

Supplemental Tables 1-4

Supplemental Table 1. Clinical Characteristics of Patient Cohort used for Array Assay

n=10	Age (years)	Sex (F, M)	Self-identified Race (Black, White, Asian)	UPCR (mg/g)	eGFR (mL/min/1.73 m ²)	Serum Creatinine (mg/dL)	dsDNA antibody titer (IU/mL)	C3 (mg/dL)	C4 (mg/dL)	LN Class	Number included	Medication	Number of Patients
	average	min	max	7, 2, 1	3349.71	76.90	1.18	1154	63.4				
	18	10, 0		734.94	28.00	0.64	40	19	3	III	1	Mycophenolate mofetil	8
	44			6731.43	130.00	2.38	4079	112	17	IV	5	Prednisone	6
										III/IV	5	Cyclophosphamide	1
										IV/V	5	Tacrolimus	1
												Belimumab	2

Supplemental Table 2. Clinical Characteristics of Patient Cohort used for ELISA Validation

a. Proliferative LN Patients											
	Age (years)	Sex (F/M, %)	Self-Identified Race (Black, White, Asian)	UPCR (mg/g)	eGFR (mL/min/1.73 m ²)	Serum Creatinine (mg/dL)	dsDNA antibody titer (IU/mL)	C3 (mg/dL)	C4 (mg/dL)	LN Class	Number of Patients
α-JAG	n=16										
	average	36.33	16, 0	14, 2, 0	1889.80	62.00	1.63	89.40	21.20	III	1
	min	22.20			905.00	13.00	0.71	60.00	10.00	IV	5
	max	54.86			3506.73	120.00	4.27	136.00	38.00	III/V	5
MMP-9 Lactoferrin	n=21										
	average	32.45	21, 0	18, 2, 1	2583.51	69.81	1.45	64.85	16.19	III	3
	min	20.72			905.00	13.00	0.64	1.00	3.00	IV	7
	max	48.95			6731.43	130.00	4.27	4079.00	38.00	III/V	5
Antrocinin MPO	n=18										
	average	33.14	17, 1	15, 2, 1	2340.01	77.44	1.15	64.88	16.94	III	2
	min	20.72			734.94	28.00	0.64	4.00	3.00	IV	5
	max	48.55			6731.43	130.00	2.38	4079.00	47.00	III/V	6
Neutrophil Elastase	n= 21										
	average	34.35	20, 1	17, 3, 1	2251.67	81.40	1.14	548.30	81.53	III	3
	min	20.72			625.00	28.00	0.62	6.00	3.00	IV	6
	max	64.94			6731.43	145.00	2.38	4079.00	47.00	III/V	6
b. Nephrotic Controls											
Class V LN	n=6										
	average	35.77	5, 1	5, 1, 0	6199.50	89.75	1.05	231.67	122.25	III	3
	min	26.41			1563.00	54.00	0.54	1.00	101.00	III/V	6
	max	54.56			13476.00	129.00	1.66	684.00	146.00	IV/V	6
MCD	n=3										
	average	48.60	1, 2	1, 2, 0	6887.33	96.67	0.89				
	min	39.33			5860.00	65.00	0.61				
	max	54.68			8899.00	117.00	1.32				
MGN	n=6										
	average	52.85	3, 3	0, 5, 1	10478.67	71.50	1.36				
	min	18.56			4769.00	26.00	0.43				
	max	71.95			14604.00	124.00	3.38				

Supplemental Table 3. Clinical Characteristics of Patients Comparing Active LN to Remission

	Age (years)	Sex (F/M, M)	Self-identified Race (Black, White, Asian)	UPCR (mg/g)	eGFR (mL/min/1.73 m ²)	Serum Creatinine (mg/dL)	dsDNA antibody titer (IU/mL)	C3 (mg/dL)	C4 (mg/dL)	LN Class	Number included	Medication	Number of Patients
n=15 (active LN)													
average	35.86	14, 1	13, 2, 0	1360.00	82.29	1.10	99.20	105.38	24.08	III	3	Mycophenolate mofetil	13
min	23.58			625.00	36.00	0.62	4	53	6	IV	3	Prednisone	12
max	64.94			2950.00	145.00	1.91	403	201	47	III/IV	7	Hydroxychloroquine	11
										IV/V	2	Belimumab	4
												Ecilizumab	1
												Voclosporin	1
												Ravulizumab	0
												Rituxumab	0
n=15 (inactive LN)													
average	36.61	14, 1	13, 2, 0	309.93	68.36	1.25	90.85	111.25	23.67	III	3	Mycophenolate mofetil	13
min	22.62			122.00	36.00	0.67	3	68	9	IV	3	Prednisone	10
max	66.49			492.00	141.00	1.88	706	168	41	III/IV	7	Hydroxychloroquine	12
										IV/V	2	Belimumab	2
												Ecilizumab	0
												Voclosporin	1
												Ravulizumab	1

Supplemental Table 4. Clinical Characteristics of Patient Cohort used for Degranulation Assay

	Age (years)	Sex (F/M, M)	Self-identified Race (Black, White, Asian)	UPCR (mg/g)	eGFR (mL/min/1.73 m ²)	Serum Creatinine (mg/dL)	dsDNA antibody titer (IU/mL)	C3 (mg/dL)	C4 (mg/dL)	LN Class	Number included	Medication	Number of Patients
n=19													
average	38	18, 1	16, 3, 0	1120.00	62.85	1.40	178	107	21	III	5	Mycophenolate mofetil	17
min	22			89.00	19.00	0.70	1	54	7	IV	4	Prednisone	15
max	68			5154.00	119.00	2.40	2815	201	44	III/IV	5	Tacrolimus	1
										IV/V	2	Belimumab	2
										V	3		

