

Supplementary Materials

Comparison of the Effectiveness and Safety of Mycophenolate Mofetil and Cyclophosphamide in Lupus Nephritis: Evidence from a Real-World Study

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Table S1 Clinical and laboratory characteristics at 6 months follow-up.

	Before IPTW			After IPTW		
	MMF group (n=97)	CYC group (n=94)	p	MMF group (n=182)	CYC group (n=193)	p
White blood cells ($\times 10^9/L$)	7.4 $\pm$ 3.0	6.8 $\pm$ 2.6	0.176	7.3 $\pm$ 3.01	6.6 $\pm$ 2.5	0.165
Hemoglobin (g/L)	126.9 $\pm$ 17.6	124.9 $\pm$ 18.0	0.461	127.4 $\pm$ 17.7)	125.1 $\pm$ 17.8	0.470
Platelet counts ($\times 10^9/L$)	243.9 $\pm$ 72.3	216.6 $\pm$ 67.2	0.010*	247.6 $\pm$ 71.6	222.5 $\pm$ 64.7	0.031*
24-h UTP (g)	0.3 (0.1, 0.9)	0.5 (0.1, 1.7)	0.094	0.4 (0.1, 1.3)	0.5 (0.1, 1.5)	0.405
Hematuria, n (%)	45 (46.4)	40 (42.1)	0.594	81 (44.8)	85 (44.7)	0.993
Pyuria, n (%)	18 (18.6)	19 (20.0)	0.772	37 (20.7)	43 (22.8)	0.779
Cylindruria, n (%)	8 (8.2)	13 (13.7)	0.218	13 (7.1)	30 (15.8)	0.079
Serum creatinine ($\mu\text{mol/L}$)	72.5 (62.5, 86.5)	79.0 (71.1, 97.5)	0.001*	70.0 (62.0, 82.2)	76.0 (70.7, 92.6)	0.001*
Serum albumin (g/L)	38.6 $\pm$ 5.7	38.1 $\pm$ 5.0	0.662	38.0 $\pm$ 5.9	38.3 $\pm$ 5.3	0.772
Positive anti-dsDNA, n (%)	40 (41.2%)	41 (43.2%)	0.788	98 (54.0)	116 (60.5)	0.435
C3 (g/L)	0.80 $\pm$ 0.20	0.82 $\pm$ 0.22	0.551	0.81 $\pm$ 0.20	0.80 $\pm$ 0.21	0.569
C4 (g/L)	0.18 $\pm$ 0.07	0.18 $\pm$ 0.07	0.858	0.17 $\pm$ 0.07	0.17 $\pm$ 0.08	0.841
SLEDAI	6.8 $\pm$ 3.8	6.8 $\pm$ 4.5	0.910	6.8 $\pm$ 4.0	7.3 $\pm$ 5.2	0.576
Dose of Prednisolone (mg/d)	15.7 $\pm$ 5.2	18.6 $\pm$ 11.3	0.022*	16.1 $\pm$ 5.3	18.9 $\pm$ 13.6	0.134

* p < 0.05

Table S2 Clinical and laboratory characteristics at 12 months follow-up.

	Before IPTW			After IPTW		
	MMF group (n=92)	CYC group (n=85)	p	MMF group (n=175)	CYC group (n=183)	p
White blood cells ($\times 10^9/L$)	6.7 $\pm$ 2.9	5.5 $\pm$ 2.1	0.004*	6.8 $\pm$ 3.0	5.4 $\pm$ 2.0	0.002*
Hemoglobin (g/L)	128.1 $\pm$ 14.8	124.7 $\pm$ 18.7	0.197	128.8 $\pm$ 14.5	125.7 $\pm$ 18.8	0.305
Platelet counts ($\times 10^9/L$)	239.1 $\pm$ 57.1	215.5 $\pm$ 61.1	0.012*	236.7 $\pm$ 54.1	221.3 $\pm$ 59.1	0.112
24-h UTP (g)	0.1 (0.1,0.3)	0.2 (0.1,0.9)	0.005*	0.1 (0.1, 0.3)	0.2 (0.1, 0.9)	0.006*
Hematuria, n (%)	31 (34.1%)	25 (29.1%)	0.444	56 (32.6)	54 (31.0)	0.843
Pyuria, n (%)	13 (14.3%)	15 (17.4%)	0.587	22 (12.8)	34 (19 .5)	0.286
Cylindruria, n (%)	5 (5.5%)	8 (9.3%)	0.342	8 (4.8)	25 (14.2)	0.055
Ser creatinine ($\mu\text{mol/L}$)	75.0 (67.0, 84.0)	76.5 (68.0, 91.8)	0.091	74.0 (66.0, 84.0)	76.0 (68.0, 88.5)	0.136
Serum albumin (g/L)	41.0 $\pm$ 4.6	40.2 $\pm$ 3.8	0.230	40.7 $\pm$ 4.6	40.2 $\pm$ 4.0	0.493
Positive anti-dsDNA, n (%)	40 (44.4%)	40 (56.5%)	0.783	95 (55.8)	98 (56.4)	0.950
C3 (g/L)	0.81 $\pm$ 0.21	0.86 $\pm$ 0.20	0.124	0.83 $\pm$ 0.20	0.86 $\pm$ 0.20	0.356
C4 (g/L)	0.17 $\pm$ 0.07	0.19 $\pm$ 0.07	0.145	0.17 $\pm$ 0.06	0.19 $\pm$ 0.08	0.218
SLEDAI	4.8 $\pm$ 4.1	5.3 $\pm$ 4.9	0.441	4.5 $\pm$ 4.0	5.9 $\pm$ 5.4	0.103
Dose of Prednisolone (mg/d)	9.6 $\pm$ 3.3	11.2 $\pm$ 5.5	0.023*	9.7 $\pm$ 3.1	11.6 $\pm$ 5.9	0.021*

* p < 0.05

Table S3 Comparisons of demographics and baseline characteristics between two groups in biopsy-proven class III-V LN patients

	Before IPTW			After IPTW		
	MMF group (n= 60)	CYC group (n= 51)	p	MMF group (n=105)	CYC group (n=117)	p
Age of SLE onset (years)	28.1 ± 10.6	33.7 ± 13.7	0.017*	29.8 ± 11.5	29.7 ± 12.8	0.985
Age at enrollment (years)	31.6 ± 11.3	39.6 ± 14.4	0.001*	34.5 ± 12.7	34.4 ± 13.7	0.981
SLE duration (years)	1.0 (0.3, 4.8)	3.2 (0.3, 7.5)	0.181	1.0(0.3, 5.8	1.5 (0.3, 5.1]	0.678
Female, n (%)	46 (76.7)	42 (82.4)	0.616	83 (78.8)	94 (80.2)	0.881
White blood cells (×10 ⁹ /L)	6.5 ± 3.4	6.7 ± 3.7	0.861	6.3 ± 3.21	6.4 ± 3.6	0.907
Hemoglobin (g/L)	106.4 ± 19.3	101.5 ± 23.7	0.242	106.4 ± 19.2	103.7 ± 24.5	0.583
Platelet counts (×10 ⁹ /L)	199.1 ± 95.7	206.2 ± 79.3	0.677	192.9 ± 91.4	208.6 ± 78.2	0.366
24-h UTP (g)	4.2 (3.0, 5.8)	4.1 (2.5, 6.2)	0.903	4.2 (2.8, 5.6)	3.8 (2.3, 4.9)	0.458
Hematuria, n (%)	46 (76.7)	36 (70.6)	0.610	80 (75.8)	78(67.1)	0.385
Pyuria, n (%)	35 (58.3)	34 (66.7)	0.48-	64(60.9)	81(68.9)	0.440
Cylindruria, n (%)	21 (35.0)	20 (39.2)	0.794	42 (39.7)	49 (42.2)	0.822
Serum creatinine (μmol/L)	75.5 (66.0, 101.4)	77.0 (65.1, 101.0)	0.797	74.0 (66.00, 101.8)	77.0 (65.1, 90.8)	0.796
Serum albumin (g/L)	26.9 ± 5.5	25.8 ± 5.73	0.324	26.7 ± 5.5	26.6 ± 5.6	0.979
Positive anti-dsDNA, n (%)	52 (86.7)	45 (88.2)	1.000	89 (84.2)	109 (93.1)	0.13
C3 (g/L)	0.46 ± 0.24	0.45 ± 0.23	0.828	0.48 ± 0.26	0.44 ± 0.22	0.545
C4 (g/L)	0.10 ± 0.08	0.10 ± 0.07	0.799	0.10 ± 0.08)	0.10 ± 0.08)	0.851
SLEDAI	19.0 ± 5.9	18.8 ± 5.8	0.898	18.9 ± 6.3	18.6 ± 5.6	0.798
Initial dose of Prednisolone (mg/d)	60.6 ± 17.0	60.7 ± 19.3	0.965	59.9 ± 16.7	61.5 ± 18.4	0.666
HCQ usage, n (%)	52 (86.7)	33 (64.7)	0.013*	85 (80.5)	92 (78.4)	0.800
ACEI/ARB usage, n (%)	52 (86.7)	36 (70.6)	0.065	87 (82.2)	94 (80.5)	0.837

* p < 0.05

Table S4 Comparisons of remission rates between two groups III-V LN patients

		Before IPTW			After IPTW		
		MMF group (n=60)	CYC group (n=51)	p	MMF group (n=105)	CYC group (n=117)	p
6 months	CR, n (%)	27 (45.0)	14 (28.0)	0.101	46 (44.0)	35 (30.3)	0.213
	PR, n (%)	20 (33.3)	15 (29.4)	0.812	38 (36.1)	35 (29.8)	0.558
	TR, n (%)	47 (78.3)	29 (56.9)	0.026*	84 (80.1)	70 (59.7)	0.034*
		MMF group (n=58)	CYC group (n=48)	p	MMF group (n=101)	CYC group (n=109)	p
12 months	CR, n (%)	40 (71.4)	25 (54.3)	0.114	74 (75.1)	57 (54.2)	0.050*
	PR, n (%)	10 (17.5)	10 (20.8)	0.859	17 (17.1)	23 (21.1)	0.664
	TR, n (%)	50 (86.2)	35 (72.9)	0.143	91 (89.7)	80 (73.7)	0.032*

* p < 0.05

Table S5 Clinical and laboratory characteristics at 6 months follow-up in III-V LN patients

	Before IPTW			After IPTW		
	MMF group (n=60)	CYC group (n=51)	p	MMF group (n=105)	CYC group (n=117)	p
White blood cells ($\times 10^9/L$)	7.3 $\pm$ 2.8	7.0 $\pm$ 2.4	0.589	7.2 $\pm$ 2.8	6.7 $\pm$ 2.3	0.341
Hemoglobin (g/L)	126.8 $\pm$ 18.9	123.1 $\pm$ 20.1	0.344	126.3 $\pm$ 18.8	122.5 $\pm$ 18.8	0.347
Platelet counts ($\times 10^9/L$)	245.9 $\pm$ 73.7	228.2 $\pm$ 69.2	0.217	248.4 $\pm$ 71.7	231.8 $\pm$ 62.9	0.229
24-h UTP (g)	0.4 (0.1, 1.2)	0.7 (0.4, 1.9)	0.041*	0.5 (0.2, 1.3)	0.8 (0.4, 1.8)	0.050*
Hematuria, n (%)	33 (55.0)	30 (61.2)	0.646	57 (54.1)	77 (67.4)	0.204
Pyuria, n (%)	12 (20.0)	12 (24.5)	0.741	24 (22.6)	42 (36.9)	0.193
Cylindruria, n (%)	4 (6.7)	10 (20.4)	0.065	6 (5.5)	30 (26.6)	0.004*
Ser creatinine ($\mu\text{mol/L}$)	75.0 (62.0, 87.0)	78.0 (71.1, 96.0)	0.026*	72.1 (62.0, 86.6)	75.0 (71.5, 94.3)	0.036*
Serum albumin (g/L)	37.7 $\pm$ 6.2	37.2 $\pm$ 5.9	0.703	37.1 $\pm$ 6.4	36.7 $\pm$ 6.0	0.733
Positive anti-dsDNA, n (%)	34 (56.7)	26 (53.1)	0.855	56 (53.2)	65 (57.3)	0.713
C3 (g/L)	0.82 $\pm$ 0.21	0.80 $\pm$ 0.21	0.771	0.83 $\pm$ 0.20	0.76 $\pm$ 0.20	0.126
C4 (g/L)	0.19 $\pm$ 0.07	0.17 $\pm$ 0.06	0.251	0.18 $\pm$ 0.07	0.16 $\pm$ 0.07	0.095
SLEDAI	7.1 $\pm$ 3.6	8.1 $\pm$ 5.0	0.199	7.2 $\pm$ 3.8	9.7 $\pm$ 5.5	0.042*
Dose of Prednisolone (mg/d)	16.1 $\pm$ 5.0	17.3 $\pm$ 6.9	0.293	16.4 $\pm$ 5.0	16.5 $\pm$ 6.2	0.906

* p < 0.05

Table S6 Clinical and laboratory characteristics at 12 months follow-up in III-V LN patients

	Before IPTW			After IPTW		
	MMF group (n=58)	CYC group (n=48)	p	MMF group (n=101)	CYC group (n=109)	p
White blood cells ($\times 10^9/L$)	6.7 $\pm$ 3.22	5.5 $\pm$ 2.3	0.050*	6.8 $\pm$ 3.2	5.6 $\pm$ 2.2	0.035*
Hemoglobin (g/L)	129.4 $\pm$ 15.5	125.0 $\pm$ 17.8	0.208	129.6 $\pm$ 15.0	125.8 $\pm$ 18.3	0.341
Platelet counts ($\times 10^9/L$)	244.7 $\pm$ 57.4	229.6 $\pm$ 60.6	0.221	243.0 $\pm$ 54.7	234.7 $\pm$ 60.1	0.524
24-h UTP (g)	0.1 (0.1, 0.3)	0.3 (0.1, 0.9)	0.009*	0.1 (0.1, 0.3)	0.3 (0.1, 1.0)	0.004*
Hematuria, n (%)	23 (42.6)	18 (39.1)	0.883	40 (41.3)	48 (45.0)	0.751
Pyuria, n (%)	6 (11.1)	8 (17.4)	0.54	11 (11.4)	18 (17.1)	0.46
Cylindruria, n (%)	3 (5.6)	7 (15.2)	0.204	4(4.5)	27 (25.3)	0.004*
Ser creatinine ($\mu\text{mol/L}$)	76.0 (65.3, 86.8)	77.5 (68.0, 94.0)	0.175	75.0 (65.2, 86.0)	76.0 (68.0, 87.0)	0.339
Serum albumin (g/L)	40.8 $\pm$ 4.8	39.9 $\pm$ 4.2	0.368	40.4 $\pm$ 5.0	39.5 $\pm$ 4.5	0.428
Positive anti-dsDNA, n (%)	32 (59.3)	22 (47.8)	0.346	58.3 (60.9)	56.8 (53.7)	0.529
C3 (g/L)	0.83 $\pm$ 0.22	0.87 $\pm$ 0.20	0.395	0.84 $\pm$ 0.21	0.88 $\pm$ 0.20	0.491
C4 (g/L)	0.19 $\pm$ 0.07	0.20 $\pm$ 0.09	0.508	0.18 $\pm$ 0.07	0.19 $\pm$ 0.09)	0.607
SLEDAI	4.9 $\pm$ 4.2	5.9 $\pm$ 5.6	0.331	4.8 $\pm$ 4.2	6.9 $\pm$ 6.4	0.132
Dose of Prednisolone (mg/d)	9.4 $\pm$ 2.5	12.2 $\pm$ 6.9	0.030*	9.4 $\pm$ 2.5	12.2 $\pm$ 6.9	0.030*

* p < 0.05