (0.85-1.59)
		GG vs.CC+CG	additive	CT+TT vs.CC	additive

		0.3664	1.37 (0.97-1.94)	0.4708	1.41 (0.80-2.49)	0.4885	1.24 (0.89-1.73)	0.5131	1.16 (0.85-1.59)
Complement depressed	+ vs. -	G vs.C		C vs.T		C vs.T		G vs.A	
		0.6123	1.29 (0.94-1.77)	0.7147	1.26 (0.69-2.30)	0.6123	1.18 (0.91-1.53)	0.7147	1.10 (0.78-1.55)
		GG vs.CC+CG		CC vs.CT+TT		CC vs.CT+TT		GG vs.AA+AG	
		0.5183	1.36 (0.93-1.96)	0.5183	1.34 (0.72-2.47)	0.5183	1.25 (0.87-1.80)	0.5183	1.17 (0.79-1.72)
	+ vs. Normal	G vs.C		T vs.C		T vs.C		G vs.A	
		0.0102	1.39 (1.13-1.71)	0.6622	1.11 (0.73-1.69)	0.5365	1.07 (0.91-1.26)	0.2850	1.20 (0.97-1.49)
		GG vs.CC+CG		additive		additive		GG vs.AA+AG	
		0.0075	1.48 (1.17-1.88)	0.6311	1.11 (0.73-1.68)	0.5340	1.07 (0.90-1.26)	0.1745	1.25 (0.98-1.60)
Anti-dsDNA	+ vs. -	G vs.C		C vs.T		C vs.T		G vs.A	
		0.8156	1.15 (0.84-1.57)	0.6522	1.44 (0.83-2.51)	0.8565	1.03 (0.80-1.32)	0.8565	1.07 (0.77-1.49)
		GG vs.CC+CG		additive		CC+CT vs.TT		GG vs.AA+AG	
		0.6957	1.19 (0.83-1.71)	0.6145	1.43 (0.83-2.47)	0.8323	1.08 (0.67-1.75)	0.8211	1.11 (0.76-1.61)
	+ vs. Normal	G vs.C		T vs.C		T vs.C		G vs.A	
		0.0204	1.37 (1.11-1.69)	0.6637	1.11 (0.72-1.70)	0.3306	1.11 (0.94-1.31)	0.2604	1.19 (0.96-1.48)
		GG vs.CC+CG		additive		additive		GG vs.AA+AG	
		0.0116	1.47 (1.15-1.87)	0.6410	1.11 (0.72-1.70)	0.3284	1.11 (0.94-1.31)	0.1743	1.24 (0.97-1.59)
Anti-Sm	+ vs. -	G vs.C		C vs.T		T vs.C		G vs.A	
		0.9318	1.15 (0.84-1.58)	1.0000	1.05 (0.57-1.93)	0.9318	1.07 (0.84-1.37)	0.9318	1.25 (0.89-1.75)
		GG vs.CC+CG		additive		TT vs.CC+CT		GG vs.AA+AG	
		0.5008	1.29 (0.90-1.86)	0.8821	1.05 (0.57-1.91)	0.5008	1.26 (0.79-2.00)	0.5008	1.28 (0.88-1.86)
	+ vs. Normal	G vs.C		T vs.C		T vs.C		G vs.A	
		0.0726	1.45 (1.09-1.93)	0.7745	1.10 (0.62-1.94)	0.4826	1.14 (0.91-1.43)	0.1578	1.36 (1.00-1.85)
		GG vs.CC+CG		additive		TT vs.CC+CT		additive	
		0.0161	1.65 (1.19-2.31)	0.7268	1.11 (0.62-1.97)	0.0952	1.39 (0.91-2.12)	0.1519	1.36 (1.00-1.85)
Anti-RNP	+ vs. -	C vs.G		C vs.T		C vs.T		G vs.A	
		1.0000	1.03 (0.76-1.40)	0.4488	1.86 (0.98-3.51)	1.0000	1.01 (0.79-1.28)	1.0000	1.01 (0.73-1.39)

		CC vs.CG+GG	CC vs.CT+TT	CC vs.CT+TT	GG vs.AA+AG
		0.1972 2.91 (1.10-7.73)	0.1972 1.84 (0.96-3.52)	0.7694 1.11 (0.80-1.54)	0.7694 1.09 (0.76-1.56)
	+ vs. Normal	G vs.C	C vs.T	T vs.C	G vs.A
		0.2826 1.31 (1.01-1.71)	0.6204 1.30 (0.71-2.39)	0.6204 1.07 (0.86-1.33)	0.6204 1.18 (0.89-1.56)
		GG vs.CC+CG	CC vs.CT+TT	TT vs.CC+CT	GG vs.AA+AG
		0.0537 1.51 (1.11-2.06)	0.4639 1.31 (0.71-2.43)	0.3054 1.30 (0.87-1.96)	0.3054 1.26 (0.92-1.73)
Anti-SSA	+ vs. -	G vs.C	T vs.C	T vs.C	G vs.A
		0.6965 1.12 (0.80-1.58)	1.0000 1.04 (0.53-2.06)	0.0366 1.47 (1.11-1.94)	0.6965 1.11 (0.77-1.60)
		CG+GG vs.CC	CT+TT vs.CC	CT+TT vs.CC	additive
		0.6316 0.56 (0.18-1.73)	0.8683 1.14 (0.56-2.32)	0.0037 1.93 (1.33-2.81)	0.6745 1.12 (0.77-1.61)
	+ vs. Normal	G vs.C	T vs.C	T vs.C	G vs.A
		0.0804 1.36 (1.06-1.74)	0.7028 1.11 (0.68-1.82)	0.0804 1.25 (1.03-1.52)	0.1572 1.26 (0.97-1.64)
		GG vs.CC+CG	additive	additive	additive
		0.0248 1.51 (1.13-2.01)	0.6648 1.12 (0.68-1.85)	0.0840 1.24 (1.02-1.51)	0.1548 1.27 (0.98-1.65)
Anti-SSB	+ vs. -	G vs.C	T vs.C	T vs.C	G vs.A
		0.8785 1.06 (0.73-1.54)	0.8573 1.28 (0.64-2.58)	0.8785 1.03 (0.77-1.38)	0.2052 1.48 (0.97-2.26)
		CG+GG vs.CC	CT+TT vs.CC	TT vs.CC+CT	additive
		0.3558 0.51 (0.19-1.35)	0.4487 1.35 (0.66-2.76)	0.2673 0.58 (0.32-1.08)	0.2005 1.50 (0.98-2.31)
	+ vs. Normal	G vs.C	T vs.C	T vs.C	G vs.A
		0.2248 1.34 (0.95-1.90)	0.4629 1.31 (0.68-2.51)	0.4629 1.12 (0.85-1.48)	0.1200 1.61 (1.08-2.40)
		GG vs.CC+CG	additive	TT vs.CC+CT	additive
		0.0746 1.57 (1.05-2.36)	0.4236 1.32 (0.68-2.56)	0.0776 0.84 (0.46-1.53)	0.1105 1.63 (1.09-2.44)
Anti-cardiolipin IgG	+ vs. -	C vs.G	T vs.C	C vs.T	A vs.G
		1.0000 1.13 (0.81-1.58)	1.0000 1.08 (0.59-1.97)	1.0000 1.07 (0.82-1.39)	1.0000 1.01 (0.71-1.44)
		CC+CG vs.GG	CT+TT vs.CC	CC vs.CT+TT	AA vs.AG+GG
		0.8819 1.17 (0.80-1.73)	0.8819 1.15 (0.62-2.13)	0.8427 1.21 (0.84-1.75)	0.8427 1.77 (0.67-4.71)
	+ vs. Normal	G vs.C	T vs.C	T vs.C	G vs.A

		0.6774	1.28 (0.94-1.75)	0.6774	1.38 (0.77-2.47)	0.6796	1.08 (0.84-1.39)	0.6774	1.22 (0.87-1.70)
			GG vs.CC+CG		additive		TT vs.CC+CT		additive
		0.2948	1.33 (0.93-1.91)	0.5405	1.40 (0.77-2.53)	0.5444	1.24 (0.77-2.01)	0.5405	1.22 (0.88-1.69)
Anti-cardiolipin IgM	+ vs. -		G vs.C		C vs.T		C vs.T		A vs.G
		0.8009	1.18 (0.65-2.13)	0.8135	1.15 (0.40-3.27)	0.4518	1.55 (0.97-2.46)	0.8009	1.39 (0.81-2.39)
			GG vs.CC+CG		additive		additive		AA vs.AG+GG
		0.7211	1.32 (0.67-2.59)	0.7934	1.15 (0.41-3.19)	0.3968	1.54 (0.97-2.44)	0.4447	2.61 (0.72-9.54)
	+ vs. Normal		G vs.C		T vs.C		C vs.T		A vs.G
		0.6660	1.63 (0.91-2.92)	0.8921	1.18 (0.42-3.35)	0.6660	1.34 (0.85-2.12)	0.8921	1.07 (0.63-1.82)
			GG vs.CC+CG		additive		CC vs.CT+TT		additive
		0.2767	1.93 (0.99-3.76)	0.8138	1.19 (0.41-3.44)	0.5532	1.29 (0.72-2.32)	0.8138	1.07 (0.63-1.81)

^aThe analysis was done by comparing allele frequencies in different clinical subgroups as described in the methods section. After testing for the additive, dominant and recessive models, only the model which provided the smallest p-value was presented in this table. ^b P_{FDR} : The p-value was adjusted after the FDR correction.

Table 3 Association of TLR 3 SNPs with SLE clinical phenotypes and autoantibodies in the male and female SLE patients

Clinical manifestation		Male				Female				
		TLR3				TLR3				
		rs3775291		rs3775296		rs3775291		rs3775296		
		Type of analysis ^a		Type of analysis ^a		Type of analysis ^a		Type of analysis ^a		
		P _{FDR} ^b	OR (95%CI)	P _{FDR} ^b	OR (95%CI)	P _{FDR} ^b	OR (95%CI)	P _{FDR} ^b	OR (95%CI)	
Oral ulcer	+ vs. -	G vs.A		G vs.T		G vs.A		G vs.T		
		0.2082	2.70 (0.95-7.70)	0.9021	1.53 (0.48-4.87)	1.0000	1.00 (0.78-1.28)	0.6589	1.09 (0.83-1.43)	
					GG vs.AA+AG		GG vs.GT+TT			
					0.5975	0.91 (0.66-1.27)	0.5674	1.13 (0.81-1.57)		
	+ vs. Normal	G vs.A		G vs.T		G vs.A		T vs.G		
		0.3908	2.19 (0.82-5.86)	0.3908	1.96 (0.67-5.74)	0.7986	1.09 (0.86-1.38)	0.9479	1.01 (0.78-1.32)	
				GG vs.AA+AG		TT vs.GG+GT				
				0.5501	1.12 (0.81-1.55)	0.5501	1.23 (0.63-2.42)			
Arthritis	+ vs. -	G vs.A		T vs.G		G vs.A		G vs.T		
		0.2006	1.88 (0.92-3.83)	1.0000	1.07 (0.46-2.48)	0.7771	1.04 (0.83-1.30)	0.7771	1.06 (0.83-1.35)	
					additive		additive			
					0.7585	1.03 (0.83-1.28)	0.7414	1.06 (0.83-1.36)		
	+ vs. Normal	G vs.A		G vs.T		G vs.A		T vs.G		
		0.5248	1.28 (0.77-2.14)	0.5248	1.34 (0.76-2.37)	0.4628	1.10 (0.92-1.31)	0.6067	1.05 (0.86-1.28)	
				GG vs.AA+AG		TT vs.GG+GT				
				0.2425	1.21 (0.95-1.54)	0.4500	1.26 (0.76-2.10)			
Malar rash	+ vs. -	G vs.A		T vs.G		A vs.G		T vs.G		
		0.7010	1.32 (0.65-2.67)	0.1656	2.50 (1.01-6.16)	0.6200	1.11 (0.89-1.38)	0.7255	1.06 (0.84-1.34)	
					additive		TT vs.GG+GT			
					0.5842	1.10 (0.89-1.36)	0.5193	0.71 (0.39-1.29)		
+ vs. Normal	G vs.A		T vs.G		G vs.A		T vs.G			

		0.9696	1.09 (0.66-1.80)	1.0000	1.04 (0.61-1.77)	0.8533	1.04 (0.87-1.25)	0.5433	1.10 (0.90-1.35)	
							GG vs.AA+AG		additive	
							0.5843	1.12 (0.87-1.44)	0.4930	1.11 (0.90-1.36)
Discoid rash	+ vs. -		A vs.G		G vs.T		G vs.A		G vs.T	
		0.8472	1.90 (0.85-4.26)	0.9767	1.16 (0.42-3.17)	0.9404	1.09 (0.82-1.44)	0.9404	1.02 (0.75-1.38)	
							AG+GG vs.AA		GG+GT vs.TT	
							0.7528	1.41 (0.78-2.57)	0.7528	1.92 (0.75-4.92)
	+ vs. Normal		A vs.G		G vs.T		G vs.A		T vs.G	
		0.2801	1.69 (0.83-3.42)	0.4169	1.55 (0.63-3.81)	0.4365	1.16 (0.88-1.53)	0.7536	1.06 (0.78-1.44)	
							additive		TT vs.GG+GT	
							0.4145	1.17 (0.88-1.55)	0.5090	0.72 (0.28-1.88)
Photosensitivity	+ vs. -		G vs.A		G vs.T		G vs.A		G vs.T	
		0.7817	1.29 (0.51-3.23)	1.0000	1.11 (0.38-3.26)	0.8964	1.02 (0.79-1.32)	0.5462	1.20 (0.90-1.60)	
							AG+GG vs.AA		GG+GT vs.TT	
							0.7757	1.19 (0.71-2.00)	0.1465	3.30 (1.17-9.30)
	+ vs. Normal		G vs.A		G vs.T		G vs.A		G vs.T	
		0.8389	1.18 (0.51-2.74)	0.6044	1.50 (0.56-4.02)	0.5881	1.10 (0.85-1.42)	0.6640	1.07 (0.81-1.42)	
							additive		GG+GT vs.TT	
							0.5795	1.11 (0.86-1.42)	0.4374	2.18 (0.77-6.22)
Pleural effusion	+ vs. -		A vs.G		G vs.T		G vs.A		T vs.G	
		0.7223	1.39 (0.56-3.42)	0.7874	1.36 (0.42-4.36)	0.7301	1.06 (0.81-1.39)	0.1794	1.37 (1.03-1.82)	
							additive		additive	
							0.7024	1.05 (0.81-1.37)	0.1902	1.37 (1.03-1.83)
	+ vs. Normal		A vs.G		G vs.T		G vs.A		T vs.G	
		0.6222	1.37 (0.60-3.12)	0.5313	1.79 (0.61-5.28)	0.3689	1.13 (0.86-1.48)	0.0852	1.38 (1.04-1.83)	
							GG vs.AA+AG		additive	
							0.1173	1.26 (0.88-1.81)	0.0713	1.40 (1.05-1.86)

Pericardial effusion	+ vs. -	G vs.A	T vs.G	A vs.G	T vs.G
		1.0000 1.04 (0.42-2.55)	0.6456 1.56 (0.58-4.19)	0.7299 1.07 (0.76-1.50)	0.5485 1.17 (0.82-1.68)
	+ vs. Normal	A vs.G	T vs.G	A vs.G	T vs.G
		1.0000 1.01 (0.45-2.29)	1.0000 1.03 (0.43-2.48)	0.9303 1.02 (0.73-1.43)	0.3415 1.23 (0.86-1.76)
		AA vs.AG+GG	TT vs.GG+GT	AA vs.AG+GG	TT vs.GG+GT
		0.2890 1.64 (0.91-2.95)	0.2890 1.70 (0.77-3.77)	0.1585 1.36 (0.86-2.15)	0.1116 1.99 (0.89-4.45)
Ascites	+ vs. -	G vs.A	G vs.T	G vs.A	G vs.T
		0.4320 7.02 (0.38-128.47)	1.0000 1.31 (0.15-11.69)	1.0000 1.14 (0.70-1.86)	1.0000 1.16 (0.68-1.99)
	+ vs. Normal	G vs.A	G vs.T	G vs.A	G vs.T
		0.6222 6.27 (0.35-112.58)	1.0000 1.79 (0.21-15.39)	1.0000 1.23 (0.75-2.01)	1.0000 1.07 (0.62-1.84)
		AG+GG vs.AA	GG+GT vs.TT	additive	additive
		0.8647 0.85 (0.35-2.07)	0.8158 2.66 (0.36-19.59)	0.9746 1.23 (0.75-2.01)	0.9746 1.07 (0.62-1.86)
Nephritis	+ vs. -	G vs.A	T vs.G	A vs.G	T vs.G
		0.2422 1.70 (0.82-3.54)	0.2422 2.16 (0.81-5.78)	0.8813 1.04 (0.84-1.29)	0.8813 1.12 (0.88-1.42)
	+ vs. Normal	G vs.A	G vs.T	G vs.A	T vs.G
		0.8491 1.16 (0.73-1.85)	0.8491 1.10 (0.67-1.81)	0.5163 1.07 (0.89-1.28)	0.3066 1.13 (0.92-1.38)
		additive	TT vs.GG+GT	GG vs.AA+AG	TT vs.GG+GT
		0.8556 1.04 (0.84-1.28)	0.3377 1.88 (0.99-3.57)	0.3272 1.15 (0.90-1.48)	0.2042 1.60 (0.97-2.63)
Neuropsychiatric manifestations	+ vs. -	G vs.A	G vs.T	G vs.A	T vs.G
		1.0000 1.02 (0.38-2.76)	0.7713 2.60 (0.57-11.94)	0.9439 1.01 (0.75-1.35)	0.9439 1.07 (0.78-1.46)
			AG+GG vs.AA	TT vs.GG+GT	

					0.2715	0.64 (0.38-1.07)	0.5018	1.65 (0.82-3.34)
	+ vs. Normal	A vs.G	G vs.T		G vs.A		T vs.G	
		1.0000	1.03 (0.41-2.60)	0.2550	3.21 (0.74-13.93)	0.5654	1.10 (0.82-1.47)	0.5654 1.13 (0.83-1.55)
					AG+GG vs.AA		TT vs.GG+GT	
					0.2124	0.65 (0.39-1.09)	0.2440	1.88 (0.93-3.83)
Leukopenia (WBC count < 3500/uL)	+ vs. -	G vs.A	T vs.G		G vs.A		T vs.G	
		0.3842	1.69 (0.83-3.46)	1.0000	1.02 (0.44-2.39)	1.0000	1.04 (0.84-1.29)	1.0000 1.09 (0.86-1.38)
					AG+GG vs.AA		GT+TT vs.GG	
					0.9531	1.01 (0.66-1.55)	0.9531	1.08 (0.81-1.45)
	+ vs. Normal	G vs.A	G vs.T		G vs.A		T vs.G	
		0.6544	1.19 (0.73-1.94)	0.4488	1.37 (0.79-2.38)	0.3678	1.10 (0.92-1.32)	0.3678 1.12 (0.92-1.37)
					GG vs.AA+AG		TT vs.GG+GT	
					0.2369	1.24 (0.96-1.59)	0.2298	1.37 (0.82-2.29)
Anemia (Hb < 9 g/dL)	+ vs. -	G vs.A	T vs.G		A vs.G		T vs.G	
		0.2754	2.83 (0.90-8.91)	0.5026	2.07 (0.75-5.71)	1.0000	1.01 (0.80-1.27)	0.9782 1.19 (0.93-1.53)
					AA vs.AG+GG		TT vs.GG+GT	
					0.9203	1.18 (0.76-1.84)	0.0244	2.41 (1.33-4.39)
	+ vs. Normal	G vs.A	T vs.G		G vs.A		T vs.G	
		0.3462	2.35 (0.79-7.00)	0.6271	1.31 (0.53-3.25)	0.6732	1.08 (0.87-1.35)	0.2414 1.21 (0.95-1.53)
							additive	
							0.2289	1.21 (0.96-1.53)
Thrombocytopenia (Plat count <105/uL)	+ vs. -	G vs.A	T vs.G		A vs.G		T vs.G	
		0.5956	1.62 (0.75-3.50)	0.6006	1.35 (0.57-3.19)	1.0000	1.09 (0.85-1.39)	1.0000 1.14 (0.87-1.49)
					AA+AG vs.GG		GT+TT vs.GG	
					0.8146	1.10 (0.79-1.54)	0.8146	1.15 (0.82-1.60)
	+ vs. Normal	G vs.A	G vs.T		G vs.A		T vs.G	
		0.8608	1.33 (0.69-2.56)	0.9036	1.14 (0.57-2.28)	0.9046	1.02 (0.80-1.30)	0.5319 1.19 (0.92-1.54)

						GG vs.AA+AG	TT vs.GG+GT
						0.4005 1.12 (0.80-1.56)	0.4005 1.53 (0.80-2.91)
Complement depressed	+ vs. -	G vs.A	T vs.G	G vs.A	G vs.A	G vs.T	
		0.2790 2.47 (1.03-5.91)	0.7458 2.24 (0.62-8.11)	0.7147 1.09 (0.84-1.42)	1.0000 1.00 (0.75-1.33)		
				GG vs.AA+AG	GG vs.GT+TT		
				0.5183 1.21 (0.84-1.74)	0.8919 1.03 (0.72-1.46)		
	+ vs. Normal	G vs.A	G vs.T	G vs.A	T vs.G		
		0.7872 1.11 (0.72-1.70)	0.6362 1.22 (0.76-1.96)	0.5365 1.09 (0.92-1.29)	0.5365 1.08 (0.90-1.30)		
				GG vs.AA+AG	TT vs.GG+GT		
				0.1745 1.22 (0.97-1.53)	0.4855 1.28 (0.79-2.07)		
Anti-dsDNA	+ vs. -	G vs.A	T vs.G	G vs.A	T vs.G		
		0.5018 1.80 (0.79-4.11)	0.5018 2.70 (0.75-9.68)	0.4284 1.26 (0.98-1.62)	0.8565 1.06 (0.80-1.40)		
				AG+GG vs.AA	TT vs.GG+GT		
				0.3423 1.57 (0.99-2.50)	0.8211 1.16 (0.57-2.38)		
	+ vs. Normal	G vs.A	G vs.T	G vs.A	T vs.G		
		0.8986 1.08 (0.70-1.66)	0.7206 1.19 (0.74-1.92)	0.2604 1.15 (0.97-1.36)	0.4189 1.10 (0.91-1.33)		
				GG vs.AA+AG	TT vs.GG+GT		
				0.1408 1.26 (1.00-1.59)	0.3605 1.34 (0.82-2.17)		
Anti-Sm	+ vs. -	A vs.G	T vs.G	G vs.A	T vs.G		
		1.0000 1.03 (0.49-2.17)	0.3614 2.11 (0.88-5.05)	0.9318 1.07 (0.83-1.37)	0.9331 1.04 (0.79-1.36)		
				GG vs.AA+AG	additive		
				0.5008 1.21 (0.86-1.69)	0.8821 1.04 (0.79-1.37)		
	+ vs. Normal	A vs.G	T vs.G	G vs.A	T vs.G		
		0.7711 1.13 (0.64-1.99)	0.7661 1.18 (0.65-2.15)	0.4826 1.13 (0.90-1.42)	0.6296 1.09 (0.85-1.40)		
				additive	TT vs.GG+GT		
				0.4624 1.13 (0.90-1.41)	0.0952 1.18 (0.61-2.28)		
Anti-RNP	+ vs. -	A vs.G	T vs.G	A vs.G	G vs.T		

		0.6869	1.26 (0.59-2.70)	0.5002	1.81 (0.76-4.30)	1.0000	1.00 (0.78-1.27)	1.0000	1.11 (0.85-1.45)
							AA vs.AG+GG		GG vs.GT+TT
						0.7725	1.07 (0.67-1.72)	0.7694	1.12 (0.80-1.55)
	+ vs. Normal		A vs.G		T vs.G		G vs.A		T vs.G
		0.7977	1.25 (0.69-2.26)	0.8890	1.15 (0.61-2.18)	0.6204	1.08 (0.87-1.34)	1.0000	1.00 (0.79-1.27)
							GG vs.AA+AG		additive
						0.3054	1.22 (0.91-1.64)	0.9834	1.00 (0.79-1.28)
Anti-SSA	+ vs. -		A vs.G		G vs.T		G vs.A		T vs.G
		1.0000	1.10 (0.45-2.67)	1.0000	1.42 (0.50-4.04)	0.6965	1.18 (0.90-1.55)	0.6965	1.11 (0.82-1.50)
							AG+GG vs.AA		GT+TT vs.GG
						0.5455	1.43 (0.85-2.42)	0.6580	1.16 (0.80-1.68)
	+ vs. Normal		A vs.G		G vs.T		G vs.A		T vs.G
		0.9034	1.15 (0.66-2.01)	0.4208	1.64 (0.82-3.30)	0.2501	1.14 (0.93-1.39)	0.2501	1.16 (0.93-1.44)
							additive		TT vs.GG+GT
						0.2285	1.14 (0.94-1.40)	0.1638	1.12 (0.62-2.02)
Anti-SSB	+ vs. -		A vs.G		G vs.T		G vs.A		T vs.G
		1.0000	1.04 (0.34-3.18)	0.8772	1.93 (0.40-9.39)	0.2052	1.34 (0.99-1.82)	0.8573	1.13 (0.82-1.55)
							additive		GT+TT vs.GG
						0.2005	1.32 (0.98-1.78)	0.4487	1.17 (0.78-1.74)
	+ vs. Normal		A vs.G		G vs.T		G vs.A		T vs.G
		0.9558	1.15 (0.41-3.19)	0.3917	2.50 (0.56-11.07)	0.1431	1.34 (1.01-1.79)	0.2742	1.23 (0.91-1.66)
							additive		TT vs.GG+GT
						0.1288	1.35 (1.01-1.80)	0.0746	1.21 (0.55-2.68)
Anti-cardiolipin IgG	+ vs. -		A vs.G		G vs.T		A vs.G		G vs.T
		0.4538	1.83 (0.72-4.67)	0.9482	1.18 (0.39-3.61)	1.0000	1.06 (0.81-1.38)	1.0000	1.00 (0.75-1.34)
							AA vs.AG+GG		GG+GT vs.TT
						0.8427	1.23 (0.74-2.04)	0.8819	1.14 (0.54-2.39)

	+ vs. Normal	A vs.G	G vs.T	G vs.A	T vs.G
	0.7656	1.62 (0.72-3.65)	0.7656 1.36 (0.50-3.68)	0.9493 1.01 (0.79-1.30)	0.6796 1.09 (0.83-1.44)
				GG vs.AA+AG	TT vs.GG+GT
				0.6294 1.15 (0.81-1.62)	0.2948 1.20 (0.58-2.47)
Anti-cardiolipin IgM	+ vs. -	A vs.G	G vs.T	A vs.G	T vs.G
	0.8197	1.87 (0.44-8.01)	0.8197 2.26 (0.26-19.45)	0.8009 1.12 (0.73-1.72)	0.8009 1.17 (0.73-1.87)
				additive	TT vs.GG+GT
				0.7442 1.11 (0.73-1.68)	0.7211 0.59 (0.14-2.53)
	+ vs. Normal	A vs.G	G vs.T	A vs.G	T vs.G
	1.0000	1.91 (0.47-7.68)	1.0000 2.50 (0.31-20.41)	0.8921 1.08 (0.71-1.65)	0.8921 1.22 (0.77-1.94)
				AA vs.AG+GG	TT vs.GG+GT
				0.7792 1.36 (0.62-3.00)	0.5377 0.81 (0.19-3.46)

^aFor the male participants, the analysis was done by comparing allele frequencies in different clinical subgroups as described in the methods section. The additive, dominant and recessive models were further tested in the females, with only the model which provided the smallest p-value shown in this table. ^b P_{FDR} : The p-value was adjusted after the FDR correction.