A.

Serum SLE

Sensitivity: 70.3%
Specificity: 86.2%
Cutoff: >24.64pg/ml
AUC: 0.82

Urine SLE

Sensitivity: 73.9%
Specificity: 63.2%
Cutoff: >45.19pg/ml
AUC: 0.79

LN

Sensitivity: 90.8%
Specificity: 69.8%
Cutoff: >10.12pg/ml
AUC: 0.83

LN

Sensitivity: 84.5%
Specificity: 63.2%
Cutoff: >45.12pg/ml
AUC: 0.78

Sensitivity (%)

100-Specificity (%)

B. Freeze/thaw does not alter CSF-1 in the serum and urine

CSF-1 serum

CSF-1 (pg/ml)

times thawed: 1x   2x   3x   4x

CSF-1 urine

CSF-1 (pg/ml)

times thawed: 1x   2x   3x   4x
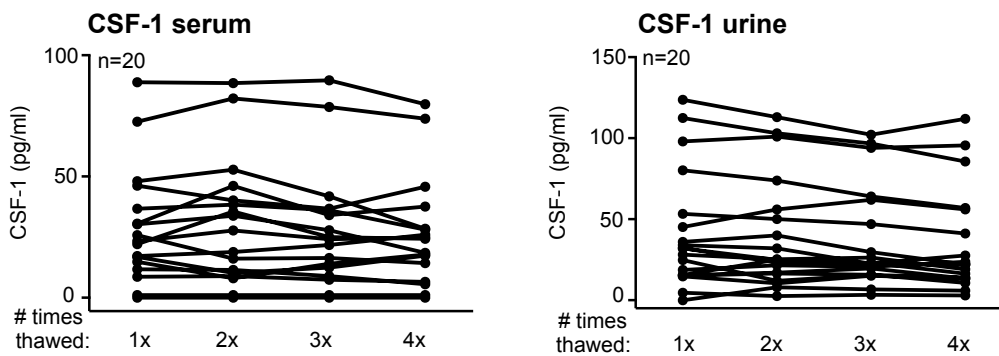
C. CSF-1 (serum) variability measured at different time-points

Healthy controls

CSF-1 (pg/ml)

Timed (mo) intervals: 0   3-5   6-8

LN patients in remission

CSF-1 (pg/ml)

Timed (mo) intervals: 0   3-5   6-8   9-12
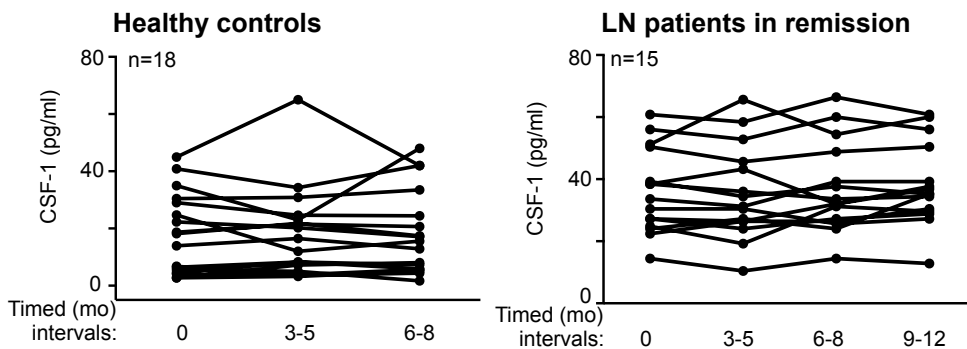
Supplement Figure 1. Serum and urine CSF-1 analysis is highly accurate and specific and values are reproducibly stable. **(**A) Nonparametric receiver operating characteristic (ROC) curve for serum and urine CSF-1 in patients with SLE (n=217) and patients with LN (n=84) versus healthy controls (n=162). (B) Serum and urine CSF-1 levels urine tracked through 1-4 cycles of freezing and thawing specimens. (C). Left panel: Serum CSF-1 levels from healthy volunteers compared initially and after 3-5 and 6-8 mo. Right panel: Serum CSF-1 levels from SLE patients in remission compared initially and after 3-5, 6-8 and 9-12 mo. Serum and urine CSF-1 levels were quantified using an ELISA.

Supplement Table 1.
Demographic and Clinical Characteristics in Patients with Non-inflammatory Kidney Disease

Race (n)	White	45
	Asian	0
	Others	7
Sex (n)	Female	27
	Male	25
Disease type	Nephrosclerosis	32
	Amyloidosis	12
	Minimal Change Disease	10
Age at diagnosis (years)	Mean	48.6±2.8
	Range	24.9-74.1

Supplement Table 2.
Demographic and Clinical Characteristics in Patients with LN Flares

Race (n)	White	12
	Asian	0
	Others	2
Sex (n)	Female	9
	Male	5
Age at SLE diagnosis (years)	Mean	32.9±2.8
	Range	21.8-47.6
Age at diagnosis of LN (years)	Mean	38.1±2.7
	Range	23.8-50.7
Age at diagnosis of flare (years)	Mean	43.6±3.1
	Range	23.9-62.1
Time from diagnosis of LN to flare (years)	Mean	5.3±1.5
	Range	0.5-14.5
Overall duration of LN (years)	Mean	6.9±1.3
	Range	1.2-15.9
Clinical parameter at the time of LN flare		
Creatinine (mg/dl)		1.1±0.1
Proteinuria (24h collection) >0·5g	n	48
	Mean	1.7±0.2
	Range	1.1-3.1 g/d
ANA positive	n	12
anti-dsDNA positive	n	10
Depressed serum C3 level	n	9
	Mean	0.9±0.1
	Range	0.5-1.2
ISN/RPS class		
Class II	n	2
Class III	n	3
Class IV	n	8
Class V	n	1
Medication		
Prednisolone	n	12
Mycophenolatmofetile	n	10
Cyclophosphamide	n	0
Azathioprine	n	2
Hydroxychloroquine	n	8
Angiotensin-blocking agent	n	5

Supplement Table 3.
Demographic and Clinical Characteristics in Patients new Onset of LN

Race (n)	White	15
	Asian	0
	Others	2
Sex (n)	Female	12
	Male	5
Age at SLE diagnosis (years)	Mean	31±2.2
	Range	21.8-49.3
Age at diagnosis of LN (years)	Mean	37.3±2.4
	Range	22.1-55.5
Disease duration at the time of LN onset (years)	Mean	5.9±1.6
	Range	0.5-22.8
Clinical parameter at the time of LN onset		
Creatinine (mg/dl)		1.0±0.1
Proteinuria (24h collection) >0·5g	n	17
	Mean	2.1±0.3
	Range	0.6-6.3 g/d
ANA positive	n	16
anti-dsDNA positive	n	14
Depressed serum C3 level	n	11
	Mean	0.8±0.1
	Range	0.2-1.5
ISN/RPS class		
Class II	n	4
Class III	n	3
Class IV	n	9
Class V	n	1
Medication		
Prednisolone	n	16
Mycophenolatmofetile	n	12
Cyclophosphamide (only as induction therapy)	n	0
Azathioprine	n	2
Hydroxychloroquine	n	8
Angiotensin-blocking agent	n	5