

SUPPLEMENTARY MATERIAL

Table SM1: Distributions of genotypes and alleles frequencies in T2D patients considering complications.

Polymorphisms		Diabetic Retinopathy				
		Yes (n=66) (%)	No (n=36) (%)	p	OR	95% CI
TNF-α -308 A/G (rs 1800629)	Genotypes					
	GG	49 (74.24)	29 (80.56)	0.252	Ref.	0.594 - 4.734
	GA	17 (25.76)	6 (16.67)		1.677	
	AA	0	1 (2.77)		-	
	Alleles			0.713	0.846	0.314 - 2.224
G	115 (87.12)	64 (88.89)				
A	17 (12.88)	8 (11.11)				
TGF-β1 codon 10 T/C (rs 1982073)	Genotypes					
	TT	25 (37.88)	10 (27.78)	0.246	Ref.	0.746 - 4.610
	TC	31 (46.97)	23 (63.89)		1.855	
	CC	10 (15.15)	3 (8.33)		0.750	
	Alleles			0.819	1.071	0.571 - 2.008
T	81 (61.36)	43 (59.72)				
C	51 (38.64)	29 (40.28)				

TGF-β1 codon 25 C/G (rs 1800471)	Genotypes					
	GG	61 (92.42)	26 (72.22)	0.004*	Ref.	1.685 - 20.413
	GC	4 (6.06)	10 (27.78)		5.865	
	CC	1 (1.52)	0,0		-	
	Alleles					
G	126 (95.45)	62 (86.11)	0.018*	3.387	1.069 - 11.064	
C	6 (4.55)	10 (13.89)				
IL-10 -1082 G/A (rs 1800896)	Genotypes					
	GG	8 (12.12)	4 (11.11)	0.841	Ref.	0.266 - 4.032
	GA	29 (43.94)	18 (50.00)		1.036	
	AA	29 (43.94)	14 (38.89)		1.286	
	Alleles					
G	45 (34.09)	26 (36.11)	0.772	0.915	0.418 - 1.744	
A	87 (65.91)	46 (63.89)				
IL-10 -819 C/T (rs 1800871)	Genotypes					
	TT	10 (15.15)	3 (8.33)	0.613	Ref.	0.474 - 8.444
	TC	25 (37.88)	15 (41.67)		2.000	
	CC	31 (46.97)	18 (50.00)		1.935	
	Alleles					
T	45 (34.09)	21 (29.17)	0.472	1.256	0.645 - 2.457	

	C	87 (65.91)	51 (70.83)			
IL-10 -592 C/A (rs 1800872)	Genotypes					
	CC	31 (46.97)	18 (50.00)		Ref.	
	CA	24 (36.36)	15 (41.67)	0.498	2.129	0.524 - 8.655
	AA	11 (16.67)	3 (8.33)		2.292	0.548 - 9.579
	Alleles					
	C	86 (65.15)	51 (70.83)			
	A	46 (34.85)	21 (29.17)	0.409	0.770	0.394 - 1.498
IL-6 -174 C/G (rs 1800795)	Genotypes					
	GG	46 (69.69)	23 (63.89)		Ref.	
	GC	15 (22.73)	11 (30.56)	0.692	1.467	0.582 - 3.699
	CC	5 (7.58)	2 (5.55)		0.800	0.144 - 4.443
	Alleles					
	G	107 (81.06)	57 (79.17)			
	C	25 (18.94)	15 (20.83)	0.745	1.126	0.517 - 2.438
INF-γ +874 T/A (rs 2430561)	Genotypes					
	TT	10 (15.15)	3 (8.33)		Ref.	
	TA	30 (45.45)	15 (41.67)	0.465	0.433	0.104 - 1.799
	AA	26 (39.39)	18 (50.00)		0.722	0.305 - 1.712
	Alleles					

	T	50 (37.88)	21 (29.17)	0.212	1.481	0.764 - 2.882
	A	82 (62.12)	51 (70.83)			

Polymorphisms		Diabetic Nephropathy				
		Yes (n=80) (%)	No (n=20) (%)	p	OR	CI (95%)
TNF-α -308 A/G (rs 1800629)	Genotypes					
	GG	61 (76.25)	16 (80.00)	0.164	Ref.	0.437 - 6.321
	GA	19 (23.75)	3 (15.00)		1.661	
	AA	0	1 (5.00)		-	
	Alleles			1.000	1.060	0.321 - 3.297
G	141 (88.13)	35 (87.50)				
A	19 (11.87)	5 (12.50)				
TGF-β1 codon 10 T/C (rs 1982073)	Genotypes					
	TT	28 (35.00)	6 (30.00)	0.363	Ref.	0.514 - 4.471
	TC	40 (50.00)	13 (65.00)		1.517	
	CC	12 (15.00)	1 (5.00)		0.389	
	Alleles			0.772	0.900	0.414 - 1.942
T	96 (60.00)	25 (62.50)				
C	64 (40.00)	15 (37.50)				
TGF-β1 codon 25 C/G	Genotypes					

(rs 1800471)	GG	69 (86.25)	16 (80.00)	0.578	Ref.	0.479 - 6.209
	GC	10 (12.50)	4 (20.00)		1.725	
	CC	1 (1.25)	0		-	
	Alleles					
	G	148 (92.50)	36 (90.00)	0.532	1.370	0.349 - 4.962
	C	12 (7.50)	4 (10.00)			
IL-10 -1082 G/A (rs 1800896)	Genotypes					
	GG	7 (8.75)	5 (25.00)	0.049*	Ref.	1.612 - 9.076
	GA	40 (50.00)	5 (25.00)		2.357	
	AA	33 (41.25)	10 (50.00)		0.413	
	Alleles					
	G	54 (33.75)	15 (37.50)	0.655	0.849	0.391 - 1.854
	A	106 (66.25)	25 (62.50)			
IL-10 -819 C/T (rs 1800871)	Genotypes					
	TT	11 (13.75)	2 (10.00)	0.905	Ref.	0.261 - 7.733
	TC	31 (38.75)	8 (40.00)		1.419	
	CC	38 (47.50)	10 (50.00)		1.447	
	Alleles					
	T	53 (33.13)	12 (30.00)	0.706	1.156	0.514 - 2.628
	C	107 (66.87)	28 (70.00)			
IL-10 -592 C/A	Genotypes					

(rs 1800872)	CC	38 (47.50)	10 (50.00)	0.847	Ref.	0.303 - 8.230
	CA	30 (37.50)	8 (40.00)		1.579	
	AA	12 (15.00)	2 (10.00)		1.600	
	Alleles					
	C	106 (66.25)	28 (70.00)	0.652	0.841	0.370 - 1.889
	A	54 (33.75)	12 (30.00)			
IL-6 -174 C/G (rs 1800795)	Genotypes					
	GG	55 (68.75)	13 (65.00)	0.808	Ref.	0.445 - 4.010
	GC	19 (23.75)	6 (30.00)		1.336	
	CC	6 (7.50)	1 (5.00)		0.705	
	Alleles					
	G	129 (80.63)	32 (80.00)	0.929	1.040	0.397 - 2.653
	C	31 (19.37)	8 (20.00)			
INF-γ +874 T/A (rs 2430561)	Genotypes					
	TT	10 (12.50)	3 (15.00)	0.363	Ref.	0.203 - 3.761
	TA	38 (47.50)	6 (30.00)		0.873	
	AA	32 (40.00)	11 (55.00)		0.459	
	Alleles					
	T	58 (36.25)	12 (30.00)	0.459	1.327	0.593 - 3.007
	A	102 (63.75)	28 (70.00)			

Polymorphisms		Diabetic Neuropathy				
		Yes (n=42) (%)	No (n=60) (%)	p	OR	CI (95%)
TNF-α -308 A/G (rs 1800629)	Genotypes					
	GG	36 (85.71)	42 (70.00)	0.118	Ref. 0.412	0.147 - 1.155
	GA	6 (14.29)	17 (28.33)			
	AA	0	1 (1.67)			
	Alleles			0.062	2.446	0.868 - 7.221
G	78 (92.86)	101 (84.17)				
A	6 (7.14)	19 (15.83)				
TGF-β1 codon 10 T/C (rs 1982073)	Genotypes					
	TT	13 (30.95)	22 (36.67)	0.814	Ref. 0.796	0.333 - 1.906
	TC	23 (54.76)	31 (51.67)			
	CC	6 (14.29)	7 (11.66)			
	Alleles			0.549	0.840	0.456 - 1.546
T	49 (58.33)	75 (62.50)				
C	35 (41.67)	45 (37.50)				
TGF-β1 codon 25 C/G (rs 1800471)	Genotypes					
	GG	34 (81.00)	53 (88.33)	0.307	Ref. 0.481	0.153 - 1.509
	GC	8 (19.00)	6 (10.00)			
	CC	0	1 (1.67)			

	Alleles					
	G	76 (90.48)	112 (93.33)	0.455	0.679	0.220 - 2.095
	C	8 (9.52)	8 (6.67)			
IL-10 -1082 G/A (rs 1800896)	Genotypes					
	GG	3 (7.14)	9 (15.00)		Ref.	
	GA	20 (47.62)	27 (45.00)	0.474	2.375	0.563 - 10.010
	AA	19 (45.24)	24 (40.00)		1.069	0.464 - 2.462
	Alleles					
	G	26 (30.95)	45 (37.50)			
	A	58 (69.05)	75 (62.50)	0.334	0.747	0.396 - 1.408
IL-10 -819 C/T (rs 1800871)	Genotypes					
	TT	8 (19.05)	5 (8.33)		Ref.	
	TC	16 (38.10)	24 (40.00)	0.266	2.400	0.665 - 8.666
	CC	18 (42.85)	31 (51.67)		2.756	0.782 - 9.708
	Alleles					
	T	32 (38.10)	34 (28.33)			
	C	52 (61.90)	86 (71.67)	0.142	1.557	0.824 - 2.941
IL-10 -592 C/A (rs 1800872)	Genotypes					
	CC	18 (42.86)	31 (51.67)		Ref.	
	CA	15 (35.71)	24 (40.00)	0.165	3.100	0.899 - 10.690
	AA	9 (21.43)	5 (8.33)		2.880	0.809 - 10.249

	Alleles					
	C	51 (60.71)	86 (71.67)	0.101	0.611	0.324 - 1.151
	A	33 (39.29)	34 (28.33)			
IL-6 -174 C/G (rs 1800795)	Genotypes					
	GG	27 (64.29)	42 (70.00)	0.891	Ref.	0.178 - 4.133
	GC	12 (28.57)	14 (23.33)			
	CC	3 (7.14)	4 (6.67)			
	Alleles					
G	66 (78.57)	98 (81.67)	0.584	0.823	0.388 - 1.749	
C	18 (21.43)	22 (18.33)				
INF-γ +874 T/A (rs 2430561)	Genotypes					
	TT	4 (9.52)	9 (15.00)	0.455	Ref.	0.550 - 7.675
	TA	17 (40.48)	28 (46.67)			
	AA	21 (50.00)	23 (38.33)			
	Alleles					
T	25 (29.76)	46 (38.33)	0.206	0.682	0.360 - 1.288	
A	59 (70.24)	74 (61.67)				

*p<0.05 was considered statistically significant.

Ref. = reference

Table SM2: Distributions of genotypes and alleles frequencies in T2D patients considering comorbidities.

Polymorphisms		Hypertension				
		Yes (n=94) (%)	No (n=8) (%)	p	OR	CI (95%)
TNF-α -308 A/G (rs 1800629)	Genotypes					
	GG	71 (75.53)	7 (87.50)	0.704	Ref.	0.054 - 3.955
	GA	22 (23.40)	1 (12.50)		0.461	
	AA	1 (1.07)	0		-	
	Alleles					
G	164 (87.23)	15 (93.75)	0.699	0.456	0.021 - 3.558	
A	24 (12.77)	1 (6.25)				
TGF-β1 codon 10 T/C (rs 1982073)	Genotypes					
	TT	34 (36.17)	1 (12.50)	0.073	Ref.	0.039 - 3.433
	TC	50 (53.19)	4 (50.00)		0.368	
	CC	10 (10.64)	3 (37.50)		0.098	
	Alleles					
T	118 (62.77)	6 (37.50)	0.047*	2.810	1.890 - 9.148	
C	70 (37.23)	10 (62.50)				
TGF-β1 codon 25 C/G (rs 1800471)	Genotypes					
	GG	80 (85.11)	7 (87.50)	1.000	Ref.	0.129 - 10.020
	GC	13 (13.83)	1 (12.50)		1.137	

	CC	1 (1.06)	0		-	-
	Alleles					
	G	173 (92.02)	15 (93.75)	1.000	0.769	0.036 - 6.265
	C	15 (7.98)	1 (6.25)			
IL-10 -1082 G/A (rs 1800896)	Genotypes					
	GG	12 (12.77)	0		-	-
	GA	43 (45.74)	4 (50.00)	0.694	1.103	0.258 - 4.710
	AA	39 (41.49)	4 (50.00)		Ref.	
	Alleles					
G	67 (35.64)	4 (25.00)	0.586	1.661	0.472 - 6.383	
A	121 (64.36)	12 (75.00)				
IL-10 -819 C/T (rs 1800871)	Genotypes					
	TT	10 (10.64)	3 (37.50)		Ref.	
	TC	37 (39.36)	3 (37.50)	0.079	3.700	0.645 - 21.210
	CC	47 (50.00)	2 (25.00)		7.050	1.039 - 47.846
	Alleles					
T	57 (30.32)	9 (56.25)	0.033*	0.338	1.107 - 1.154	
C	131 (69.68)	7 (43.75)				
IL-10 -592 C/A (rs 1800872)	Genotypes					
	CC	47 (50.00)	2 (25.00)	0.013*	Ref.	
	CA	37 (39.36)	2 (25.00)		9.400	1.509 - 58.568

	AA	10 (10.64)	4 (50.00)		7.400	1.181 - 46.385
	Alleles					
	C	131 (69.68)	6 (37.50)	0.009*	3.830	1.206 - 12.546
	A	57 (30.32)	10 (62.50)			
IL-6 -174 C/G (rs 1800795)	Genotypes					
	GG	65 (69.15)	4 (50.00)	0.117	Ref.	0.127 - 4.295
	GC	24 (25.53)	2 (25.00)			
	CC	5 (5.32)	2 (25.00)			
	Alleles					
G	154 (81.91)	10 (62.50)	0.06	2.718	0.811 - 8.878	
C	34 (18.09)	6 (37.50)				
INF-γ +874 T/A (rs 2430561)	Genotypes					
	TT	11 (11.70)	2 (25.00)	0.236	Ref.	0.011 - 1.543
	TA	40 (42.55)	5 (62.50)			
	AA	43 (45.74)	1 (12.50)			
	Alleles					
T	62 (32.98)	9 (56.25)	0.061	0.383	0.121 - 1.189	
A	126 (67.02)	7 (43.75)				

Polymorphisms		Dyslipidemia				
		Yes (n=96) (%)	No (n=6) (%)	p	OR	CI (95%)
TNF-α -308 A/G (rs 1800629)	Genotypes					
	GG	73 (76.04)	5 (83.33)	1.000	Ref.	0.167 - 13.590
	GA	22 (22.92)	1 (16.67)		1.507	
	AA	1 (1.04)	0		-	
	Alleles					
G	168 (87.50)	11 (91.67)	1.000	0.636	0.029 - 5.160	
A	24 (12.50)	1 (8.33)				
TGF-β1 codon 10 T/C (rs 1982073)	Genotypes					
	TT	34 (35.42)	1 (16.67)	0.858	Ref.	0.291 - 25.402
	TC	50 (52.08)	4 (66.66)		2.720	
	CC	12 (12.50)	1 (16.67)		2.833	
	Alleles					
T	118 (61.46)	6 (50.00)	0.43	1.595	0.435 - 5.847	
C	74 (38.54)	6 (50.00)				
TGF-β1 codon 25 C/G (rs 1800471)	Genotypes					
	GG	82 (85.42)	5 (83.33)	1.000	Ref.	0.136 - 11.677
	GC	13 (13.54)	1 (16.67)		1.262	
	CC	1 (1.04)	0		-	

	Alleles					
	G	177 (92.19)	11 (91.67)	1.000	1.073	0.049 - 9.092
	C	15 (7.81)	1 (8.33)			
IL-10 -1082 G/A (rs 1800896)	Genotypes					
	GG	11 (11.46)	1 (16.67)		Ref.	
	GA	45 (46.88)	2 (33.33)	0.87	1.212	0.115 - 12.831
	AA	40 (41.66)	3 (50.00)		0.593	0.094 - 3.728
	Alleles					
	G	67 (34.90)	4 (33.33)	1.000	1.047	0.272 - 4.310
	A	125 (65.10)	8 (66.67)			
IL-10 -819 C/T (rs 1800871)	Genotypes					
	TT	12 (12.50)	1 (16.67)		Ref.	
	TC	38 (39.58)	2 (33.33)	1.000	0.632	0.053 - 7.592
	CC	46 (47.92)	3 (50.00)		0.783	0.075 - 8.211
	Alleles					
	T	62 (32.29)	4 (33.33)	1.000	0.954	0.248 - 3.936
	C	130 (67.71)	8 (66.67)			
IL-10 -592 C/A (rs 1800872)	Genotypes					
	CC	46 (47.92)	3 (50.00)		Ref.	
	CA	37 (38.54)	2 (33.33)	1.000	0.848	0.081 - 8.849
	AA	13 (13.54)	1 (16.67)		0.703	0.059 - 8.410

	Alleles					
	C	129 (67.19)	8 (66.67)	1.000	1.024	0.248 - 3.942
	A	63 (32.81)	4 (33.33)			
IL-6 -174 C/G (rs 1800795)	Genotypes					
	GG	66 (68.75)	3 (50.00)		Ref.	
	GC	24 (25.00)	2 (33.33)	0.457	1.833	0.289 - 11.650
	CC	6 (6.25)	1 (16.67)		3.667	0.328 - 40.929
	Alleles					
G	156 (81.25)	8 (66.67)	0.257	2.167	0.515 - 8.552	
C	36 (18.75)	4 (33.33)				
INF-γ +874 T/A (rs 2430561)	Genotypes					
	TT	12 (12.50)	1 (16.67)		Ref.	
	TA	44 (45.83)	1 (16.67)	0.336	0.833	0.085 - 8.182
	AA	40 (41.67)	4 (66.66)		0.227	0.024 - 2.119
	Alleles					
T	68 (35.42)	3 (25.00)	0.548	1.645	0.390 - 7.956	
A	124 (64.58)	9 (75.00)				

Polymorphisms		BMI					
		< 25 Kg/m ² (n=19) (%)	25 - 30 Kg/m ² (n=25) (%)	≥ 30 Kg/m ² (n=58) (%)	p	OR [#]	CI (95%)
TNF-α -308 A/G (rs 1800629)	Genotypes						
	GG	14 (73.68)	22 (88.00)	42 (72.41)	0.625	Ref. (BMI < 25 Kg/m ²) 0.838 -	0.638 - 1.100 -
	GA	5 (26.32)	3 (12.00)	15 (25.86)			
	AA	0	0	1 (1.73)			
	Alleles				p ^a ,p ^b ,p ^c >0.05	0.421 1.133	0.073 - 2.227 0.355 - 3.831
G	33 (86.84)	47 (94.00)	99 (85.34)				
A	5 (13.16)	3 (6.00)	17 (14.66)				
TGF-β1 codon 10 T/C (rs 1982073)	Genotypes						
	TT	5 (26.32)	12 (48.00)	18 (31.04)	0.026*	Ref. (BMI < 25 Kg/m ²) 1.963 1.546	1.007 - 3.826 1.858 - 2.786
	TC	8 (42.10)	10 (40.00)	36 (62.07) ^a			
	CC	6 (31.58) ^a	3 (12.00)	4 (6.89)			
	Alleles				p ^a ,p ^b ,p ^c >0.05	0.424 0.550	0.161 - 1.104 0.246 - 1.226
T	18 (47.37)	34 (68.00)	72 (62.07)				
C	20 (52.63)	16 (32.00)	44 (37.93)				
TGF-β1 codon 25 C/G (rs 1800471)	Genotypes						
	GG	16 (84.21)	21 (84.00)	50 (86.21)	0.613	Ref. (BMI < 25 Kg/m ²) 0.562 0.579	0.169 - 1.870 0.189 - 1.778
	GC	3 (15.79)	3 (12.00)	8 (13.79)			
	CC	0	1 (4.00)	0			

	Alleles						
	G	35 (92.11)	45 (90.00)	108 (93.10)	$p^a, p^b, p^c > 0.05$	1.296	0.245 - 7.439
	C	3 (7.89)	5 (10.00)	8 (6.90)		0.864	0.193 - 4.375
IL-10 -1082 G/A (rs 1800896)	Genotypes						
	GG	2 (10.53)	2 (8.00)	8 (13.79)	0.677	Ref. (BMI < 25 Kg/m ²)	
	GA	11 (57.89)	10 (40.00)	26 (44.83)		0.902	0.697 - 1.168
	AA	6 (31.58)	13 (52.00)	24 (41.38)		0.712	0.558 - 0.908
	Alleles						
G	15 (39.47)	14 (28.00)	42 (36.21)	$p^a, p^b, p^c > 0.05$	1.677	0.623 - 4.533	
A	23 (60.53)	36 (72.00)	74 (63.79)		1.149	0.506 - 2.600	
IL-10 -819 C/T (rs 1800871)	Genotypes						
	TT	4 (21.05)	5 (20.00)	4 (6.90)	0.133	Ref. (BMI < 25 Kg/m ²)	
	TC	9 (47.37)	6 (24.00)	25 (43.10)		0.870	0.672 - 1.125
	CC	6 (31.58)	14 (56.00)	29 (50.00)		0.622	0.484 - 0.799
	Alleles						
T	17 (44.74)	16 (32.00)	33 (28.45)	$p^a, p^b, p^c > 0.05$	1.720	0.657 - 4.524	
C	21 (55.26)	34 (68.00)	83 (71.55)		2.036	0.894 - 4.639	
IL-10 -592 C/A (rs 1800872)	Genotypes						
	CC	6 (31.58)	14 (56.00)	29 (50.00)	0.058	Ref. (BMI < 25 Kg/m ²)	
	CA	9 (47.37)	5 (20.00)	25 (43.10)		0.876	0.677 - 1.134
	AA	4 (21.05)	6 (24.00)	4 (6.90)		0.621	0.483 - 0.798

	Alleles						
	C	21 (55.26)	33 (66.00)	83 (71.55)	$p^a, p^b, p^c > 0.05$	0.636	0.244 - 1.654
	A	17 (44.74)	17 (34.00)	33 (28.45)		0.461	0.216 - 1.118
IL-6 -174 C/G (rs 1800795)	Genotypes						
	GG	13 (68.42)	15 (60.00)	41 (70.69)	0.806	Ref. (BMI < 25 Kg/m ²)	
	GC	5 (26.32)	7 (28.00)	14 (24.14)		0.784	0.594 - 1.034
	CC	1 (5.26)	3 (12.00)	3 (5.17)		0.661	0.510 - 0.856
	Alleles						
G	31 (81.58)	37 (74.00)	96 (82.76)	$p^a, p^b, p^c > 0.05$	1.556	0.467 - 4.977	
C	7 (18.42)	13 (26.00)	20 (17.24)		0.923	0.328 - 2.669	
INF-γ +874 T/A (rs 2430561)	Genotypes						
	TT	3 (15.78)	4 (16.00)	6 (10.34)	0.228	Ref. (BMI < 25 Kg/m ²)	
	TA	8 (42.11)	15 (60.00)	22 (37.93)		0.737	0.393 - 1.384
	AA	8 (42.11)	6 (24.00)	30 (51.73)		1.251	0.701 - 2.232
	Alleles						
T	14 (36.84)	23 (46.00)	34 (29.31)	$p^c = 0.038^*$ $p^a, p^b > 0.05$	0.685	1.264 - 1.769	
A	24 (63.16)	27 (54.00)	82 (70.69)		1.407	0.606 - 3.250	

BMI - Body Mass Index

* $p < 0.05$ was considered statistically significant

#BMI < 25 Kg/m² was reference in the Odds Ratio estimation for genotype and allele frequencies - BMI < 25 Kg/m² versus BMI 25 - 30 Kg/m² and BMI < 25 Kg/m² versus BMI \geq 30 Kg/m², respectively

p^a : group (BMI < 25 Kg/m²) versus group (BMI 25 - 30 Kg/m²)

p^b : group (BMI < 25 Kg/m²) versus group (BMI \geq 30 Kg/m²)

p^c : group (BMI 25 - 30 Kg/m²) versus group (BMI \geq 30 Kg/m²)
a (more frequent) – residual analysis