

Supplementary Table 1: Cumulative American College of Rheumatology (1997) classification criteria for systemic lupus erythematosus at the research visit compared across smoking status.

	Overall (n=99)	Smoker (n=35)	Non-smoker (n=64)	OR (95%CI)	P-value
Mucosal-cutaneous features *	95 (96.0)	34 (97.1)	61 (95.3)	1.67 (0.17, 16.71)	0.662
Malar Rash	66 (67.3)	29 (82.9)	37 (58.7)	3.40 (1.23, 9.34)	0.018
Photosensitivity	59 (60.2)	23 (65.7)	36 (57.1)	1.44 (0.61, 3.39)	0.407
Discoid lupus	42 (42.9)	18 (51.4)	24 (38.1)	1.72 (0.75, 3.97)	0.203
Mucosal ulcers	31 (31.6)	17 (48.6)	14 (22.2)	3.31 (1.36, 8.05)	0.008
Arthritis	72 (73.5)	23 (65.7)	49 (77.8)	0.55 (0.22, 1.37)	0.198
Serositis	23 (23.5)	7 (20.0)	16 (25.4)	0.73 (0.27, 2.00)	0.547
Pleuritis	20 (20.4)	6 (17.1)	14 (22.2)	0.72 (0.25, 2.09)	0.551
Pericarditis	10 (10.2)	2 (5.7)	8 (12.7)	0.42 (0.08, 2.08)	0.286
Haematological	65 (66.3)	21 (60.0)	44 (69.8)	0.65 (0.27, 1.54)	0.325
Leucopaenia	45 (45.9)	15 (42.9)	30 (47.6)	0.83 (0.36, 1.90)	0.651
Lymphopenia	41 (41.8)	14 (40.0)	27 (42.9)	0.89 (0.38, 2.06)	0.784
Thrombocytopenia	18 (18.4)	4 (11.4)	14 (22.2)	0.45 (0.14, 1.50)	0.194
Renal manifestations	23 (23.5)	6 (17.1)	17 (27.0)	0.56 (0.20, 1.58)	0.274
Proteinuria	19 (19.4)	4 (11.4)	15 (23.8)	0.41 (0.13, 1.36)	0.146
Cellular casts	15 (15.3)	5 (14.3)	10 (15.9)	0.88 (0.28, 2.83)	0.834
Neuropsychiatric manifestations	6 (6.1)	2 (5.7)	4 (6.3)	0.89 (0.16, 5.14)	0.900
Epilepsy	4 (4.1)	2 (5.7)	2 (3.2)	1.85 (0.25, 13.73)	0.548
Psychosis	3 (3.1)	0 (0.0)	3 (4.8)	-	-
Immunological criteria	90 (90.9)	30 (85.7)	60 (93.8)	0.40 (0.10, 1.60)	0.195
Antinuclear antibodies	97 (97.9)	35 (100.0)	62 (96.9)	-	-
Anti-double stranded DNA antibodies	60 (61.2)	20 (57.1)	44 (69.8)	0.58 (0.24, 1.36)	0.208
Anti-Smith antibodies	17 (17.3)	8 (22.9)	13 (20.6)	1.14 (0.42, 3.09)	0.797
Anti-phospholipid antibodies	63 (63.6)	13 (37.1)	27 (42.9)	0.65 (0.28, 1.52)	0.582
Hypocomplementemia	67 (67.7)	24 (68.6)	43 (67.2)	1.07 (0.44, 2.58)	0.888

*also includes alopecia

Supplementary Table 2: Disease activity in patients with systemic lupus erythematosus at the research visit, compared across smoking status.

	Overall	Smokers	Non-smokers	OR 95%CI	P-value
Clinical Disease activity, n (%)	84 (84.8)	28 (28.0)	56 (56.5)	0.57 (0.19, 1.74)	0.324
Neuropsychiatric manifestations, n (%)	24 (24.2)	12 (34.3)	12 (18.8)	2.26 (0.88, 5.78)	0.089
Migraine, n (%)	22 (22.2)	12 (12.3)	10 (10.6)	2.82 (1.07, 7.44)	0.037
Vasculitis, n (%)	8 (8.1)	2 (2.7)	6 (6.4)	0.59 (0.11, 3.07)	0.527
Renal disease, n (%)	38 (38.4)	10 (10.6)	28 (28.8)	0.51 (0.21, 1.25)	0.140
Proteinuria, n (%)	25 (25.3)	6 (6.1)	19 (19.7)	0.49 (0.18, 1.37)	0.175
Haematuria, n (%)	15 (15.2)	5 (5.3)	10 (10.6)	0.90 (0.28, 2.88)	0.859
Arthritis, n (%)	21 (21.2)	12 (34.3)	9 (14.1)	3.19 (1.19, 8.60)	0.022
Cutaneous manifestations, n (%)	59 (59.6)	24 (68.6)	35 (54.7)	1.81 (0.76, 4.30)	0.181
Inflammatory rash*, n (%)	38 (38.4)	17 (17.6)	21 (21.8)	1.93 (0.83, 4.50)	0.125
Lupus rash, n (%)	30 (30.3)	13 (13.1)	17 (17.6)	1.63 (0.68, 3.95)	0.275
Alopecia, n (%)	24 (24.2)	10 (10.6)	14 (14.9)	1.43 (0.56, 3.67)	0.458
Ulcers, n (%)	16 (16.2)	8 (8.9)	8 (8.5)	2.07 (0.70, 6.12)	0.186
Serositis, n (%)	1 (1.0)	0 (0.0)	1 (1.6)	-	-
Fever, n (%)	12 (12.1)	4 (4.4)	8 (8.5)	0.90 (0.25, 3.24)	0.876
Serological disease activity, n (%) **	61 (61.6)	26 (74.3)	57 (89.1)	0.52 (0.22, 1.20)	0.125
Lympho/Leucopaenia, n (%)	59 (59.6)	18 (51.4)	41 (64.1)	0.59 (0.26, 1.37)	0.222
Thrombocytopenia, n (%)	2 (2.0)	0 (0.0)	2 (3.1)	-	-
Immunological disease activity, n (%)	86 (86.9)	18 (51.4)	43 (67.2)	0.59 (0.18, 1.93)	0.386
Antinuclear antibodies, n (%)	71 (71.7)	28 (80.0)	43 (67.2)	1.95 (0.73, 5.20)	0.180
Anti-dsDNA antibodies, n (%)	31 (31.3)	10 (28.6)	21 (32.8)	0.82 (0.33, 2.02)	0.664
Anti-Smith antibodies, n (%)	7 (7.1)	3 (8.6)	4 (6.3)	1.41 (0.30, 6.67)	0.668
Hypocomplementemia, n (%)	29 (29.3)	9 (25.7)	20 (31.2)	0.76 (0.30, 1.92)	0.563
Antiphospholipid autoantibodies, n (%)	41 (41.4)	13 (37.1)	28 (43.8)	0.76 (0.33, 1.77)	0.524
Secondary conditions					
Raynaud's phenomena, n (%)	25 (25.3)	16 (16.7)	9 (9.1)	5.15 (1.95, 13.56)	0.001
Sjögren syndrome (Europe criteria), n (%)	15 (15.2)	3 (3.6)	12 (12.8)	0.41 (0.11, 1.55)	0.188
Anaemia, n (%)	21 (21.2)	6 (17.1)	15 (23.4)	0.68 (0.24, 1.94)	0.466

* also includes discoid, photosensitive, profundus, cutaneous, bullous rash.

** also includes haemolytic anaemia

Supplementary Table 3: Cumulative SLICC Damage Index items at the research visit in patients with systemic lupus erythematosus compared across smoking status.

	Overall	Smokers	Non-smokers	OR (95%CI)	P-value
Damage accrual, n (%)	59 (59.6)	24 (68.6)	35 (54.7)	1.81 (0.76, 4.30)	0.181
Score, median (IQR)	2 (1, 3)	1 (1, 2)	2 (1, 4)		0.325
Ocular, n (%)	6 (6.1)	2 (5.7)	4 (6.3)	0.91 (0.16, 5.23)	0.915
Score, median (IQR)	1 (1, 1)	1 (1, 1)	1 (1, 1)		0.739
Neuropsychiatric, n (%)	19 (19.2)	6 (17.1)	13 (20.3)	0.81 (0.28, 2.37)	0.702
Score, median (IQR)	1 (1, 1)	1 (1, 1)	1 (1, 1)		0.908
Renal, n (%)	10 (10.1)	2 (5.7)	8 (12.5)	0.42 (0.09, 2.12)	0.296
Score, median (IQR)	1 (1, 2)	1 (1, 1)	1 (1, 2)		0.470
Pulmonary, n (%)	7 (7.1)	4 (11.4)	3 (4.7)	2.62 (0.55, 12.46)	0.225
Score, median (IQR)	1 (1, 1)	1 (1, 1)	1 (1, 1)		0.400
Cardiovascular disease, n (%)	18 (18.2)	7 (20.0)	11 (17.2)	1.21 (0.42, 3.45)	0.729
Score, median (IQR)	1 (1, 1)	1 (1, 1)	1 (1, 1)		0.941
Peripheral vascular disease, n (%)	7 (7.1)	0 (0.0)	7 (10.9)	-	-
Score, median (IQR)	1 (1, 1)	-	1 (1, 1)		0.105
Gastrointestinal disease, n (%)	8 (8.1)	3 (8.6)	5 (7.8)	1.11 (0.25, 4.93)	0.895
Score, median (IQR)	1 (1, 1)	1 (1, 1)	1 (1, 1)		0.800
Musculoskeletal, n (%)	23 (23.2)	10 (28.6)	13 (20.3)	1.57 (0.61, 4.07)	0.354
Score, median (IQR)	1 (1, 1)	1 (1, 1)	1 (1, 1)		0.496
Skin, n (%)	3 (3.0)	2 (5.7)	1 (1.6)	3.82 (0.33, 43.68)	0.281
Score, median (IQR)	1 (1, 2)	1 (1, 1)	2 (2, 2)		0.590
Gonads, n (%)	3 (3.0)	1 (2.9)	2 (3.1)	0.91 (0.08, 10.43)	0.941
Score, median (IQR)	1 (1, 1)	1 (1, 1)	1 (1, 1)		0.590
Endocrine, n (%)	1 (1.0)	1 (2.9)	0 (0.0)	-	-
Score, median (IQR)	1 (1, 1)	1 (1, 1)	-		0.758
Malignancy, n (%)	14 (14.1)	3 (8.6)	11 (17.2)	0.45 (0.12, 1.74)	0.249
Score, median (IQR)	1 (1, 1)	1 (1, 1)	1 (1, 1)		0.382

Supplementary Table 4: Laboratory findings of patients with systemic lupus erythematosus at the research visit, compared across smoking status

	Overall	SLE smokers	Non-smokers	P-value
Haemoglobin, mean ± SD	13.01 ± 1.50	13.06 ± 1.56	12.99 ± 1.49	0.036
MCV, mean ± SD	89.74 ± 6.28	91.91 ± 6.73	88.52 ± 5.70	0.014
White blood cells, mean ± SD	5.83 ± 1.97	6.43 ± 2.19	5.50 ± 1.77	0.360
Lymphocytes, mean ± SD	1.36 ± 0.60	1.50 ± 0.65	1.28 ± 0.56	0.399
Platelets, mean ± SD	253.71 ± 73.85	270.80 ± 68.70	244.36 ± 75.40	0.346
LDH, mean ± SD	186.10 ± 68.08	178.81 ± 38.69	190.12 ± 79.85	0.123
APTT, mean ± SD	26.61 ± 3.50	26.14 ± 3.22	26.89 ± 3.66	0.307
Iron, mean ± SD	13.98 ± 6.47	13.40 ± 6.26	14.31 ± 6.61	0.642
TIBC, mean ± SD	60.26 ± 10.92	58.54 ± 8.55	61.23 ± 12.01	0.298
Transferrin, mean ± SD	2.43 ± 0.40	2.33 ± 0.34	2.48 ± 0.42	0.113
Triglycerides, mean ± SD	1.18 ± 0.58	1.10 ± 0.48	1.23 ± 0.63	0.992
Cholesterol, mean ± SD	4.71 ± 1.06	4.58 ± 0.83	4.79 ± 1.18	0.913
High Density Lipoprotein, mean ± SD	1.62 ± 0.55	1.58 ± 0.52	1.65 ± 0.57	0.670
LDL cholesterol, mean ± SD	2.88 ± 0.91	2.84 ± 0.80	2.90 ± 0.98	0.670
Ionised calcium, median (IQR)	1.23 (1.20, 1.25)	1.23 (1.20, 1.24)	1.23 (1.20, 1.25)	0.759
Albumin, mean ± SD	42.33 ± 3.94	43.06 ± 3.56	41.93 ± 4.11	0.927
Potassium, mean ± SD	3.89 ± 0.31	3.94 ± 0.31	3.86 ± 0.31	0.742
Creatinine, mean ± SD	66.48 ± 34.52	66.14 ± 29.62	66.67 ± 37.19	0.673
HbA1c (%), median (IQR)	5.70 (5.30, 5.95)	5.70 (5.40, 6.00)	5.70 (5.20, 5.80)	0.801
Fasting glucose, mean ± SD	5.09 ± 0.88	5.15 ± 1.21	5.06 ± 0.63	0.855
ASAT, mean ± SD	28.84 ± 20.96	23.43 ± 8.77	31.80 ± 24.83	0.113
ALAT, mean ± SD	27.20 ± 31.71	20.37 ± 13.54	30.94 ± 37.75	0.235
Alkaline phosphatase ALP, mean ± SD	66.33 ± 31.38	60.57 ± 15.47	69.48 ± 37.07	0.729
Gamma GT, mean ± SD	29.51 ± 29.91	23.66 ± 13.68	32.76 ± 35.59	0.399
Homocysteine, median (IQR)	10.00 (8.00, 13.00)	11.00 (9.00, 13.00)	10.00 (7.00, 12.00)	0.320
Haptoglobin, median (IQR)	1.40 (0.90, 1.90)	1.70 (1.10, 2.10)	1.30 (0.80, 1.80)	0.060
Ceruloplasmin, median (IQR)	0.32 (0.29, 0.38)	0.32 (0.29, 0.35)	0.34 (0.29, 0.39)	0.436
C1 esterase inhibitor, median (IQR)	0.33 (0.30, 0.38)	0.34 (0.31, 0.38)	0.33 (0.28, 0.38)	0.809
Fibrinogen, mean ± SD	3.59 ± 0.68	3.68 ± 0.64	3.54 ± 0.71	1.000
ESR in mm/hr, median (IQR)	20.00 (10.00, 34.00)	22.00 (10.00, 34.00)	19.00 (11.00, 33.50)	0.621
CRP sensitive, median (IQR)	2.10 (0.64, 5.00)	1.31 (0.67, 4.13)	3.00 (0.60, 5.10)	0.138
C3, mean ± SD	0.96 ± 0.27	0.94 ± 0.19	0.97 ± 0.31	0.299
C4, mean ± SD	0.16 ± 0.06	0.17 ± 0.06	0.16 ± 0.07	0.689
B cells, median (IQR)	0.10 (0.04, 0.22)	0.14 (0.07, 0.28)	0.08 (0.04, 0.19)	0.037
Immunoglobulin A, median (IQR)	2.38 (1.45, 2.96)	2.30 (1.34, 2.96)	2.42 (1.55, 2.96)	0.876
Immunoglobulin G, median (IQR)	13.25 (10.90, 16.30)	12.95 (10.70, 16.05)	13.45 (10.90, 16.30)	0.820
Immunoglobulin M, median (IQR)	0.94 (0.73, 1.38)	0.89 (0.55, 1.17)	0.98 (0.77, 1.48)	0.495
Rheumatoid factor (Latex), mean (95%CI)	22.81 (18.83, 27.63)	21.81 (17.16, 27.72)	23.67 (17.49, 32.02)	0.674

Supplementary Table 5: Medication requirement of patients with systemic lupus erythematosus at the research visit, compared across smoking status

	Overall	Smokers	Non-smokers	OR 95%CI	P-value
Prednisone, n (%)	50 (50.5)	18 (51.4)	32 (50.0)	1.06 (0.46, 2.41)	0.892
Hydroxychloroquine, n (%)	58 (58.6)	19 (54.3)	39 (60.9)	0.76 (0.33, 1.75)	0.521
Rituximab, n (%)	1 (1.0)	1 (2.9)	0 (0.0)	-	-
Any cytostatic agent, n (%)	36 (36.4)	13 (37.1)	23 (35.9)	1.05 (0.45, 2.48)	0.905
Methotrexate, n (%)	4 (4.0)	2 (5.7)	2 (3.1)	1.88 (0.25, 13.95)	0.538
Azathioprine, n (%)	21 (21.2)	6 (17.1)	15 (23.4)	0.68 (0.24, 1.94)	0.466
Cyclophosphamide, n (%)	1 (1.0)	0 (0.0)	1 (1.6)		
Mycophenolate, n (%)	11 (11.1)	5 (14.3)	6 (9.4)	1.61 (0.45, 5.71)	0.460
NSAIDs, n (%)	15 (15.2)	11 (31.4)	4 (6.3)	6.88 (1.99, 23.72)	0.002
Aspirin, n (%)	32 (32.3)	10 (28.6)	22 (34.4)	0.76 (0.31, 1.87)	0.556
Warfarin/LWMH, n (%)	10 (10.1)	2 (5.7)	8 (12.5)	0.42 (0.09, 2.12)	0.296
Statins, n (%)	13 (13.1)	6 (17.1)	7 (10.9)	1.69 (0.52, 5.48)	0.386
Anti-hypertensives, n (%)	36 (36.4)	10 (28.6)	26 (40.6)	0.59 (0.24, 1.42)	0.236
Anti-osteoporotic, n (%)	14 (14.1)	4 (11.4)	10 (15.6)	0.70 (0.20, 2.41)	0.568
Anti-depressives, n (%)	3 (3.0)	1 (2.9)	2 (3.1)	0.91 (0.08, 10.43)	0.941