

Table S1: Characteristics of patients with missing MetS status

	<u>MetS assigned</u>	<u>MetS missing</u>	<u>p</u>
No. of patients	1494	193	-
Age (years) (mean (SD))	35.2 (13.4)	35.1 (12.1)	1.00
Gender (%)			
Female	1336 (89.4)	169 (88.5)	0.70
Male	158 (10.6)	22 (11.5)	
Ethnicity (%)			
Caucasian	660/1492 (44.2)	100/191 (52.4)	<0.001
Black	228/1492 (15.3)	44/191 (23.0)	<0.001
SE Asian	303/1492 (20.3)	24/191 (12.6)	<0.001
Hispanic	240/1492 (16.1)	17/191 (8.9)	<0.001
Other	61/1492 (4.1)	6/191 (3.1)	0.9
Region (%)			
Canada	358/1477 (24.2)	27/178 (15.2)	<0.001
Mexico	194/1477 (13.1)	9/178 (5.1)	<0.001
USA	374/1477 (25.3)	97/178 (54.5)	<0.001
Asia	168/1477 (11.4)	1/178 (0.6)	<0.001
Europe	383/1477 (25.3)	44/178 (24.7)	0.9
CHD Risk Factors (mean (SD))			
BP systolic (mmHg)	119.5 (16.8)	118.7 (16.8)	0.54
BP diastolic (mmHg)	75.3 (11.0)	73.0 (10.9)	0.01
On AHT medication (%)	435 (29.1)	49 (25.4)	0.28
Triglyceride (mmol/l)	1.79 (1.19)	1.50 (0.93)	0.31
HDL-cholesterol (mmol/l)	1.39 (0.60)	1.51 (0.29)	0.79
On lipid-lowering medication (%)	171 (11.5)	0 (0)	<0.001
Glucose (mmol/l)	5.03 (1.63)	5.39 (1.81)	0.25
Diabetes (%)	50/1475 (3.4)	6/184 (3.3)	0.90
Smoker current (%)	225/1491 (15.1)	27/191 (14.1)	0.70
BMI	25.1 (5.9)	26.3 (6.3)	0.02
WC (cm)	82.9 (14.0)	84.2(14.2)	0.38
Disease duration weeks (mean SD))	24.1 (18.0)	27.6 (19.5)	0.01
SLEDAI (mean SD))	5.5 (5.4)	3.78 (4.20)	<0.001
SLICC/ACR-DI (mean(SD))	0.29 (0.72)	0.18 (0.46)	0.15
Disease Phenotype (%)			
Active renal disease	314 (22.9)	21 (10.8)	0.001
Anti-dsDNA positive	541/1347 (40.2)	38/161 (23.6)	<0.001
Low Complement	519/1349 (38.5)	50/164 (30.5)	0.05
Thrombocytopenia	44/1313 (3.4)	2/158 (1.3)	0.20
Medication (median (IQR))			
Oral CS (%)	1043 (69.8)	122 (63.2)	0.06
Average CS dose(mg)	20 (10, 30)	15 (7, 30)	0.001
Highest CS dose(mg)	40 (20, 60)	30 (20, 50)	0.08
Cumulative CS dose (g)	2.6 (1.1, 5.0)	1.7 (0.7, 4.3)	0.02
Pulse intravenous CS (%)	70/1423 (4.9)	4/184 (2.2)	0.10
Immunosuppressant (%)	599/1491 (31.0)	58/187 (40.1)	0.02
Antimalarial (%)	971 (65.0)	144 (74.6)	0.008

CHD coronary heart disease; BP blood pressure; AHT anti-hypertensive; WC waist circumference; SLEDAI Systemic Lupus Erythematosus Disease Activity index; SLICC Systemic Lupus Erythematosus; ACR American College of Rheumatology; CS corticosteroid.

Table S2: Characteristics of patients of by immunosuppressant use

	<u>Not On</u>	<u>On</u>	p
	<u>Immunosuppressive</u>	<u>Immunosuppressive</u>	
No. of patients	892	599	
Age (years) (mean (SD))	36.6 (13.7)	33.3 (13.1)	<0.001
Gender (%)			
Female	809 (90.7)	524 (87.5)	0.05
Male	83 (9.3)	75 (12.5)	0.05
MetS (%)	98 (11.0)	140 (23.4)	<0.001
MetS Phenotype (%)			
MetS WC	370/786 (47.1)	274/546 (50.2)	0.26
MetS BP	331/889 (37.2)	352 (58.8)	<0.001
MetS TG	319/808 (39.5)	297/531 (55.9)	<0.001
MetS HDL	261/453 (57.6)	224/366 (61.2)	0.30
MetS Glu	140/791 (17.7)	130/550 (23.6)	0.008
BMI (mean(SD))	25.2 (5.9)	24.9 (5.8)	0.25
WC (cm) (mean (SD))	82.7 (14.2)	83.0 (13.5)	0.70
Disease duration (wks) (mean SD))	22.7 (17.9)	25.9 (17.9)	0.001
SLEDAI (mean SD))	4.72 (4.90)	6.65 (6.00)	<0.001
SLICC/ACR-DI (mean(SD))	0.22 (0.66)	0.39 (0.79)	0.004
Medication (median (IQR))			
Oral CS (%)*	492 (55.2)	548 (91.5)	<0.001
Average CS dose(mg)	15 (10, 30)	25 (15, 40)	<0.001
Highest CS dose(mg)	30 (15, 50)	50 (30, 60)	<0.001
Cumulative CS dose (g)	1.6 (0.6, 3.4)	3.5 (1.8, 6.1)	<0.001
Pulse intravenous CS (%)	26/838 (3.1)	44/583 (7.5)	<0.001
Antimalarial (%)	654 (73.3)	316 (52.8)	<0.001

Table S3: Characteristics of patients of with and without active renal disease

	<u>No Active Renal Disease</u>	<u>Active Renal Disease</u>	p
No. of patients	1180	314	
Age (years) (mean (SD))	36.5 (13.7)	30.3 (11.9)	<0.001
Gender (%)			
Female	1078 (91.4)	258 (82.2)	<0.001
Male	102 (8.6)	56 (17.8)	<0.001
MetS (%)	145 (12.3)	94 (29.9)	<0.001
MetS Phenotype (%)			
MetS WC	524/1049 (50.0)	121/285 (42.5)	0.03
MetS BP	457/1177 (38.8)	229 (72.9)	<0.001
MetS TG	413/1064 (38.8)	206/278 (74.1)	<0.001
MetS HDL	352/615 (57.2)	134/207 (64.7)	0.06
MetS Glu	211/1048 (20.1)	60/296 (20.3)	1.00
BMI (mean(SD))	25.4 (6.1)	23.9 (4.7)	<0.001
WC (cm) (mean (SD))	83.2 (14.4)	81.6 (12.4)	0.09
Disease duration (wks) (mean SD))	24.9 (18.0)	20.8 (17.4)	<0.001
SLEDAI (mean SD))	4.09 (3.98)	10.8 (6.8)	<0.001
SLICC/ACR-DI (mean(SD))	0.26 (0.69)	0.42 (0.85)	0.03
Medication (median (IQR))			
Oral CS (%)*	750 (63.6)	293 (93.3)	<0.001
Average CS dose(mg)	16 (10, 30)	30 (20, 50)	<0.001
Highest CS dose(mg)	30 (15, 50)	50 (30, 60)	<0.001
Cumulative CS dose (g)	2.2 (0.9, 4.7)	3.1 (1.5, 5.7)	<0.001
Pulse intravenous CS (%)	33/1120 (12.2)	37/303 (3.0)	<0.001
Immunosuppressant (%)	372/1178 (31.6)	227/313 (72.5)	<0.001
Antimalarial (%)	834 (70.7)	137 (43.6)	<0.001