

Validation of the revised Oxford classification for IgA nephropathy considering treatment with corticosteroids/immunosuppressors

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Supplementary Figure S1. Flow diagram of patient recruitment and enrollment.

1,147 primary IgAN patients diagnosed at our institution were enrolled

276 Excluded
149 Glomeruli < 8
101 Observation period < 1 year
without achieving ESRD
26 Both of them

871 Oxford analysis cohort
426 treated with immunosuppressors
445 not treated with immunosuppressors

350 Excluded
319 U-Prot < 0.5g/day
7 eGFR ≤ 30 mL/min/1.73m²
4 both of them
3 achieving ESRD within 1 year
17 insufficient data of U-Prot and/or eGFR

521 Original Oxford classification cohort
287 treated with immunosuppressors
234 not treated with immunosuppressors

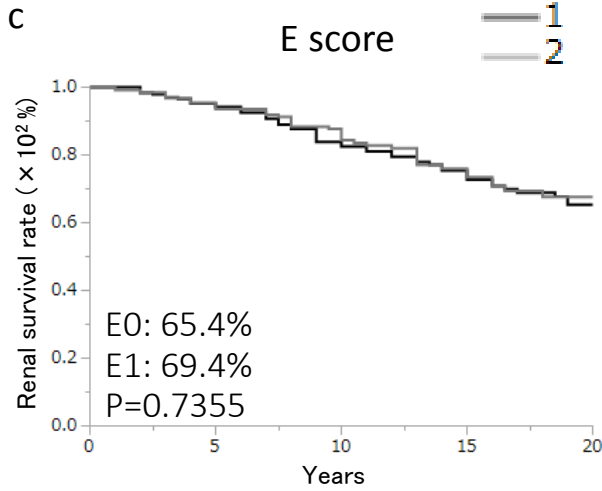
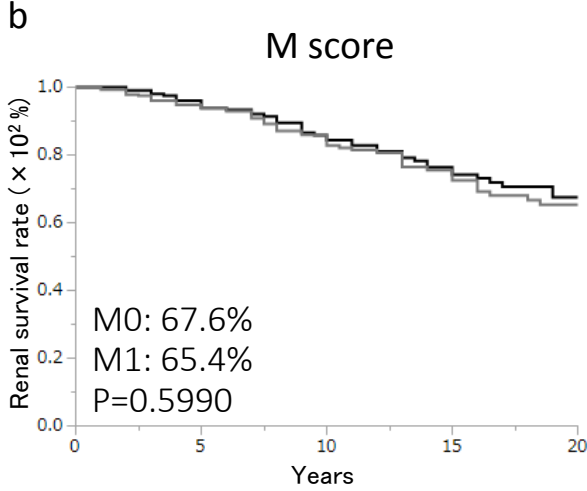
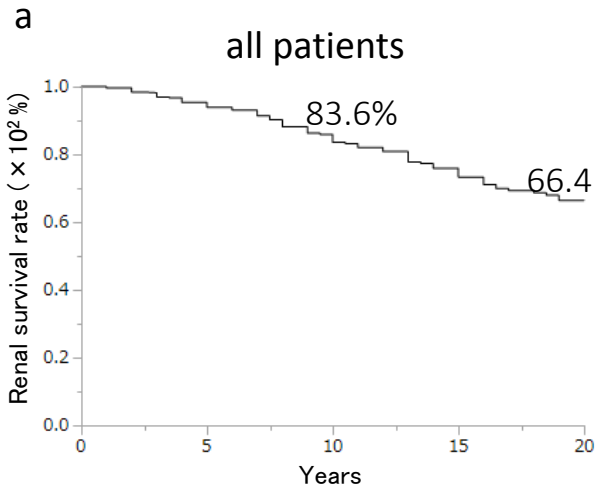
Supplementary Table S1. Comparison of baseline characteristics among all patients, non-treatment, and treatment groups

Baseline data	All patients	Non-treatment group	Treatment group	P-value between non-treatment and treatment groups
<i>Clinical findings</i>				
Age (years)	32.0 (25.3-43.0)	33.0 (26.0-44.0)	31.0 (25.0-41.0)	0.8983
Sex (Male /female)	293/227	123/94	170/133	0.8960
BMI (kg/m ²)	21.5 (19.8-23.7)	21.6 (19.7-23.5)	21.5 (19.9-23.9)	0.9282
SBP (mmHg)	122.0 (112.0-136.0)	124.0 (115.0-139.3)	120.0 (111.0-132.0)	0.0056
DBP (mmHg)	77.0 (68.0-85.0)	79.0 (70.0-86.3)	76.0 (67.0-83.0)	0.0986
MAP (mmHg)	92.0 (83.3-101.0)	93.0 (84.4-103.6)	90.7 (82.7-100.0)	0.0268
<i>Laboratory findings</i>				
TP (g/dL)				
Cr (mg/dl)	6.6 (6.1-7.0)	6.7 (6.1-7.1)	6.6 (6.1-7.0)	0.0845
eGFR (ml/min/1.73m ²)	0.84 (0.69-1.08)	0.88 (0.69-1.18)	0.81 (0.68-1.02)	0.0092
UA(mg/dl)	71.8 (56.2-90.3)	66.8 (52.6-85.6)	75.2 (57.1-94.0)	0.0098
T-Cho (mg/dl)	5.7 (4.8-6.8)	5.8 (4.8-7.2)	5.7 (4.8-6.7)	0.3448
TG (mg/dl)	202.9 (173.5-234.0)	192.0 (170.5-223.5)	209.0 (176.5-239.5)	0.0024
U-prot (mg/dl)	107.5 (78.8-164.3)	111.5 (78.0-166.3)	106.0 (79.0-156.8)	0.3526
U-RBC (counts/HF) (5<, 5-25, 26-49, 50-99,100≤)	1.17 (0.74-1.95)	1.00 (0.69-1.51)	1.3 (0.8-2.26)	0.0002
	47, 201, 90, 63, 108	26, 85, 35, 24, 46	21, 116, 55, 48, 62	0.1988
<i>Histological findings</i>				
M0/M1	228/292	111/106	117/186	0.0045
E0/E1	256/263	145/72	112/191	<0.0001
S0/S1	106/414	47/170	59/244	0.5424
T0/T1/T2	326/156/38	128/70/19	198/86/19	0.2860
C0/C1/C2	235/241/43	142/71/4	94/170/39	<0.0001

Abbreviations; BMI: Body mass index, SBP: systolic blood pressure, DBP: diastolic blood pressure, MAP mean arterial pressure, TP: serum total protein, Cr: serum creatinine, eGFR: estimated glomerular filtration rate, UA: serum uric acid, T-cho: serum total cholesterol, TG: triglyceride, U-Prot: urinary protein excretion, U-RBC: urinary red blood cells, HPF: high power field, M: mesangial hypercellularity, E: endocapillary hypercellularity, S: segmental sclerosis, T: interstitial fibrosis/tubular atrophy, C: crescents,

Supplementary Figure S2. Renal survival rates of all patients in each Oxford classification

— 0
— 1
— 2

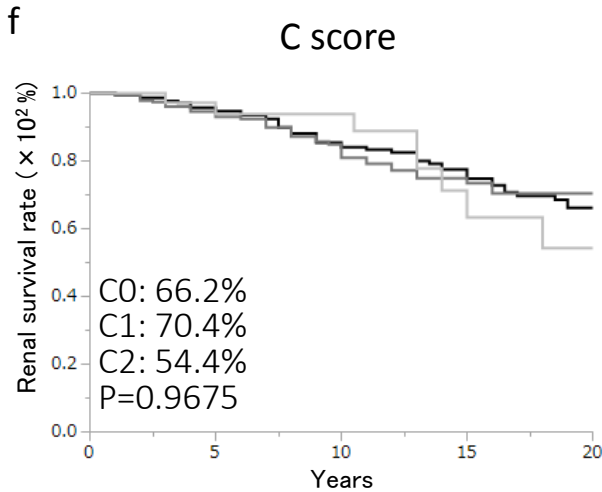
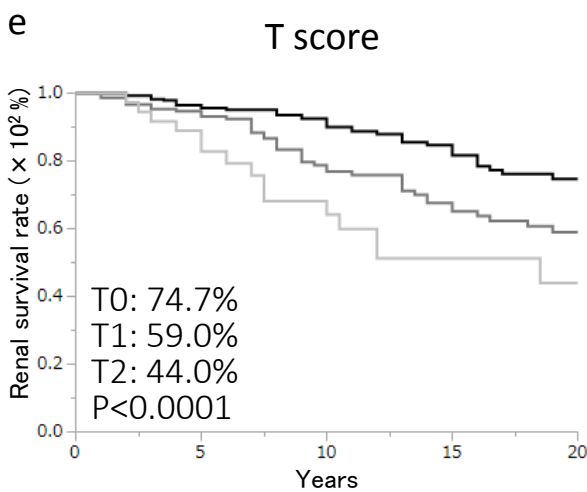
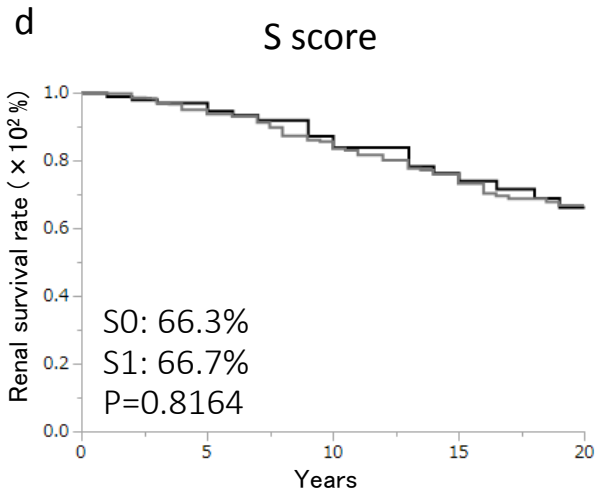


Number of patients

520	254	81
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M0 228	115	40
M1 292	135	41

E0 257	123	50
E1 263	130	31



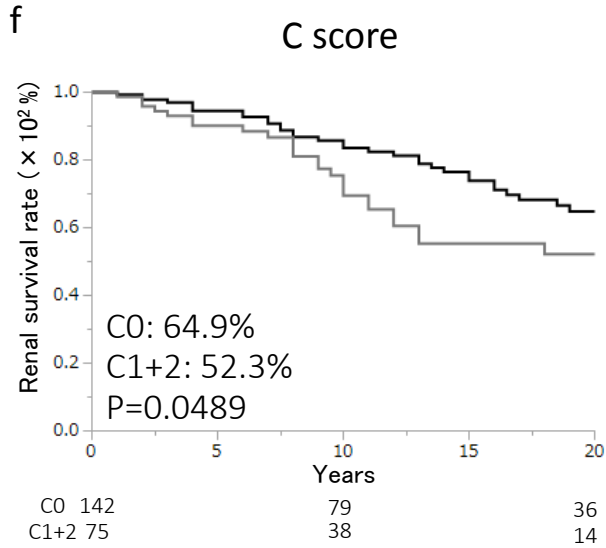
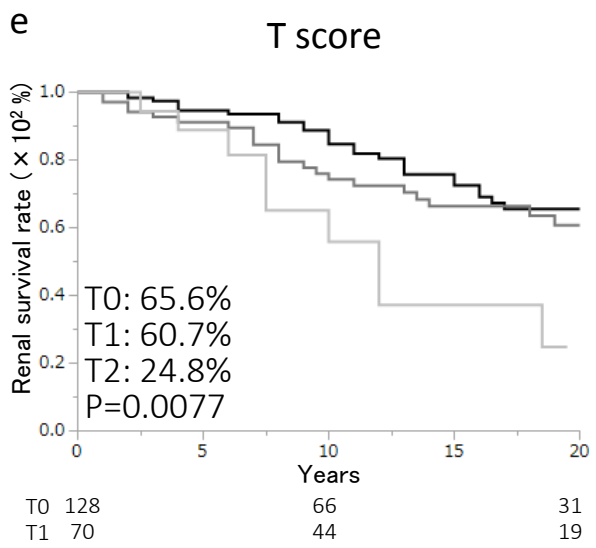
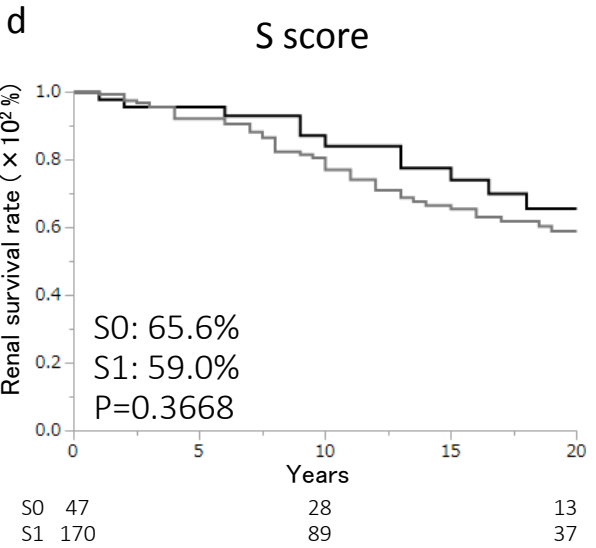
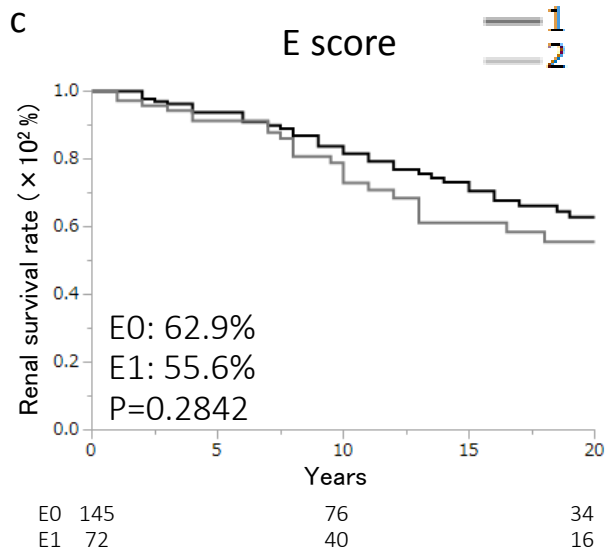
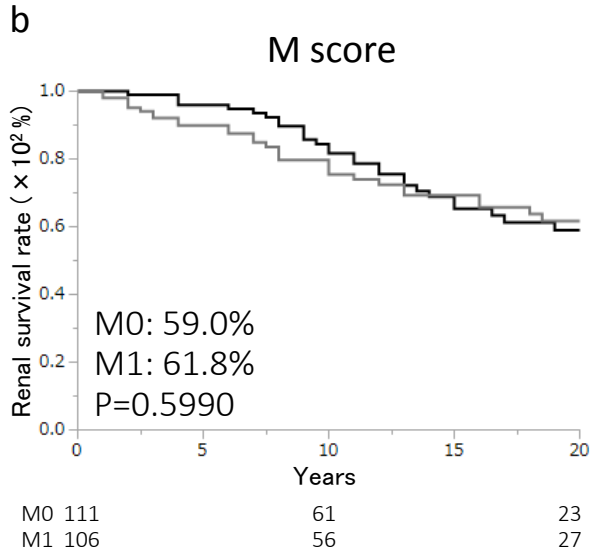
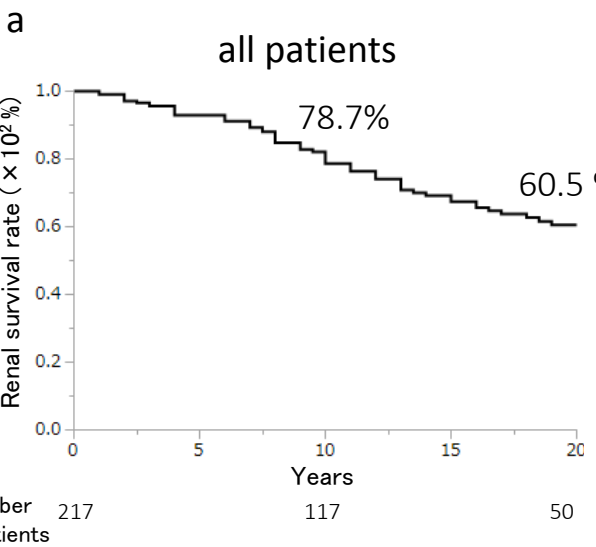
S0 106	52	23
S1 414	202	58

T0 326	153	47
T1 156	84	31
T2 58	17	3

C0 236	124	51
C1 241	105	24
C2 43	25	6

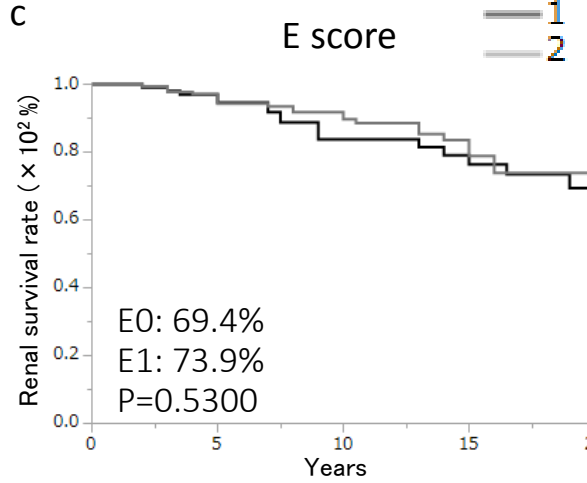
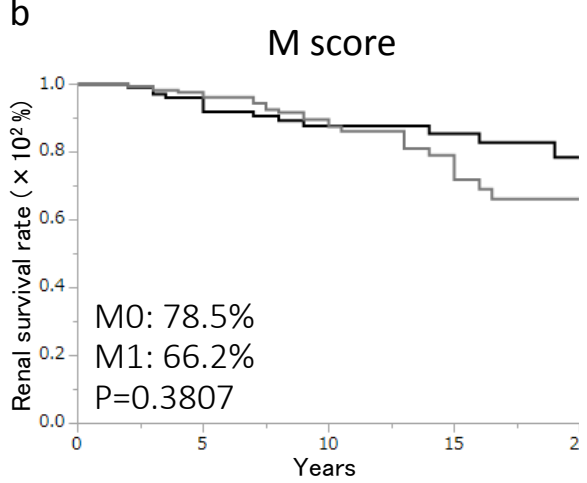
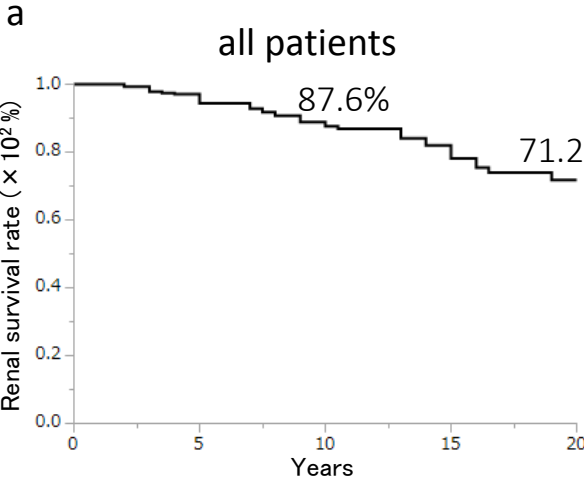
Supplementary Figure S3. Renal survival rates of the non-treatment group in each Oxford classification

— 0
— 1
— 2



Supplementary Figure S4. Renal survival rates of the treatment group in each Oxford classification

0
1
2

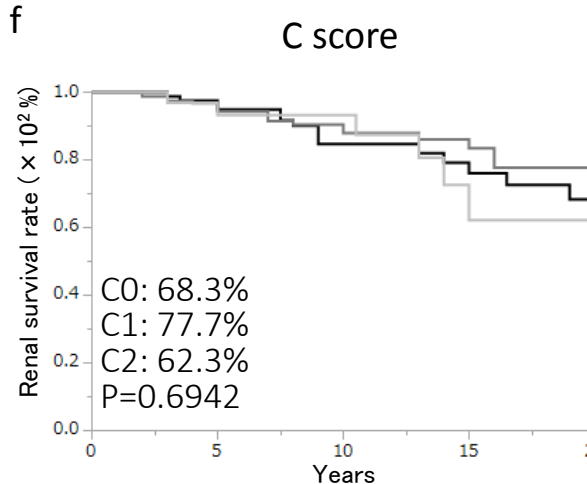
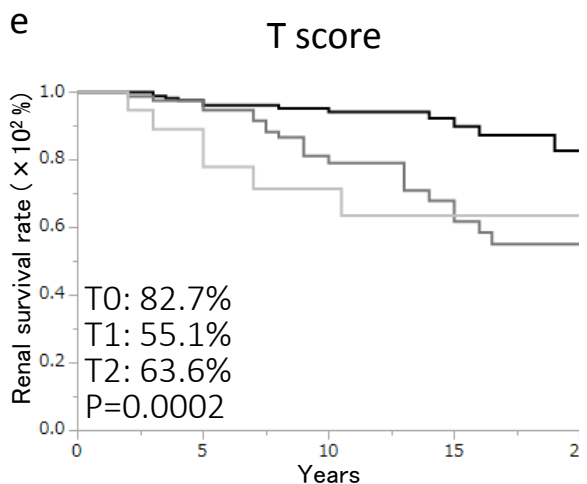
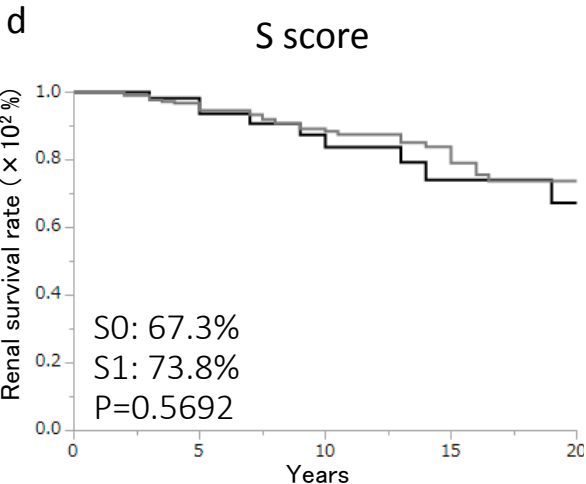


Number of patients

303	137	31
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M0	117	54	17
M1	186	83	14

E0	112	47	16
E1	191	90	15



S0	59	24	10
S1	244	113	21

T0	198	87	16
T1	86	40	12
T2	19	10	3

C0	94	45	15
C1	170	70	11
C2	39	22	5

Supplementary Table S2. Independent risk factors for progression to ESRD in the multivariate Cox regression analysis in each group

Baseline data	All patients	Non-treatment group	Treatment group
<i>Clinical findings</i>			
Age (per 10 years increase)	0.79, 0.54-1.14, P=0.2106	0.69, 0.39-1.19, P=0.1797	0.82, 0.46-1.44, P=0.4921
Sex (male vs female)	1.65, 1.07-2.57, P=0.1565	1.76, 0.95-3.37, P=0.0744	1.50, 0.75-2.98, P=0.2461
BMI (per 1kg/m ² increase)	0.89, 0.76-1.04, P=0.3500	0.98, 0.79-1.21, P=0.8281	0.85, 0.66-1.09, p=0.2032
MAP (per 10 mmHg increase)	1.29, 1.06-1.57, P=0.0117	1.30, 0.98-1.73, P=0.0724	1.30, 0.94-1.77, P=0.1077
<i>Laboratory findings</i>			
eGFR (per 30ml/min decrease)	2.39, 1.67-3.49, P<0.0001	2.29, 1.38-3.95, P=0.0011	2.26, 1.27-4.10, P=0.0052
U-Prot (per 0.5 g/day increase)	1.74, 1.42-2.12, P<0.0001	1.70, 1.29-2.24, P=0.0002	2.00, 1.44-2.82, P<0.0001
U-RBC (per 25/HPF increase)	1.74, 0.87-1.12, P=0.8542	1.13, 0.96-1.32, P=0.1319	0.86, 0.68-1.08, P=0.2076
<i>Histological findings</i>			
M1 (vs. M0)	0.98, 0.64-1.49, P=0.8947	1.01, 0.58-1.77, P=0.9764	1.32, 0.65-2.80, P=0.3388
E1 (vs. E0)	0.92, 0.54-1.54, P=0.7484	0.91, 0.45-1.80, P=0.7969	1.12, 0.46-2.81, P=0.7999
S1 (vs. S0)	1.27, 0.75-2.24, P=0.3787	2.22, 1.05-5.14, P=0.0365	0.82, 0.38-1.97, P=0.6458
T1-2 (per 1 grade increase)	1.13, 0.81-1.56, P=0.4735	0.95, 0.58-1.52, P=0.8288	1.38, 0.80-2.37, P=0.2387
C1-2 (per 1 grade increase)	0.96, 0.64-1.44, P=0.8496	1.52, 0.86-2.66 P=0.1467	0.73, 0.35-1.46, P=0.3830

Abbreviations; BMI: Body mass index, MAP mean arterial pressure, TP: serum total protein, eGFR: estimated glomerular filtration rate, U-Prot: urinary protein excretion, U-RBC: urinary red blood cells, M: mesangial hypercellularity, E: endocapillary hypercellularity, S: segmental sclerosis, T: interstitial fibrosis/tubular atrophy, C: crescents,