

Supplementary file

Table S1. Primer's sequence for a specific allele group [24 changed] and PCR product characteristics.

Primer	Sequence 5' -> 3'	Specificity of primers to the alleles	Product Length
DRB1*01	gcacgtttcttggtgagcttaagt	*01	290
DRB1*04	cacgtttcttggtgagcaggttaaac	*04	289
DRB1*07	cacgtttcttggtgagcaggttaata	*07	289
DRB1*09	cagcacgtttcttggtgagcaggttaagt	*09	291
DRB1*10	agaccacgtttcttggtgaggtgagg	*10	293
DRB1*15	cacgtttcttggtgagcagcctaaga	*15, *16	289
DRB1_52	cccacagcacgtttcttggtgagctaccta	*03, *08, *11, *12, *13, *14	296
DRB1 anty	tgtctacgtcgcctctgcac	all DRB1	Not related

Table S2. SNPs information and genotyping results for SLE patients and controls.

SNP ID	Allele	SNP type	MAF			<i>p</i> (HWE)	
			SLE	Control	HapMap-CEU	SLE	Control
TGF β rs1800469	C/T	5'-UTR	0.38	0.31	0.37	0.46	0.97
TFG β rs1800470	T/C	exon (missens; Pro10/Leu10)	0.45	0.40	0.44	0.15	0.38
IL-6 rs1800795	G/C	promoter	0.32	0.33	0.14	0.11	0.001
IL-6 rs2069827	G/T	promoter	0.14	0.12	0.04	0.88	0.49

MAF: minor allele frequency; HWE: Hardy-Weinberg equilibrium; CEU: Utah residents of northern and western European ancestry.

Table S3. The disease activity and laboratory parameters in relations to TGF- β 869 T/C (rs1800470), recessive model.

Parameter	CC		TC + TT		p^*
	Mean $\pm$ SD (median)				
Age [years]	33.5	(31-72)	37	(21-76)	0.6
Disease duration [years]	9	(1-30)	6	(0-43)	0.6
SELENA_SLEDAI	3	(0-14)	4	(0-18)	0.6
SLICC	1.5	(0-4)	1	(0-5)	0.2
APTT	45	(29.9-53)	31.7	(21.3-127)	0.01
ESR-OB [mm/h]	68	(7-114)	41.5	(5-104)	0.1
CRP [mg/L]	15	(6-262)	8	(1-395)	0.07
Haemoglobin [g/dL]	10	(4.9-14.1)	12.65	(8.3-16)	0.1
Pt	12.1	(9.8-62)	10.65	(8.6-80)	0.1
INR	1.14	(0.9-5.4)	1	(0.7-3.3)	0.05
Urea	39.3	(34-78)	33.7	(16.7-296)	0.1
PLT [$\times 10^3/\text{mm}^3$]	189	(111-405)	223.5	(38-598)	0.6
Creatinin	0.9	(0.7-1.3)	0.8	(0.5-1.5)	0.09
C3	80.4	(34-153)	71	(36-162)	0.9
C4	12.2	(3.9-22.2)	13.25	(3.09-102)	0.9
ALT	52	(22-317)	38	(1-298)	0.4
AST	56	(24-850)	28	(14-167)	0.09

	N	n (%)	N	n (%)	p^{**}
anti-dsDNA	8	6 (75)	50	29 (58)	0.6
anti-SSA	8	2 (25)	47	23 (48.93)	0.3
anti-SSB	8	2 (25)	46	3 (6.52)	0.3
anti-SM	8	1 (12.5)	47	9 (19.14)	0.9
anti-Rib	8	0 (0)	45	4 (8.88)	1.0
anti-Jo	8	0 (0)	45	0 (0)	-
anti-Scl7	8	0 (0)	46	1 (2.17)	1.0
anti-CEN	8	0 (0)	46	2 (4.34)	1.0
anti-U1RNP	8	1 (12.5)	44	11 (25)	0.7
anti-IgM	8	1 (12.5)	47	5 (10.63)	0.6
anti-IgG	8	2 (25)	48	13 (27.08)	0.7
LAC	8	3 (37.5)	47	13 (27.65)	0.8
Sjogren's syndrome	8	1 (12.5)	51	9 (17.64)	0.8
Facial erythema	8	4 (50)	51	27 (52.94)	0.8
Arthritis	8	6 (75)	51	27 (52.94)	0.43
Lung fibrosis	8	1 (12.5)	51	2 (3.92)	0.87
Leucopenia	8	3 (37.5)	51	19 (37.25)	0.7
APS	8	2 (25)	43	9 (20.93)	0.83

N: number of patients with clinical information; n: number of patients with positive clinical manifestation.
 p^* Mann-Whitney U-test; p^{**} χ^2 test; $p < 0.05$ was considered significant.

Table S4. The disease activity and laboratory parameters in relations to *IL-6 -174 G/C*, dominant model.

Parameter	IL-6 -174 GG		IL-6 -174 GC+CC		<i>p</i> *
	Mean±SD (median)				
Age [years]	46	(25-87)	39	(21-76)	0.8
Disease duration [years]	4	(1-34)	8	(0-43)	0.6
SELENA_SLEDAI	6	(0-16)	2.5	(0-18)	0.1
SLICC	0	(0-3)	1	(0-5)	0.05
APTT	30.5	(23.7-127)	32	(21.3-53)	0.4
ESR-OB [mm/h]	32.5	(5-114)	41	(7-104)	0.7
CRP [mg/L]	10.5	(1-145)	12.5	(2-395)	0.2
Haemoglobin [g/dL]	12.75	(7.4-14.8)	11.9	(4.9-16)	0.3
Pt	10.4	(8.7-80)	11.4	(9.2-62)	0.2
INR	1	(0.7-3.3)	1.085	(0.8-5.4)	0.1
Urea	35	(16.7-80)	33	(18-296)	0.4
PLT [x10 ³ /mm ³]	204	(50-596)	216.5	(38-598)	0.9
Creatinin	0.8	(0.6-1.39)	0.8	(0.5-1.4)	0.4
C3	76.79 ± 27.70		79.80 ± 31.58		0.7
C4	13.6	(3.9-102)	11.9	(3.09-31)	0.1
ALT	30	(1-317)	43	(15-92)	0.2
AST	28.5	(14-850)	32	(21-77)	0.4

	N	n (%)	N	n (%)	<i>p</i> **
anti-dsDNA	37	27 (72.97)	32	22 (68.75)	0.9
anti-SSA	26	14 (53.84)	25	6 (24)	0.05
anti-SSB	26	5 (19.23)	24	0 (0)	0.05
anti-SM	26	7 (26.92)	28	5 (17.85)	0.6
anti-Rib	25	1 (4)	24	3 (12.5)	0.5
anti-Jo	25	0 (0)	24	0 (0)	-
anti-Scl7	30	6 (20)	29	4 (13.79)	0.7
anti-CEN	25	1 (4)	25	1 (4)	0.4
anti-U1RNP	27	11 (40.74)	27	5 (18.51)	0.1
anti-IgM	26	2 (7.69)	26	3 (11.53)	1.0
anti-IgG	26	10 (38.46)	27	5 (18.51)	0.1
LAC	25	6 (24)	27	9 (33.33)	0.6
Sjogren's syndrome	27	6 (22.22)	28	3 (10.71)	0.4
Facial erythema	27	15 (55.55)	28	15 (53.57)	
Arthritis	29	19 (65.51)	30	17 (56.66)	0.6
Lung fibrosis	27	1 (3.7)	28	2 (7.14)	0.9
Leucopenia	27	8 (29.62)	28	11 (39.28)	0.6
APS	23	4 (17.39)	24	6 (25)	0.7

N: number of patients with clinical information; n: number of patients with positive clinical manifestation.
*p** Mann-Whitney U-test; *p*** χ^2 test; *p*<0.05 was considered significant.

Table S5. The disease activity and laboratory parameters in relations to *IL-6 -136 G/T*, dominant model.

Parameter	IL-6 -136 GG		IL-6 -136 GT+TT		<i>p</i> *
	Mean±SD (median)				
Age [years]	50 (31-87)		40 (21-58)		0.05
Disease duration [years]	9 (0-33)		10 (2-43)		0.6
SELENA_SLEDAI	7 (0-18)		2 (0-11)		0.2
SLICC	2 (0-4)		1 (0-5)		0.1
APTT	31.15 (24.1-78.4)		29.35 (21.3-37.4)		0.6
ESR-OB [mm/h]	51 (9-86)		38 (29-53)		0.6
CRP [mg/L]	9.5 (2-57)		12 (8-202)		0.3
Haemoglobin [g/dL]	12.02 ± 1.98		12.60 ± 2.83		0.6
Pt	10.8 (8.6-80)		10.6 (9.6-12)		0.9
INR	0.955 (0.7-5.4)		1 (0.9-1.16)		0.8
Urea	38.19 ± 16.56		100.5 ± 130.39		0.4
PLT [x10 ³ /mm ³]	260 (161-455)		165 (50-473)		0.5
Creatinin	0.8 (0.6-1.5)		0.8 (0.7-0.8)		0.3
C3	83.05 ± 38.91		105.2 ± 39.52		0.3
C4	14.37 ± 7.65		16.08 ± 5.58		0.6
ALT	32.69 ± 18.43		53.8 ± 22.76		0.04
AST	28 (14-58)		31 (25-62)		0.2
	N	n (%)	N	n (%)	<i>p</i> **
anti-dsDNA	29	23 (79.31)	13	11 (84.61)	0.9
anti-SSA	15	7 (46.66)	6	1 (16.66)	0.3
anti-SSB	14	1 (7.14)	6	0 (0)	1.0
anti-SM	19	7 (36.84)	7	1 (14.28)	0.3
anti-Rib	14	1 (7.14)	6	0 (0)	1.0
anti-Jo	14	0 (0)	6	0 (0)	-
anti-Scl7	20	6 (30)	11	4 (36.36)	1.0
anti-CEN	14	1 (7.14)	7	1 (14.28)	1.0
anti-U1RNP	20	10 (50)	8	3 (37.5)	0.6
anti-IgM	15	2 (13.33)	7	1 (14.28)	1.0
anti-IgG	16	4 (25)	7	0 (0)	0.2
LAC	16	3 (18.75)	6	2 (33.33)	0.5
Sjogren's syndrome	16	4 (25)	8	1 (12.5)	0.6
Facial erythema	16	6 (37.5)	8	3 (37.5)	1.0
Arthritis	19	10 (52.63)	10	2 (20)	0.1
Lung fibrosis	16	0 (0)	8	1 (12.5)	0.3
Leucopenia	16	7 (4)	8	7 (4)	1.0
APS	9	2 (22.22)	8	1 (12.5)	1.0

N: number of patients with clinical information; n: number of patients with positive clinical manifestation.
*p** Mann-Whitney U-test; *p*** χ^2 test; *p*<0.05 was considered significant.

Table S7. *TGF-β*, *IL-6* and *HLA-DRB1* haplotypes in SLE patients and controls.

Haplotype	SLE patients 2n = 54(%)	Controls 2n= 170 (%)	<i>p</i> *	OR (95% CI)
TGF-β rs1800469/ TGF-β rs1800470/ IL6 rs1800795/ IL6 rs206927/ HLA-DRB1				
A G C G 15:15	0.29 (0.5)	12.36 (7.3)	0.06	0.057 (0.006 to 0.572)
G A G G 15:15	1.71 (3.2)	22.38 (13.2)	0.02	0.179 (0.036 to 0.878)
G A G G 52.1:52.1	13.11 (24.3)	10.42 (6.1)	0.0007	4.376 (1.780 to 10.754)
G A C G 52.1:52.1	0.00 (0.0)	8.35 (4.9)	0.07	-
G A G G 01:01	0.00 (0.0)	10.50 (6.2)	0.04	-
A G C T 07:07	2.00 (3.7)	0.00 (0.0)	0.02	-
G A C T 15:15	2.00 (3.7)	0.00 (0.0)	0.02	-
G A G T 52.1:52.1	1.82 (3.4)	0.00 (0.0)	0.02	-

*Fisher's test. *p*-values in bold face are considered significant.

Table S6. HLA DRB1 genotype in the study population.

HLA DRB1	n (f%)
52.1:52.1	102 (17,29)
52.1:15	84 (14,24)
15:15	69 (11,69)
52.1:07	46 (7,8)
07:07	44 (7,46)
07:15	36 (6,1)
52.1:04	33 (5,59)
52.1:01	28 (4,75)
01:01	29 (4,92)
04:15	27 (4,58)
04:07	16 (2,71)
15:01	18 (3,05)
04:04	18 (3,05)
07:01	13 (2,2)
52.1:09	5 (0,85)
04:01	4 (0,68)
52.1:10	3 (0,51)
09:01	2 (0,34)
09:09	3 (0,51)
09:15	3 (0,51)
07:09	3 (0,51)
04:09	2 (0,34)
10:15	1 (0,17)
09:10	1 (0,17)