

Supplemental Table S1. Differences in baseline characteristics between the two major induction treatment groups (mycophenolic acid versus cyclophosphamide).

Baseline characteristics	Mycophenolic acid group (N=27)	Cyclophosphamide group (N=69)	p-value
Age (yr) median(IQR)	31(22)	26(17)	0.25
Sex (M-F)N/%	5/18-22/82	14/20-55/80	1
Time from SLE diagnosis to LN (years)median(IQR)	7.5(8)	3(4.5)	0.02
SLEDAI score median(IQR)	10(5)	12(2)	0.01
Low C3 N/%	14/56	51/91	0.001
Low C4 N/%	11/44	44/78	0.002
Positive anti-dsDNA N/%	18/78	43/79	0.9
Proteinuria (g/24h) mean \pm SD	1.3 \pm 2.7	3 \pm 3.6	0.009
• Proteinuria >3g/d N/%	9 / 34	37 / 53	0.004
• Proteinuria 1-3g/d N/%	6 / 22	23 / 33	
• Proteinuria <1g/d N/%	12 / 44	9 / 14	
Active urine sediment N/%	22/81	67/97	0.01
Hypertension N/%	6/22	21/30	0.4
Serum albumin (g/dl) median(IQR)	3.7(1)	2.8(0.7)	0.001
Serum Cr(mg/dl) median(IQR)	0.8(0.4)	0.8(0.8)	0.56
eGFR (ml/min/1.73m ²) mean \pm SD	100 \pm 39	95 \pm 66	0.67
• eGFR >60 N/%	23/85	49/70	0.09
• eGFR 30-60 N/%	4/15	10/15	
• eGFR <30 N/%	-	10/15	
LN class			
• III N/%	13/48	13/19	<0.01
• IV N/%	6/22	40/58	
• III + V N/%	6/22	2/3	
• IV + V N/%	2/7	14/20	
Number of crescents median(IQR)	1(2)	3(5)	0.007
Activity indexmedian(IQR)	7(5.5)	11(6)	<0.001
Chronicity index median(IQR)	2(3)	2(2)	0.67
Interstitial fibrosis/tubular atrophy*			0.73
• <25% N/%	23 / 85	59 / 88	
• >25% N/%	4 / 15	8 / 12	
Duration of treatment (months) median(IQR)	38.5(38)	43(45)	0.3

eGFR: estimated glomerular filtration rate using the CKD-EPI formula, SLEDAI: systemic lupus erythematosus disease activity index, anti-ds DNA: antibodies against double stranded DNA

*refers to percentage of renal cortex involved by interstitial fibrosis and tubular atrophy

Supplemental Table S2. Predictors of complete response at 3-6-9-12-18-24 months.

Variables	Complete Remission		
	OR	95% Cis	p-value
3 months			
Univariate models			
Proteinuria at diagnosis (g/day) <1.5	9.4	3.16, 27	<0.001
6 months			
Multivariate model			
eGFR at diagnosis(ml/min/1.73m²) >60	2.85	0.85, 9.5	0.08
Proteinuria at diagnosis (g/day) <1.5	5.3	1.7, 16.5	0.004
9 months			
Multivariate model			
eGFR at diagnosis(ml/min/1.73m²) >60	4.04	1.22, 13	0.02
Proteinuria at diagnosis (g/day) <1.5	3.7	1.18, 11.7	0.02
12 months			
Multivariate model			
eGFR at diagnosis (ml/min/1.73m²)	1.68	0.53, 5.27	0.37

>60			
Proteinuria at diagnosis (g/day) <1.5	16.9	2.12, 134	0.008
Number of Crescents	0.92	0.81, 1.03	0.18
18 months			
Univariate models			
Proteinuria at diagnosis (g/day) <1.5	5.24	1.42, 19	0.01
24 months			
Univariate models			
Proteinuria at diagnosis (g/day) <1.5	4	1.08, 15	0.03

Supplemental Table S3. Response (CR or PR) at different time points as predictors of flare.

Categories	Univariate Models	
	OR	95 CIs (p-value)
Response at 3months		
PR or CR	Reference group	
None	1.05	0.41, 2.7 (0.9)
Response at 6months		
PR or CR	Reference group	
None	1.25	0.45, 3.4 (0.66)
Response at 9months		
PR or CR	Reference group	
None	2.2	0.65, 7.8 (0.19)
Response at 12months		
PR or CR	Reference group	
None	3.8	1.03, 14 (0.04)
Response at 18months		
PR or CR	Reference group	
None	4.9	1.4, 17 (0.01)
Response at 24months		
PR or CR	Reference group	
None	6.6	1.2, 34 (0.02)

CR:complete response, PR: partial response

Supplemental Table S4. Statistical tests examining correlation between independent predictors of risk of flare.

	LN class (III, IV, III/IV+V)	Induction Treatment (CYC, MPA)	Age (years)	Proteinuria at 12m (>0.8 vs<0.8 g/day)	Time to Either Remission (months)
Proteinuria at diagnosis (>2 vs <2 g/day)	Chi ² (p<0.001) Cramer's V=0.44	Chi ² (p=0.006) Cramer's V=- 0.28	Mann-Whitney U (p=0.12)	Chi ² (p=0.01) Cramer's V=0.28	Mann-Whitney U (p=0.01)
LN class (III, IV, III/IV+V)	-	Chi ² (p=0.003) Cramer's	Anova (p=0.42)	Chi ² (p=0.35) Cramer's	Anova (p=0.65)

		V=0.34		V=0.16	
Induction Treatment (CYC, MPA)	-	-	Mann–Whitney U (p=0.5)	Chi ² (p=0.37) Cramer's V= - 0.1	Mann–Whitney U (p=0.19)
Age (years)	-	-	-	Mann–Whitney U (p=0.1)	Spearman Correlation Coefficient r_s = 0.14
Proteinuria at 12m (>0.8, <0.8 g/day)	-	-	-	-	Mann–Whitney U (p<0.001)

Supplemental Table S5. Renal function at presentation, response to treatment and time to renal failure in patients with ESRD.

Patients with ESRD	GFR at LN diagnosis (ml/min/1.73m²)	Renal Response	Time to ESRD (months)
1	11	NR	0
2	110	PR	70
3	49	CR	147
4	34	CR	180
5	53	NR	55
6	22	NR	9
7	91	NR	4
8	19	PR	76
9	51	CR	159
10	12	CR	183
11	19	NR	4
12	15	NR	5

eGFR: estimated glomerular filtration rate using the CKD-EPI formula, CR:complete response, PR: partial response, NR: no response, ESRD: end stage renal

Supplemental Table S6.Responses at different time points as predictors of adverse renal outcome.

Categories	Univariate Models	
	OR	95 CIs (p-value)
Response at 3months		
PR or CR		Reference group
None	2.2	0.82, 6.3 (0.11)
Response at 6months		
PR or CR		Reference group
None	6.4	2.16, 19 (0.001)
Response at 9months		
PR or CR		Reference group
None	5.5	1.5, 20 (0.01)
Response at 12months		
PR or CR		Reference group
None	17.4	4, 75 (<0.001)
Response at 18months		
PR or CR		Reference group
None	10.7	2.9, 39 (<0.001)
Response at 24months		
PR or CR		Reference group
None	10.5	2.3, 47(0.002)

Supplemental Table S7. Statistical tests examining correlation between independent predictors of risk of adverse renal outcome.

	eGFR at diagnosis (>60, <60 ml/min/1.73m ²)	Interstitial fibrosis/Tubular atrophy (<25%, >25%)	Proteinuria at 12m (>0.8, <0.8 g/day)	Time to Either Remission (months)
Proteinuria at diagnosis (>1.5<1.5g/day)	Chi ² (p=0.01) Cramer's V=0.23	Chi ² (p=0.51) Cramer's V=-0.06	Chi ² (p=0.008) Cramer's V=0.29	Mann-Whitney <i>U</i> (p=0.02)
eGFR at diagnosis (>60, <60 ml/min/1.73m ²)	-	Chi ² (p<0.001) Cramer's V=0.39	Chi ² (p=0.08) Cramer's V=0.19	Mann-Whitney <i>U</i> (p=0.03)
Interstitial fibrosis/Tubular atrophy (<25%, >25%)	-	-	Chi ² (p=0.54) Cramer's V=0.06	Mann-Whitney <i>U</i> (p=0.24)
Proteinuria at 12m (>0.8, <0.8 g/day)	-	-	-	Mann-Whitney <i>U</i> (p<0.001)

Supplementary Figure S1: Kaplan-Meier survival estimates of probability for response according to [a] proliferative lupus nephritis class [b] treatment with cyclophosphamide versus MPA/MMF

