

SUPPLEMENTARY MATERIAL

Supplementary Table 1: Calculation of Katz Severity Index

Component	Points	
lowest recorded hematocrit to date	30-37%	1
	<30%	2
highest recorded creatinine to date	1.3-3	1
	> 3	2
# of ACR criteria for SLE satisfied to date	4-6	1
	> 6	2
history of proteinuria	≥ 2+	1
history of cerebritis		2
history of pulmonary disease		2
Diffuse Proliferative Glomerulonephritis (Biopsy Proven)		2
Maximum Possible Score = 13		

Supplementary Table 2: Item weightings for Severity Index

Criterion	Sub-criterion	Coefficient/ Weighting
Malar Rash		0.020
Discoid Rash		-0.169
Photosensitivity		-0.210
Oral Ulcer		0.093
Arthritis		-0.289
Serositis	<i>Pericarditis</i>	0.231
	<i>Pleuritis</i>	0.206
Hematological	<i>Hemolytic Anemia</i>	0.529
	<i>Leukopenia</i>	-0.053
	<i>Lymphopenia</i>	-0.033
	<i>Thrombocytopenia</i>	0.144
Renal		1.34
Neurological	<i>Seizures</i>	0.623
	<i>Psychosis</i>	0.142
Immunological		0.447

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Supplementary Table 3.1: Prevalence of ACR criteria & sub-criteria within discovery cohort

Criterion/sub-criterion	Severe Disease			Less Severe Disease		
	Absent	Present	Missing	Absent	Present	Missing
Malar Rash	219 (42.2)	262 (50.5)	38 (7.3)	309 (40.8)	368 (48.5)	81 (10.7)
Discoid Rash	418 (80.5)	81 (15.6)	20 (3.9)	564 (74.4)	156 (20.6)	38 (5)
Photosensitivity	276 (53.2)	203 (39.1)	40 (7.7)	290 (38.3)	429 (56.6)	39 (5.1)
Oral Ulcer	316 (60.9)	152 (29.3)	51 (9.8)	454 (59.9)	232 (30.6)	72 (9.5)
Arthritis	91 (17.5)	360 (69.4)	68 (13.1)	83 (10.9)	580 (76.5)	95 (12.5)
Pericarditis	404 (77.8)	112 (21.6)	3 (0.6)	672 (88.7)	84 (11.1)	2 (0.3)
Pleuritis	318 (61.3)	196 (37.8)	5 (1)	553 (73)	185 (24.4)	20 (2.6)
Hemolytic Anemia	461 (88.8)	57 (11)	1 (0.2)	732 (96.6)	24 (3.2)	2 (0.2)
Leukopenia	333 (64.2)	173 (33.3)	13 (2.5)	491 (64.8)	259 (34.2)	8 (1.1)
Lymphopenia	311 (59.9)	199 (38.3)	9 (1.7)	497 (65.6)	259 (34.2)	2 (0.3)
Thrombocytopenia	425 (81.9)	89 (17.1)	5 (1)	659 (86.9)	95 (12.5)	4 (0.5)
Renal Disorder	140 (27)	351 (67.6)	28 (5.4)	605 (79.8)	104 (13.7)	49 (6.5)
Seizures	441 (85)	77 (14.8)	1 (0.2)	724 (95.5)	31 (4.1)	3 (0.4)
Psychosis	496 (95.6)	21 (4)	2 (0.4)	741 (97.8)	16 (2.1)	1 (0.1)
Immuno. Disorder	57 (11)	457 (88.1)	5 (1)	193 (25.5)	556 (73.4)	9 (1.2)

Supplementary Table 3.2: Prevalence of ACR criteria & sub-criteria within validation cohort

Criterion/sub-criterion	Severe Disease			Less Severe Disease		
	Absent	Present	Missing	Absent	Present	Missing
Malar Rash	122 (44.5)	134 (48.9)	18 (6.6)	172 (47.3)	173 (47.5)	19 (5.2)
Discoid Rash	219 (79.9)	37 (13.5)	18 (6.6)	291 (79.9)	53 (14.6)	20 (5.5)
Photosensitivity	135 (49.3)	121 (44.2)	18 (6.6)	145 (39.8)	198 (54.4)	21 (5.8)
Oral Ulcer	173 (63.1)	72 (26.3)	29 (10.6)	213 (58.5)	119 (32.7)	32 (8.8)
Arthritis	47 (17.2)	180 (65.7)	47 (17.2)	28 (7.7)	294 (80.8)	42 (11.5)
Pericarditis	203 (74.1)	69 (25.2)	2 (0.7)	327 (89.8)	36 (9.9)	1 (0.3)
Pleuritis	162 (59.1)	110 (40.1)	2 (0.7)	274 (75.3)	81 (22.3)	9 (2.5)
Hemolytic Anemia	244 (89.1)	29 (10.6)	1 (0.4)	353 (97)	10 (2.7)	1 (0.3)
Leukopenia	273 (99.6)	1 (0.4)	0 (0)	361 (99.2)	2 (0.5)	1 (0.3)
Lymphopenia	173 (63.1)	99 (36.1)	2 (0.7)	241 (66.2)	119 (32.7)	4 (1.1)
Thrombocytopenia	228 (83.2)	42 (15.3)	4 (1.5)	319 (87.6)	44 (12.1)	1 (0.3)
Renal Disorder	75 (27.4)	183 (66.8)	16 (5.8)	294 (80.8)	42 (11.5)	28 (7.7)
Seizures	249 (90.9)	24 (8.8)	1 (0.4)	343 (94.2)	20 (5.5)	1 (0.3)
Psychosis	262 (95.6)	9 (3.3)	3 (1.1)	359 (98.6)	5 (1.4)	0 (0)
Immuno. Disorder	28 (10.2)	243 (88.7)	3 (1.1)	89 (24.5)	270 (74.2)	5 (1.4)