

Supplemental Table 1: Univariate associations over time

Variable	Adjusted Odds Ratio	95% Confidence Interval
Age (years)	1.08	1.06, 1.11
Male Gender	2.54	1.14, 5.65
Previous MetS status (y/n)	18.6	13.7, 25.4
Indian-subcontinent race/ethnicity	0.52	0.12, 2.21
African ancestry race/ethnicity	8.11	2.69, 24.4
Afro-Caribbean race/ethnicity	0.77	0.26, 2.27
Korean race/ethnicity	1.32	0.56, 3.11
Hispanic race/ethnicity	5.17	2.28, 11.7
SLEDAI-2K >10 (y/n)	2.26	1.54, 3.32
SLEDAI-2K (per unit)	1.11	1.07, 1.16
Low Complement (y/n)	0.74	0.47, 1.13
High anti-dsDNA (y/n)	1.21	0.79, 1.86
SLICC/ACR-DI >1 (y/n)	7.84	4.32, 14.2
Active renal disease**(y/n)	7.31	4.47, 11.9
Current oral CS (y/n)	3.94	2.38, 6.55
Average oral CS dose (mg)***	1.06	1.05, 1.08
Highest oral CS dose (mg)***	1.04	1.03, 1.05
Cumulative oral CS dose (g)	1.11	1.07, 1.16
Current IS (y/n)	2.06	1.42, 3.00
Current AM (y/n)	0.21	0.14, 0.34

SLEDAI Systemic Lupus Erythematosus Disease Activity index; SLICC Systemic Lupus Erythematosus; ACR American College of Rheumatology; CS corticosteroid; IV intravenous; IS immunosuppressive; AM antimalarial.

**Defined as haematuria >5 rbc/hpf; pyuria > 5 wbc/hpf; new or recent increase of > 500 mg 24 hour protein; casts including granular or rbc; or consistent renal biopsy; Nephrotic syndrome (proteinuria > 3 grams / 24 hour, oedema, and increased BP). Other causes excluded

*** Within preceding 12 months

Supplemental Table 2: Univariate associations of exposures recorded at baseline

Variable	Adjusted Odds Ratio	95% Confidence Interval
SLEDAI-2K >10 at baseline (y/n)	3.28	1.89, 5.73
SLEDAI-2K at baseline (per unit)	1.16	1.10, 1.23
Low Complement at baseline (y/n)	0.73	0.40, 1.34
High anti-dsDNA at baseline (y/n)	1.46	0.81, 2.63
SLICC/ACR-DI >1 at baseline (y/n)	7.99	2.74, 23.3
Active renal disease at baseline **(y/n)	18.73	9.48, 37.0
Current oral CS at baseline (y/n)	4.57	2.39, 8.76
Average oral CS dose at baseline (mg)***	1.06	1.04, 1.08
Highest oral CS dose at baseline (mg)***	1.07	1.05, 1.09
Cumulative oral CS dose at baseline (g)	1.19	1.11, 1.27
Current IS at baseline (y/n)	8.04	4.53, 14.32
Current AM at baseline (y/n)	0.15	0.09, 0.27

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*** Within preceding 12 months

Supplemental Table 3: Univariate associations of exposures recorded over years 1 and 2

Variable	Adjusted Odds Ratio	95% Confidence Interval
SLEDAI-2K >10 over follow-up (y/n)	5.87	2.80, 12.4
SLEDAI-2K over follow-up (per unit)	1.17	1.08, 1.26
Low Complement over follow-up (y/n)	0.73	0.41, 1.47
High anti-dsDNA over follow-up (y/n)	0.97	0.52, 1.83
SLICC/ACR-DI >1 over follow-up (y/n)	13.2	6.89, 25.3
Active renal disease over follow-up ** (y/n)	21.7	8.71, 54.1
Current oral CS over follow-up (y/n)	4.44	2.38, 8.29
Average oral CS dose over follow-up (mg)***	1.11	1.06, 1.15
Highest oral CS dose over follow-up (mg)***	1.03	1.01, 1.05
Cumulative oral CS dose over follow-up (g)	1.17	1.08, 1.27
Current IS over follow-up (y/n)	2.64	1.47, 4.76
Current AM over follow-up (y/n)	0.14	0.08, 0.26

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**Defined as haematuria >5 rbc/hpf; pyuria > 5 wbc/hpf; new or recent increase of > 500 mg 24 hour protein; casts including granular or rbc; or consistent renal biopsy; Nephrotic syndrome (proteinuria > 3 grams / 24 hour, oedema, and increased BP). Other causes excluded

*** Within preceding 12 months

Supplemental Table 4: Characteristics of patients of Korean and Hispanic ethnicity compared to all other ethnicities over time

N (%) or median(IQR)	Visit	Korean	Hispanic	Whole cohort
MetS WC	Enrol	33/164 (20.1)	129/228 (56.6)	645/1333 (48.4)
	FU 1	30/136 (22.1)	64/101 (63.4)	467/919 (50.8)
	FU 2	19/100 (19.0)	55/88 (62.5)	359/728 (49.3)
MetS BP	Enrol	74/169 (43.8)	117/240 (48.8)	686/1489 (46.1)
	FU 1	64/137 (46.7)	59/118 (50.0)	516/1065 (48.5)
	FU 2	49/100 (49.0)	52/104 (50.0)	452/894 (50.6)
MetS TG	Enrol	100/153 (65.4)	108/168 (64.3)	619/1340 (46.2)
	FU 1	40/77 (52.6)	51/99 (51.5)	347/942 (36.8)
	FU 2	26/52 (50.0)	44/88 (50.0)	311/794 (39.2)
MetS HDL	Enrol	110/144 (76.4)	97/149 (65.1)	485/821 (59.1)
	FU 1	48/74 (64.9)	53/86 (61.6)	337/617 (54.6)
	FU 2	29/50 (58.0)	45/81 (55.6)	292/528 (55.3)
MetS Glu	Enrol	45/168 (26.8)	41/236 (17.4)	271/1342 (20.2)
	FU 1	26/135 (19.3)	10/101 (9.9)	136/966 (14.1)
	FU 2	25/99 (25.3)	8/85 (9.4)	108/805 (13.4)
MetS	Enrol	52/169 (30.8)	75/240 (31.3)	239/1494 (16.0)
	FU 1	20/137 (14.6)	27/118 (22.9)	134/1065 (12.6)
	FU 2	16/100 (16.0)	29/104 (27.9)	121/894 (13.6)
SLEDAI-2K (mean (SD))	Enrol	7.4 (6.1)	6.5 (5.8)	5.5 (5.4)
	FU 1	3.4 (2.6)	5.1 (4.9)	3.6 (4.0)
	FU 2	4.1 (3.8)	5.7 (4.6)	3.6 (4.1)
SLICC/ACR-DI ≥1	Enrol	9/62 (14.5)	20/106 (18.9)	117/644 (18.2)
	FU 1	17/137 (12.4)	41/118 (34.8)	290/1054 (27.5)
	FU 2	16/100 (16.0)	42/102 (41.2)	270/885 (30.5)
Active renal disease	Enrol	49/169 (29.0)	102/240 (42.5)	342/1489 (23.0)
	FU 1	17/137 (12.4)	46/117 (39.3)	164/1053 (15.6)
	FU 2	10/99 (10.1)	50/104 (48.1)	119/890 (13.4)
Elevated anti-dsDNA	Enrol	105/159 (66.0)	84/211 (39.8)	540/1345 (40.2)
	FU 1	63/127 (49.6)	36/99 (36.4)	332/996 (33.3)
	FU 2	52/99 (52.5)	36/103 (35.0)	36/92 (39.1)
On immune-suppressant	Enrol	86//169 (50.9)	146/240 (60.8)	597/1492 (40.0)
	FU 1	67/137 (48.9)	68/118 (57.6)	451/1065 (42.4)
	FU 2	54/100 (54.0)	59/104 (56.7)	388/894 (43.4)
Average daily oral CS dose (mg)	Enrol	20 (10, 35)	30 (15, 42.5)	20 (10, 30)
	FU 1	10 (7.5, 14.5)	15 (7.5, 24)	10 (7, 16)
	FU 2	7.5 (5, 10.5)	10 (5, 20)	7.5 (5, 12)
Peak daily oral CS dose (mg)	Enrol	30 (15, 52.5)	50 (30, 60)	40 (20, 60)
	FU 1	15 (10, 30)	30 (15, 50)	20 (10, 40)
	FU 2	10 (5, 15)	15 (6.3, 50)	10 (5, 20)
Cumulative CS dose (g)	Enrol	1.4 (0.4, 3.1)	3.9 (1.8, 6.2)	2.6 (1.1, 5.0)
	FU 1	3.8 (2.7, 5.3)	6.2 (2.8, 8.7)	3.9 (2.5, 6.1)
	FU 2	5.7 (3.6, 8.6)	7.8 (3.9, 14.4)	5.8 (3.7, 9.0)
IV CS	Enrol	26/169 (15.4)	5/223 (2.2)	70/1421 (4.9)
	FU 1	10/137 (7.3)	3/117 (2.6)	78/1053 (7.4)
	FU 2	4/100 (4.0)	1/104 (1.0)	42/891 (4.7)

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