SUPPLEMENTARY MATERIAL

Full title:

Characteristics of Acute Ischemic Stroke in Patients with Nephrotic Syndrome

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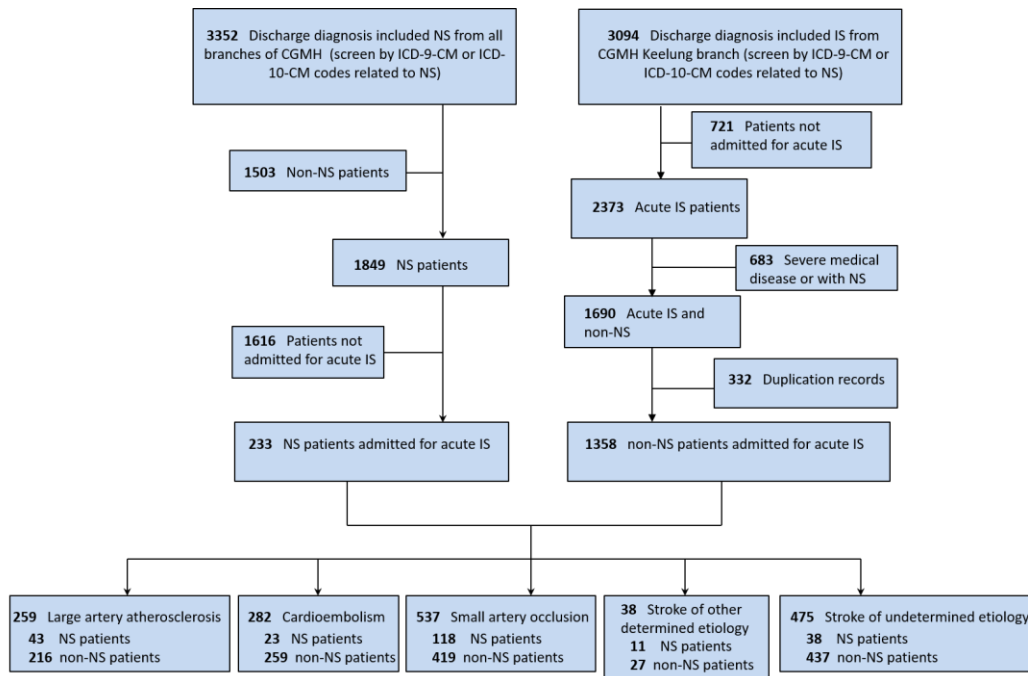
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Supplementary Figure 1. Flow of study selection. NS indicates nephrotic syndrome;

IS, ischemic stroke.

Supplementary Table 1. The results of kidney biopsy and etiology of nephrotic syndrome.

	Total nephrotic syndrome patients (n=233)
With kidney biopsy (n=34)	
Membranous glomerulonephritis	16 (6.9%)
Minimal change nephropathy	1 (0.4%)
Focal segmental glomerulosclerosis	1 (0.4%)
Diffuse mesangial proliferative glomerulonephritis	1 (0.4%)
IgM nephropathy	1 (0.4%)
IgA nephropathy	2 (0.9%)
Amyloidosis	3 (1.3%)
Systemic lupus erythematosis	6 (2.6%)
Diabetic nephropathy (biopsy confirmed)	3 (1.3%)
Without kidney biopsy (n=199)	
Diabetic nephropathy	118 (50.6%)
Unknown	81 (34.8%)

Supplementary Table 2. The stages of chronic kidney disease in patients with nephrotic syndrome.

	Nephrotic syndrome N=233
Chronic kidney disease stage 1	29 (12.4%)
Chronic kidney disease stage 2	51 (21.9%)
Chronic kidney disease stage 3	74 (31.8%)
Chronic kidney disease stage 4	36 (15.5%)
Chronic kidney disease stage 5 (without hemodialysis or peritoneal dialysis)	29 (12.4%)
Chronic kidney disease stage 5 (with hemodialysis or peritoneal dialysis)	14 (6.0%)

Supplementary Table 3. Demographic features of ischemic stroke patients with and without nephrotic syndrome.

	Nephrotic syndrome (n=233)	No nephrotic syndrome (n=1358)	Odds ratio (95% CI)	*P* value
Age (year-old)	60.58±13.35	69.64±13.28		<0.001*
Male	145 (62.2%)	837 (61.6%)	1.03 (0.77-1.37)	0.462
Height (cm)	162.58±7.62	160.47±9.61		0.092
Body weight (kg)	62.92±10.68	64.35±14.48		0.218
BMI (kg/m2)	26.06±5.12	25.10±6.11		0.291
SBP at admission (mmHg)	169.95±27.15	159.06±29.79		0.032*
DBP at admission (mmHg)	90.74±17.76	87.35±18.25		0.302
Risk factors				
Hypertension	195 (83.7%)	1014 (74.7%)	1.74 (1.20-2.52)	0.001†
Diabetes mellitus	152 (65.2%)	574 (42.3%)	2.56 (1.92-3.43)	<0.001†
Hyperlipidemia	149 (63.9%)	759 (55.9%)	1.40 (1.05-1.87)	0.013†
Coronary artery disease	35 (15.0%)	146 (10.8%)	1.47 (0.99-2.19)	0.040†
Congestive heart failure	32 (13.7%)	81 (6.0%)	2.51 (1.62-3.88)	<0.001†
Previous TIA	15 (6.4%)	45 (3.3%)	2.01 (1.10-3.66)	0.022†
Atrial fibrillation	23 (9.9%)	285 (21.0%)	0.41 (0.26-0.65)	<0.001†
Hyperuricemia	40 (17.2%)	140 (10.3%)	1.80 (1.23-2.64)	0.002†
PAOD	9 (3.9%)	17 (1.3%)	3.17 (1.40-7.20)	0.009†
Smoking	22 (9.4%)	218 (16.1%)	0.55 (0.34-0.87)	0.005†
Other diseases				
COPD	12 (5.2%)	71 (5.2%)	0.98 (0.53-1.85)	0.557
Systemic lupus erythematosis	6 (2.6%)	2 (0.1%)	17.92 (3.60-89.34)	<0.001†
Lab data				
WBC (1000/μL)	8209.01±3079.67	8399.18±3108.89		0.393
Hemoglobin (g/dL)	12.02±2.22	13.62±2.09		<0.001*
Platelet (1000/μL)	220.94K±77.51K	229.99K±77.49K		0.104
INR	1.03±0.28	1.02±0.28		0.470
APTT/NC	1.02±0.98	0.98±0.98		0.260
Fibrinogen (mg/dL)	441.54±172.69	334.89±123.19		<0.001*
Sugar (mg/dL)	169.16±95.49	143.81±70.97		0.014*
Glycohemoglobin (%)	8.05±2.44	6.77±1.86		<0.001*
Hs-CRP (mg/L)	13.45±11.96	15.23±10.54		0.588
ESR (mm/hr)	44.84±32.87	16.68±17.12		<0.001*

BUN (mg/dL)	31.06±11.80	16.19±6.08	<0.001*
Creatinine (mg/dL)	2.85±1.24	0.92±0.61	<0.001*
eGFR (mL/min/1.73 m^2)	46.57±29.81	79.84±14.82	<0.001*
AST (U/L)	26.63±18.33	31.45±11.21	0.117
ALT (U/L)	23.18±19.44	25.92±15.23	0.164
Total cholesterol (mg/dL)	234.38±88.97	183.36±42.86	<0.001*
Triglyceride (mg/dL)	208.24±96.21	134.78±41.15	<0.001*
LDL (mg/dL)	154.57±45.60	117.41±38.65	<0.001*
HDL (mg/dL)	40.79±16.07	41.22±13.50	0.709
Uric acid (mg/dL)	6.60±1.94	5.48±2.22	<0.001*
Sodium (mmol/L)	138.67±4.38	138.77±3.78	0.734
Potassium (mmol/L)	4.04±0.78	4.07±0.91	0.900
Calcium (mg/dL)	8.38±1.16	8.70±0.98	0.007*
Phosphate (mg/dL)	4.03±1.51	4.02±2.42	0.649
Albumin (g/dL)	2.82±0.77	3.58±0.56	<0.001*
Total protein (g/dL)	5.69±2.01	5.75±1.21	0.550

CI = confidence interval; BMI= body mass index; SBP = systolic blood pressure; DBP = diastolic blood pressure; TIA = transient ischemic attack; PAOD = peripheral arterial occlusive disease; COPD = chronic obstructive lung disease; WBC = white blood cells; INR = international normalized ratio; APTT/NC = activated partial thromboplastin time/normal control; hs-CRP = high-sensitivity C-reactive protein; ESR = erythrocyte sedimentation rate; BUN = blood urea nitrogen; eGFR = estimated glomerular filtration rate; AST = aspartate transaminase; ALT = alanine aminotransferase; LDL = low-density lipoprotein; HDL= high-density lipoprotein.

Data are presented as mean ± standard deviation or n (%).

*P < 0.05, Student t test; † P < 0.05, Chi-square test

Supplementary Table 4. Logistic regression for predictors of dependent functional status (modified Rankin Scale score≧3) in patients with ischemic stroke following the 30-day period.

Variables	Univariate Logistic Regression OR (95% CI)	P value	Multivariate Logistic Regression OR (95% CI)	P value
Age	1.03 (1.02-1.03)	<0.001*	1.02 (1.01-1.03)	0.002†
Male	0.70 (0.57-0.86)	0.001*	0.76 (0.60-0.98)	0.035†
Hypertension	1.01 (0.81-1.28)	0.914		
Diabetes mellitus	1.02 (0.84-1.24)	0.836		
Hyperlipidemia	0.71 (0.58-0.87)	0.001*		
CAD	1.19 (0.87-1.63)	0.269		
CHF	2.74 (1.80-4.18)	<0.001*		
Atrial fibrillation	2.95 (2.25-3.85)	<0.001*	1.44 (1.02-2.04)	0.040†
Nephrotic syndrome	2.07 (1.55-2.76)	<0.001*	4.02 (2.39-6.76)	<0.001†
Hyperuricemia	0.83 (0.61-1.13)	0.236		
TACS	28.55 (15.01-54.34)	<0.001*	13.72 (6.96-27.04)	<0.001†
Pneumonia	13.50 (9.00-20.55)	<0.001*	5.69 (3.64-8.89)	<0.001†
Pulmonary edema	39.21 (5.37-286.48)	<0.001*	9.58 (1.20-76.26)	0.033†
WBC count > 10000 1000/μL	2.07 (1.61-2.67)	<0.001*	1.52 (1.11-2.08)	0.008†
Hemoglobin < 12 g/dL	2.40 (1.87-3.08)	<0.001*	1.52 (1.10-2.08)	0.010†
eGFR<60 mL/min/1.73 m^2	1.87 (1.32-2.65)	<0.001*	0.54 (0.29-1.02)	0.056
Sodium < 135 mmol/L	2.12 (1.49-3.02)	<0.001*		
hs-CRP > 3 mg/L	3.85 (3.05-4.85)	<0.001*	2.20 (1.67-2.89)	<0.001†

OR = odds ratio; CI = confidence interval; CAD = coronary artery disease; CHF = congestive heart failure; TACS = total anterior circulation syndrome; eGFR = estimated glomerular filtration rate; WBC = white blood cell; hs-CRP = high-sensitivity C-reactive protein.

*$P < 0.1$ for the univariate logistic regression, and †$P < 0.05$ for the stepwise multivariate logistic regression.

Supplementary Table 5. Clinical courses of ischemic stroke patients with and without nephrotic syndrome.

	Nephrotic syndrome (n=233)	No nephrotic syndrome (n=1358)	Odds ratio (95% CI)	*P* value
Clinical syndromes				
TACS	15 (6.4%)	205 (15.1%)	0.39 (0.23-0.67)	<0.001†
PACS	67 (28.8%)	421 (31.0%)	0.90 (0.66-1.22)	0.272
LACS	90 (38.6%)	517 (38.1%)	1.02 (0.77-1.36)	0.463
POCS	60 (25.8%)	218 (16.1%)	1.82 (1.31-2.52)	<0.001†
TOAST classification				
Large-artery atherosclerosis	43 (18.45%)	216 (15.91%)	1.20 (0.84-1.73)	0.316
Cardioembolism	23 (9.87%)	259 (19.07%)	0.47 (0.30-0.73)	<0.001†
Small-artery occlusion	118 (50.64%)	419 (30.85%)	2.32 (1.75-3.08)	<0.001†
Stroke of other determined etiology	11 (4.72%)	27 (1.99%)	2.44 (1.20-5.00)	0.012†
Stroke of undetermined etiology	38 (16.31%)	437 (32.18%)	0.43 (0.30-0.61)	<0.001†
Intra-arterial thrombectomy	0 (0%)	2 (0.1%)		0.728
Intra-venous thrombolysis	4 (1.7%)	74 (5.4%)	0.30 (0.11-0.84)	0.006†
Mean length of stay in the acute medicine ward (days)	14.73±12.35	13.42±10.19		0.086
Stroke in evolution	29 (12.4%)	181 (13.3%)	0.92 (0.61-1.41)	0.403
Complication at admission				
Pneumonia	40 (17.2%)	248 (18.3%)	0.93 (0.64-1.34)	0.384
GI bleeding	21 (9.0%)	134 (9.9%)	0.91 (0.56-1.47)	0.395
Urinary tract infection	29 (12.4%)	184 (13.5%)	0.91 (0.60-1.38)	0.368
Other infection	17 (7.3%)	67 (4.9%)	1.52 (0.87-1.63)	0.095
Acute coronary syndrome	3 (1.3%)	19 (1.4%)	0.92 (0.27-3.13)	0.594
Venous thromboembolism	2 (0.9%)	5 (0.4%)	2.34 (0.45-12.15)	0.273
Pulmonary edema	13 (5.6%)	25 (1.8%)	3.15 (1.59-6.25)	0.002†
Medication during admission				
Warfarin	13 (5.6%)	47 (3.5%)	1.65 (0.88-3.10)	0.088
Aspirin	143 (61.4%)	853 (62.8%)	0.96 (0.72-1.27)	0.402
P2Y12 inihbitors	57 (24.5%)	264 (19.4%)	1.34 (0.97-1.86)	0.049†
Heparin in acute stage	10 (4.3%)	25 (1.8%)	2.39 (1.13-5.05)	0.024†
NOACs	1 (0.4%)	146 (10.8%)	0.04 (0.01-0.26)	<0.001†
Statins	82 (35.2%)	596 (43.9%)	0.69 (0.52-0.93)	0.008†
Glasgow coma scale score				
Upon admission	15 (15-15)	15 (15-15)		0.001*

Upon discharge	15 (15-15)	15 (15-15)		<0.001*
NIHSS score				
Upon admission	6 (4-14)	4 (3-9)		0.087
Upon discharge	6 (3-18)	4 (3-10)		0.241
modified Rankin scale score				
Upon admission	3 (2-4)	2 (1-4)		<0.001*
Upon admission	3 (2-4)	2 (1-4)		<0.001*
Death within 30 days	8 (3.4%)	64 (4.7%)	0.72 (0.34-1.52)	0.249
Recurrent stroke within 30 days	0 (0%)	7 (0.5%)		0.331
modified Rankin scale score≧3	151 (64.8%)	640 (47.1%)	2.07 (1.55-2.76)	<0.001†

CI = confidence interval; TACS = total anterior circulation syndrome; PACS = partial anterior circulation syndrome; LACS = lacunar syndrome; POCS = posterior circulation syndrome; TOAST = Trial of ORG 10172 in Acute Stroke Treatment; GI = gastrointestinal; NOACs = non-vitamin K antagonist oral anticoagulants; NIHSS = national institute of health stroke scale.

Data are presented as mean ± standard deviation, median (interquartile range) or n (%).

*P < 0.05, Student t test or Mann-Whitney U test; † P < 0.05, Chi-square test

Supplementary Table 6. Primary and secondary endpoints of ischemic stroke patients with and without nephrotic syndrome, specified in Keelung branch of Chang Gung Memorial Hospital, from 2016 to 2017.

	Nephrotic syndrome (n=17)	No nephrotic syndrome (n=769)	P value
Death within 30 days	1 (5.9%)	38 (4.9%)	0.217
Recurrent stroke within 30 days	0 (0%)	4 (0.5%)	0.911
modified Rankin scale score ≧ 3	13 (76.5%)	320 (41.6%)	
Odds ratio (95% CI)	4.56 (1.47-14.11)	1	0.004†
Adjusted odds ratio (95% CI)	3.95 (1.10-14.11)	1	0.035‡

CI = confidence interval.

Data are presented as n (%).

†$P < 0.05$, Chi-square test; ‡ $P < 0.05$, adjusted odds ratio and P value using multivariate logistic regression analysis, variates include age, male gender, hyperlipidemia, congestive heart failure, atrial fibrillation, nephrotic syndrome, total anterior circulation syndrome, pneumonia, pulmonary edema, white blood cell count > 10000 1000/μL, Hemoglobin < 12 g/dL, estimated glomerular filtration rate < 60 mL/min/1.73 m^2, Sodium < 135 mmol/L, and high-sensitivity C-reactive protein > 3 mg/L.

Supplementary Table 7. Primary and secondary endpoints of ischemic stroke

patients with and without nephrotic syndrome, specified in the group with estimated

glomerular filtration rate ≥ 60 mL/min/1.73 m^2.

	Nephrotic syndrome (n=80)	No nephrotic syndrome (n=1358)	*P* value
Death within 30 days	1 (1.2%)	64 (4.7%)	0.111
Recurrent stroke within 30 days	0 (0%)	7 (0.5%)	0.669
modified Rankin scale score ≥ 3	53 (66.2%)	640 (47.1%)	
Odds ratio (95% CI)	2.20 (1.37-3.54)	1	0.001†
Adjusted odds ratio (95% CI)	4.24 (2.51-7.14)	1	<0.001‡

CI = confidence interval.

Data are presented as n (%).

†*P* < 0.05, Chi-square test; ‡ *P* < 0.05, adjusted odds ratio and *P* value using

multivariate logistic regression analysis, variates include age, male gender,

hyperlipidemia, congestive heart failure, atrial fibrillation, nephrotic syndrome, total

anterior circulation syndrome, pneumonia, pulmonary edema, white blood cell count

> 10000 1000/μL, Hemoglobin < 12 g/dL, Sodium < 135 mmol/L, and high-

sensitivity C-reactive protein > 3 mg/L.

Supplementary Table 8. Demographic features and clinical courses of ischemic stroke patients, with and without nephrotic syndrome.

	Large-artery atherosclerosis		Cardioembolism		Small-artery occlusion		Stroke of other determined etiology		Stroke of undetermined etiology	
	NS (n=43)	No NS (n=216)	NS (n=23)	No NS (n=259)	NS (n=118)	No NS (n=419)	NS (n=11)	No NS (n=27)	NS (n=38)	No NS (n=437)
Age (years)	60.16±15.39	68.59±12.53	68.35±10.42	76.47±11.49	61.03±10.20	67.08±12.47	36.91±14.69	53.93±14.86	61.77±13.71	69.48±13.50
P value	<0.001*		0.001*		<0.001*		0.003*		0.001*	
Male (%)	25 (58.1%)	142 (65.7%)	16 (69.6%)	135 (52.1%)	75 (63.6%)	266 (63.5%)	6 (54.5%)	13 (48.1%)	24 (63.2%)	277 (63.4%)
OR (95% CI)	0.71 (0.37-1.39)		2.08 (0.83-5.23)		0.98 (0.64-1.50)		1.29 (0.32-5.28)		0.91 (0.47-1.79)	
P value	0.206		0.084		0.511		0.500		0.458	
Height (cm)	161.67±8.13	161.24±9.05	164.55±3.02	158.19±5.78	162.02±7.97	160.51±9.56	165.83±10.01	160.61±8.99	163.50±6.59	161.41±7.51
P value	0.875		0.206		0.498		0.236		0.538	
Weight (kg)	61.40±15.41	65.32±14.54	67.26±4.16	60.26±13.21	64.36±9.35	67.46±10.20	57.33±4.23	58.28±10.18	58.36±10.80	63.30±13.95
P value	0.256		<0.001*		0.049*		0.759		0.209	
BMI (kg/m2)	25.64±4.70	25.28±5.32	24.67±1.58	24.99±3.44	27.34±9.48	25.86±4.55	19.54±1.18	22.52±3.94	23.76±2.31	24.48±3.38
P value	0.836		0.940		0.222		0.218		0.435	
SBP at admission (mmHg)	175.17±29.47	162.69±31.21	160.33±37.29	153.40±31.14	176.20±27.64	164.68±26.38	160±28.10	152.83±30.76	156.89±20.94	155.57±30.29
P value	0.373		0.712		0.089		0.838		0.899	
DBP at admission (mmHg)	95.80±29.04	87.08±18.22	88.50±23.53	88.60±22.43	91.72±18.68	88.04±15.94	90.01±22.88	95.67±17.11	86.56±10.62	85.37±17.85
P value	0.352		0.995		0.400		0.771		0.846	
Risk factors (%)										
Hypertension	38 (88.4%)	171 (79.2%)	21 (91.3%)	185 (71.4%)	101 (85.6%)	341 (81.4%)	7 (63.6%)	9 (33.3%)	29 (76.3%)	302 (69.1%)
OR (95% CI)	1.96 (0.73-5.26)		4.14 (0.95-18.12)		1.31 (0.74-2.31)		3.50 (0.81-15.16)		1.28 (0.61-2.70)	

P value	0.126		0.029†		0.219		0.088		0.329
DM	30 (69.8%)	124 (57.4%)	7 (30.4%)	81 (31.3%)	95 (80.5%)	192 (45.8%)	1 (9.1%)	8 (29.6%)	20 (52.6%)	167 (38.2%)
OR (95% CI)	1.69 (0.84-3.43)		0.96 (0.38-2.41)		4.82 (2.94-7.90)		0.24 (0.03-2.18)		1.69 (0.88-3.26)
P value	0.095		0.565		<0.001†		0.179		0.081
Hyperlipidemia	30 (69.8%)	143 (66.2%)	7 (30.4%)	93 (35.9%)	82 (69.5%)	265 (63.2%)	6 (54.5%)	9 (33.3%)	25 (65.8%)	244 (55.8%)
OR (95% CI)	1.16 (0.57-2.36)		0.78 (0.31-1.96)		1.30 (0.84-2.01)		2.40 (0.57-10.04)		1.40 (0.71-2.76)
P value	0.412		0.385		0.146		0.198		0.213
CAD	3 (7.0%)	23 (10.6%)	6 (26.1%)	41 (15.8%)	19 (16.1%)	36 (8.6%)	0 (0%)	1 (3.7%)	7 (18.4%)	36 (8.9%)
OR (95% CI)	0.43 (0.13-1.47)		1.87 (0.70-5.02)		2.03 (1.11-3.69)				2.42 (1.00-5.88)
P value	0.124		0.166		0.018†		0.711		0.051
CHF	8 (18.6%)	5 (2.3%)	6 (26.1%)	47 (18.1%)	12 (10.2%)	9 (2.1%)	1 (9.1%)	1 (3.7%)	5 (13.2%)	19 (4.3%)
OR (95% CI)	9.60 (2.97-31.03)		1.58 (0.59-4.23)		5.12 (2.10-12.47)		2.60 (0.15-45.68)		3.22 (1.13-9.16)
P value	<0.001†		0.250		<0.001†		0.501		0.038†
AF	0 (0%)	4 (1.9%)	20 (87.0%)	245 (94.6%)	2 (1.7%)	10 (2.4%)	0 (0%)	0 (0%)	1 (2.6%)	26 (5.9%)
OR (95% CI)			0.35 (0.09-1.35)		0.70 (0.15-3.24)				0.41 (0.56-3.14)
P value	0.480		0.133		0.484				0.328
Hyperuricemia	10 (23.3%)	18 (8.3%)	8 (34.8%)	29 (11.2%)	14 (11.9%)	46 (11.0%)	3 (27.3%)	2 (7.4%)	6 (15.8%)	45 (10.3%)
OR (95% CI)	3.31 (1.41-7.81)		4.21 (1.64-10.79)		1.09 (0.57-2.05)		4.69 (0.66-33.22)		1.58 (0.63-3.97)
P value	0.008†		0.005†		0.459		0.134		0.232
PAOD	3 (7.0%)	4 (1.9%)	1 (4.3%)	7 (2.7%)	4 (3.4%)	1 (0.2%)	0 (0%)	1 (3.7%)	1 (2.6%)	4 (0.9%)
OR (95% CI)	3.96 (0.85-18.36)		1.63 (0.19-13.86)		14.56 (1.61-131.56)				2.84 (0.31-26.01)
P value	0.093		0.500		0.009†		0.711		0.350
Smoking	4 (9.3%)	34 (15.7%)	0 (0%)	28 (10.8%)	15 (12.7%)	67 (16.0%)	0 (0%)	3 (11.1%)	3 (7.9%)	86 (19.7%)
OR (95% CI)	0.55 (0.18-1.63)				0.76 (0.42-1.38)				0.34 (0.10-1.12)
P value	0.197		0.080		0.227		0.347		0.042†
Previous TIA	2 (4.7%)	8 (3.7%)	2 (8.7%)	9 (3.5%)	9 (7.6%)	10 (2.4%)	1 (9.1%)	1 (3.7%)	1 (2.6%)	17 (3.9%)
OR (95% CI)	1.26 (0.26-6.16)		2.64 (0.53-12.99)		3.35 (1.33-8.45)		2.60 (0.15-45.68)		0.65 (0.08-5.00)

P value	0.519		0.224		0.012†		0.501		0.555	
Other diseases										
COPD	5 (11.6%)	11 (5.1%)	4 (17.4%)	15 (5.8%)	2 (1.7%)	20 (4.8%)	0 (0%)	0 (0%)	1 (2.6%)	25 (5.7%)
OR (95% CI)	2.44 (0.80-7.42)		3.41 (1.03-11.30)		0.34 (0.08-1.48)				0.43 (0.06-3.27)	
P value	0.107		0.058		0.101				0.350	
SLE	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	6 (54.5%)	2 (7.4%)	0 (0%)	0 (0%)
OR (95% CI)							15.00 (2.32-96.96)			
P value							0.004†			
Clinical syndromes										
TACS	8 (18.6%)	50 (23.1%)	6 (26.1%)	111 (42.9%)	0 (0%)	0 (0%)	0 (0%)	4 (14.8%)	1 (2.6%)	37 (8.5%)
OR (95% CI)	0.75 (0.33-1.73)		0.47 (0.18-1.22)						0.28 (0.04-2.12)	
P value	0.328		0.085				0.238		0.157	
PACS	13 (30.2%)	78 (36.1%)	7 (30.4%)	96 (37.1%)	19 (16.1%)	5 (1.2%)	8 (72.7%)	14 (51.9%)	20 (52.6%)	224 (51.3%)
OR (95% CI)	0.76 (0.38-1.55)		0.74 (0.29-1.86)		15.78 (5.75-43.28)		2.48(0.54-11.40)		0.99 (0.52-1.91)	
P value	0.283		0.343		<0.001†		0.208		0.556	
LACS	8 (18.6%)	24 (11.1%)	4 (17.4%)	21 (8.1%)	72 (61.0%)	372 (88.8%)	0 (0%)	3 (11.1%)	7 (18.4%)	95 (21.7%)
OR (95% CI)	1.82 (0.76-4.38)		2.38 (0.74-7.63)		0.19 (0.11-0.30)				0.78 (0.34-1.83)	
P value	0.137		0.134		<0.001†		0.347		0.369	
POCS	14 (32.6%)	63 (29.2%)	6 (26.1%)	30 (11.6%)	27 (22.9%)	39 (9.3%)	3 (27.3%)	6 (22.2%)	10 (26.3%)	79 (18.1%)
OR (95% CI)	1.17 (0.58-2.35)		2.68 (0.98-7.33)		2.87 (1.67-4.93)		1.31 (0.26-6.55)		1.55 (0.73-3.32)	
P value	0.398		0.057		<0.001†		0.522		0.174	

NS = nephrotic syndrome; OR = odds ratio; CI = confidence interval; BMI = body mass index; SBP = systolic blood pressure; DBP = diastolic blood pressure;

DM = diabetes mellitus; CAD = coronary artery disease; CHF = congestive heart failure; AF = atrial fibrillation; PAOD = peripheral arterial occlusive disease;

TIA = transient ischemic attack; COPD = chronic obstructive pulmonary disease; SLE = Systemic lupus erythematosus; TACS = total anterior circulation syndrome; PACS = partial anterior circulation syndrome; LACS = lacunar syndrome; POCS = posterior circulation syndrome;.

Data are presented as mean ± standard deviation or n (%).

*$P < 0.05$, Student t test; †$P < 0.05$, Chi-square test

Supplementary Table 9. Laboratory findings of ischemic stroke patients, with and without nephrotic syndrome.

	Large-artery atherosclerosis		Cardioembolism		Small-artery occlusion		Stroke of other determined etiology		Stroke of undetermined etiology	
	NS (n=43)	No NS (n=216)	NS (n=23)	No NS (n=259)	NS (n=118)	No NS (n=419)	NS (n=11)	No NS (n=27)	NS (n=38)	No NS (n=437)
WBC (1000/μL)	8316.28±2729.11	9250.79±3816.00	7952.17±2169.39	8326.72±3133.81	7855.56±3176.65	7766.81±2277.36	8845.45±4488.29	10561.90±6174.50	9123.08±3070.78	8498.76±2989.05
P value	0.130		0.576		0.783		0.422		0.217	
Hemoglobin (g/dL)	11.89±2.41	13.85±2.23	12.64±2.31	13.29±2.04	11.99±2.06	13.94±1.81	12.33±3.92	12.04±3.16	11.77±1.84	13.49±2.15
P value	<0.001*		0.148		<0.001*		0.820		<0.001*	
Platelet (1000/μL)	205.63K±76.24K	232.59±67.87K	231.35K±72.63K	214.27K±78.62K	217.36K±72.81K	228.39K±67.91K	212.55K±112.42K	244.36K±103.58K	244.77K±80.07K	239.41K±86.48K
P value	0.023*		0.319		0.136		0.432		0.711	
INR	0.95±0.12	0.99±0.11	1.24±0.36	1.05±0.10	1.05±0.32	0.99±0.08	1.01±0.14	1.22±0.29	0.95±0.06	1.02±0.23
P value	0.058		0.068		0.138		0.331		0.486	
APTT/NC	1.00±0.13	0.90±0.12	1.01±0.13	0.99±0.12	1.10±0.29	0.99±0.11	1.12±0.19	1.02±0.10	0.99±0.16	0.98±0.15
P value	0.518		0.331		0.334		0.069		0.737	
Glycohemoglobin (%)	8.56±2.79	7.23±2.10	6.79±1.52	6.22±0.98	8.31±2.43	6.97±2.09	6.26±1.59	6.74±2.08	7.60±2.27	6.64±1.76
P value	0.021*		0.185		<0.001*		0.645		0.063	
ESR (mm/hr)	57.44±42.59	17.51±6.54	29.20±15.07	16.53±10.68	43.80±21.32	12.90±6.13	32.75±24.72	33.45±27.08	47.67±24.16	18.99±15.33
P value	0.023*		0.152		<0.001*		0.970		0.015*	
BUN (mg/dL)	31.79±20.21	15.71±5.76	26.20±10.42	17.91±6.28	32.32±15.76	15.52±3.05	27.68±12.74	15.32±4.81	30.78±19.76	16.11±6.91
P value	<0.001*		0.001*		<0.001*		0.020*		<0.001*	

Creatinine (mg/dL)	2.79±1.82	0.93±0.28	1.82±1.01	1.13±0.99	3.07±2.02	0.94±0.23	1.92±0.85	0.87±0.25	3.17±2.11	0.97± 0.31
P value	<0.001*		0.061		<0.001*		0.007*		<0.001*	
eGFR (mL/min/1.73 m^2)	46.23±30.92	81.41±14.13	53.96±25.02	76.72±14.44	45.04±30.02*	80.95±14.67	51.69±29.78	83.82±16.04	45.70±31.21	75.79±15.19
P value	<0.001*		<0.001*		<0.001*		0.005*		<0.001*	
Total cholesterol (mg/dL)	244.76±93.77	187.46±41.82	202.10±65.64	173.12±44.23	240.50±90.30	184.10±40.50	226.4±72.51	208.24±69.12	224.09±54.44	185.22±41.45
P value	0.001*		0.151		<0.001*		0.531		0.012*	
Triglyceride (mg/dL)	271.62±79.43	139.70±52.61	122.70±52.76	102.86±34.92	213.41±104.54	152.12±89.28	224.40±117.19	211.67±123.58	169.84±71.17	129.77±45.12
P value	0.002*		0.149		<0.001*		0.865		0.060	
LDL (mg/dL)	150.10±53.24	121.59±36.23	123.13±38.71	107.74±34.67	163.64±44.97	116.29±35.81	130.29±31.12	134.48±46.64	154.40±46.23	121.11±39.81
P value	0.054		0.111		0.001*		0.865		0.018*	
HDL (mg/dL)	41.18±15.53	39.14±10.29	34.69±7.65	46.03±10.46	38.95±11.23	41.11±14.12	46.71±10.12	34.77±8.65	48.43±19.43	40.20±13.04
P value	0.597		<0.001*		0.158		0.122		0.070	
Uric acid (mg/dL)	6.66±1.85	5.58±1.72	6.93±2.08	5.51±1.53	6.46±1.85	5.51±1.14	7.98±2.37	5.82±1.87	6.56±2.13	5.36±1.51
P value	0.132		0.003*		<0.001*		0.047*		<0.001*	
Potassium (mmol/L)	4.06±0.78	3.91±1.13	3.71±0.90	4.05±1.10	4.01±0.61	4.43±0.78	4.60±0.70	3.87±0.47	4.17±0.75	3.82±0.45
P value	0.439		0.464		0.547		0.002*		0.011*	
Calcium (mg/dL)	8.24±0.90	8.85±0.71	8.59±1.10	8.34±1.23	8.38±0.95	8.65±1.01	8.16±0.67	8.33±0.47	8.44±0.73	8.87±0.58
P value	0.116		0.511		0.320		0.779		0.004*	
Albumin (g/dL)	2.76±0.49	3.61±0.55	2.69±0.56	3.39±0.61	2.85±0.78	3.81±0.43	2.86±1.02	2.18±0.38	2.88±0.72	3.60±0.62
P value	<0.001*		<0.001*		<0.001*		0.107		<0.001*	
Fibrinogen (mg/dL)	473.00±197.4	320.27±151.7	731.50±395.2	428.86±182.1	396.79±117.0	298.70±43.56	341.67±112.4	320.10±116.1	465.15±157.4	336.06±110.2

	0	6	7	5	9		8	7	8	3
P value	0.086		0.138		0.010*		0.789		0.008*	
Sugar (mg/dL)	178.11±98.66	162.95±74.95	126.63±36.54	155.55±94.61	180.93±97.52	143.59±46.82	95.40±7.80	251.50±117.48	169.82±88.45	123.03±49.19
P value	0.593		0.132		0.014*		0.431		0.050	
Hs-CRP (mg/L)	21.91±19.68	18.29±13.52	14.41±13.32	24.06±22.12	10.18±9.23	7.04±6.53	5.61±8.96	42.15±33.79	14.94±13.68	12.69±10.77
P value	0.654		0.473		0.321		0.225		0.675	
AST (U/L)	26.39±14.42	32.71±23.17	35.68±22.24	30.84±15.41	26.31±19.48	29.95±24.65	23.29±13.95	34.50±25.03	22.68±11.80	32.26±17.33
P value	0.152		0.405		0.505		0.313		0.302	
ALT (U/L)	27.03±12.38	26.82±17.52	21.74±19.97	25.35±10.87	23.10±15.81	24.97±17.22	18.00±7.11	32.79±20.27	21.00±10.24	26.40±12.72
P value	0.966		0.405		0.384		0.010*		0.404	
Sodium (mmol/L)	138.26±5.74	138.61±3.82	139.54±3.79	138.91±4.28	139.06±4.20	138.92±3.61	137.91±3.53	138.47±7.00	137.61±3.67	138.61±3.36
P value	0.633		0.510		0.764		0.808		0.093	
Phosphate (mg/dL)	3.78±1.57	3.28±0.69	3.35±1.39	3.70±0.97	3.15±1.59	5.67±2.05	4.13±1.02	4.85±1.91	4.36±1.29	3.98±1.94
P value	0.496		0.567		0.600		0.497		0.496	
Total protein (g/dL)	5.32±0.91	6.48±0.64	5.48±1.15	5.62±1.26	5..40±1.01	5.16±1.80	5.60±1.10	4.90±0.28	5.68± 0.93	5.47±1.15
P value	0.003*		0.775		0.546		0.463		0.346	

NS = nephrotic syndrome; WBC = white blood cells; INR = international normalized ratio; APTT/NC = activated partial thromboplastin time/normal control;

ESR = erythrocyte sedimentation rate; BUN = blood urea nitrogen; eGFR = estimated glomerular filtration rate; LDL = low-density lipoprotein; HDL= high-density lipoprotein; hs-CRP = high-sensitivity C-reactive protein; AST = aspartate transaminase; ALT = alanine aminotransferase.

Data are presented as mean ± standard deviation.

*P < 0.05, Student t test

Supplementary Table 10. Logistic regression for predictors of dependent functional status (modified Rankin Scale score ≧ 3) in patients with small-artery occlusion following the 30-day period.

Variables	Univariate Logistic Regression		Multivariate Logistic Regression	
	OR (95% CI)	*P* value	OR (95% CI)	*P* value
Age	1.01 (0.99-1.03)	0.465		
Male	0.90 (0.60-1.35)	0.607		
Hypertension	1.47 (0.84-2.56)	0.177		
Diabetes mellitus	1.45 (0.97-2.15)	0.069*		
Hyperlipidemia	0.88 (0.59-1.32)	0.532		
CAD	0.72 (0.36-1.44)	0.355		
CHF	1.89 (1.76-4.65)	0.169		
Atrial fibrillation	0.99 (0.27-3.72)	0.991		
Nephrotic syndrome	6.98 (4.45-10.95)	<0.001*	8.02 (3.94-16.32)	<0.001†
Hyperuricemia	0.82 (0.43-1.58)	0.560		
Pneumonia	3.19 (1.44-7.07)	0.004*		
WBC count > 10000 1000/μL	1.19 (0.69-2.05)	0.538		
Hemoglobin < 12 g/dL	3.53 (2.25-5.54)	<0.001*		
eGFR<60 mL/min/1.73 m^2	5.07 (3.06-8.41)	<0.001*	0.66 (0.29-1.53)	0.333
Sodium < 135 mmol/L	1.67 (0.85-3.31)	0.139		
hs-CRP > 3 mg/L	1.92 (1.18-3.13)	0.009*	1.85 (1.06-3.21)	0.030†

OR = odds ratio; CI = confidence interval; CAD = coronary artery disease; CHF = congestive heart failure; WBC = white blood cell; eGFR = estimated glomerular filtration rate; hs-CRP = high-sensitivity C-reactive protein.

*$P < 0.1$ for the univariate logistic regression, and †$P < 0.05$ for the stepwise multivariate logistic regression.

Supplementary Table 11. Logistic regression for predictors of dependent functional

status (modified Rankin Scale score ≧ 3) in patients with stroke of undetermined

etiology following the 30-day period.

Variables	Univariate Logistic Regression		Multivariate Logistic Regression	
	OR (95% CI)	*P* value	OR (95% CI)	*P* value
Age	1.01 (1.00-1.03)	0.096*		
Male	0.72 (0.49-1.06)	0.093*		
Hypertension	0.89 (0.60-1.32)	0.552		
Diabetes mellitus	1.06 (0.73-1.54)	0.748		
Hyperlipidemia	0.69 (0.48-1.00)	0.052*		
CAD	1.60 (0.82-3.12)	0.165		
CHF	3.93 (1.32-11.68)	0.014*		
Atrial fibrillation	2.21 (0.92-5.33)	0.077*		
Nephrotic syndrome	2.66 (1.23-5.73)	0.013*	2.47 (1.06-5.76)	0.037†
Hyperuricemia	0.75 (0.42-1.34)	0.329		
TACS	31.65 (4.30-232.72)	0.001*	17.55 (2.30-133.96)	0.006†
Pneumonia	7.87 (3.83-16.16)	<0.001*	4.12 (1.89-9.00)	<0.001†
WBC count > 10000 1000/μL	2.03 (1.25-3.30)	0.004*		
Hemoglobin < 12 g/dL	2.10 (1.31-3.37)	0.002*		
eGFR<60 mL/min/1.73 m^2	1.97 (0.81-4.82)	0.135		
Sodium < 135 mmol/L	2.47 (1.22-5.00)	0.012*		
hs-CRP > 3 mg/L	3.30 (2.16-5.04)	<0.001*	2.19 (1.36-3.50)	0.001†

OR = odds ratio; CI = confidence interval; CAD = coronary artery disease; CHF =

congestive heart failure; TACS = total anterior circulation syndrome; WBC = white

blood cell; eGFR = estimated glomerular filtration rate; hs-CRP = high-sensitivity C-

reactive protein.

*P < 0.1 for the univariate logistic regression, and †P < 0.05 for the stepwise

multivariate logistic regression.

Supplementary Table 12. Treatment, complication and clinical outcomes of ischemic stroke patients, with and without nephrotic syndrome.

	Large-artery atherosclerosis		Cardioembolism		Small-artery occlusion		Stroke of other determined etiology		Stroke of undetermined etiology	
	NS (n=43)	No NS (n=216)	NS (n=23)	No NS (n=259)	NS (n=118)	No NS (n=419)	NS (n=11)	No NS (n=27)	NS (n=38)	No NS (n=437)
Treatment										
Intra-venous thrombolysis	0 (0%)	13 (6%)	1 (4.3%)	34 (13.1%)	2 (1.7%)	11 (2.6%)	1 (9.1%)	0 (0%)	0 (0%)	16 (3.7%)
OR (95% CI)			0.30 (0.04-2.29)		0.64 (0.14-2.90)					
P value	0.088		0.188		0.425		0.289		0.247	
Intra-arterial thrombectomy	0 (0%)	1 (0.5%)	0 (0%)	1 (0.4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
OR (95% CI)										
P value	0.833		0.918							
Warfarin	3 (7.0%)	12 (5.6%)	4 (17.4%)	19 (7.3%)	3 (2.5%)	2 (0.5%)	2 (18.2%)	1 (3.7%)	1 (2.6%)	13 (3.0%)
OR (95% CI)	1.27 (0.34-4.70)		2.65 (0.82-8.58)		5.40 (0.89-32.70)		5.78 (0.47-71.62)		0.85 (0.11-6.71)	
P value	0.471		0.105		0.074		0.196		0.677	
P2Y12 inhibitors	16 (37.2%)	67 (31.0%)	6 (26.1%)	32 (12.4%)	25 (21.2%)	64 (15.3%)	1 (9.1%)	2 (7.4%)	9 (23.7%)	97 (22.2%)
OR (95% CI)	1.31 (0.66-2.59)		2.49 (0.92-6.79)		1.48 (0.88-2.48)		1.25 (0.10-15.38)		1.05 (0.48-2.28)	
P value	0.273		0.072		0.090		0.653		0.523	
Heparin in acute stage	4 (9.3%)	12 (5.6%)	1 (4.3%)	3 (1.2%)	4 (3.4%)	1 (0.2%)	1 (9.1%)	0 (0%)	0 (0%)	9 (2.1%)
OR (95% CI)	1.74 (0.53-5.66)		3.86 (0.39-38.72)		14.56 (1.61-131.56)					
P value	0.267		0.291		0.009†		0.289		0.459	

Aspirin	25 (58.1%)	130 (60.2%)	10 (43.5%)	54 (20.8%)	82 (69.5%)	357 (85.2%)	5 (45.5%)	16 (59.3%)	23 (60.5%)	292 (66.8%)
OR (95% CI)	0.91 (0.47-1.77)		2.91 (1.21-6.99)		0.38 (0.23-0.61)		0.57 (0.14-2.36)		0.70 (0.36-1.37)	
P value	0.452		0.018†		<0.001†		0.337		0.195	
NOACs	0 (0%)	3 (1.4%)	1 (4.3%)	128 (49.4%)	0 (0%)	4 (1.0%)	0 (0%)	0 (0%)	0 (0%)	11 (2.5%)
OR (95% CI)			0.05 (0.01-0.35)							
P value	0.577		<0.001†		0.367				0.385	
Statins	17 (39.5%)	118 (54.6%)	4 (17.4%)	74 (28.6%)	44 (37.3%)	209 (49.9%)	2 (18.2%)	7 (25.9%)	15 (39.5%)	185 (42.3%)
OR (95% CI)	0.54 (0.28-1.05)		0.52 (0.17-1.59)		0.59 (0.39-0.90)		0.64 (0.11-3.68)		0.85 (0.43-1.66)	
P value	0.047†		0.181		0.008†		0.478		0.376	
Length of stay in acute care unit (days)	18.81±16.59	16.30±11.01	22.74±19.34	17.72±12.99	11.02±8.44	8.17±4.25	20.00±12.58	14.33±9.24	15.15±9.12	14.41±9.90
P value	0.215		0.258		0.001*		0.440		0.653	
Stroke in evolution	10 (23.3%)	61 (28.2%)	5 (21.7%)	56 (21.6%)	7 (5.9%)	7 (1.7%)	3 (27.3%)	6 (22.2%)	4 (10.5%)	51 (11.7%)
OR (95% CI)	0.77 (0.36-1.65)		1.00 (0.36-2.82)		3.69 (1.27-10.73)		1.31 (0.26-6.55)		0.86(0.29-2.52)	
P value	0.314		0.587		0.019†		0.522		0.518	
Complication at admission										
UTI	5 (11.6%)	32 (14.8%)	6 (26.1%)	63 (24.3%)	12 (10.2%)	23 (5.5%)	1 (9.1%)	4 (14.8%)	5 (13.2%)	62 (14.2%)
OR (95% CI)	0.75 (0.28-2.06)		1.09 (0.41-2.89)		1.93 (0.93-4.02)		0.58 (0.06-5.81)		0.89 (0.33-2.35)	
P value	0.389		0.515		0.061		0.545		0.517	
Pneumonia	12 (27.9%)	61 (28.2%)	5 (21.7%)	96 (37.1%)	11 (9.3%)	15 (3.6%)	1 (9.1%)	5 (18.5%)	11 (28.9%)	71 (16.2%)
OR (95% CI)	0.98 (0.47-2.03)		0.47 (0.17-1.30)		2.75 (1.23-6.16)		0.44 (0.05-4.27)		2.01 (0.96-4.23)	
P value	0.556		0.102		0.014†		0.429		0.054	
GI bleeding	5 (11.6%)	31 (14.4%)	2 (8.7%)	52 (20.1%)	5 (4.2%)	5 (1.2%)	1 (9.1%)	3 (11.1%)	8 (21.1%)	42 (9.6%)
OR (95% CI)	0.78 (0.29-2.14)		0.38 (0.09-1.66)		3.64 (1.04-12.78)		0.80 (0.07-8.65)		2.41 (1.04-5.59)	
P value	0.420		0.142		0.047†		0.674		0.041*	

Other infection	7 (16.3%)	11 (5.1%)	1 (4.3%)	20 (7.7%)	5 (4.2%)	12 (2.9%)	1 (9.1%)	3 (11.1%)	3 (7.9%)	20 (4.6%)
OR (95% CI)	3.61 (1.31-9.92)		0.54 (0.07-4.22)		1.49 (0.51-4.32)		0.80 (0.07-8.65)		1.73 (0.49-6.10)	
P value	0.017†		0.470		0.315		0.674		0.291	
Acute coronary syndrome	1 (2.3%)	5 (2.3%)	1 (4.3%)	7 (2.7%)	0 (0%)	1 (0.2%)	0 (0%)	2 (7.4%)	1 (2.6%)	4 (0.9%)
OR (95% CI)	1.00 (0.11-8.78)		1.63 (0.19-13.86)						2.84 (0.31-26.01)	
P value	0.738		0.500		0.779		0.499		0.350	
Venous thromboembolism	1 (2.3%)	2 (0.9%)	1 (4.3%)	2 (0.8%)	0 (0%)	1 (0.2%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
OR (95% CI)	2.54 (0.23-28.61)		5.82 (0.51-66.73)							
P value	0.423		0.227		0.779					
Pulmonary edema	4 (9.3%)	4 (1.9%)	3 (13%)	16 (6.2%)	4 (3.4%)	0 (0%)	0 (0%)	1 (3.7%)	2 (5.3%)	4 (0.9%)
OR (95% CI)	5.41 (1.30-22.55)		2.27 (0.61-8.45)						5.82 (1.03-32.86)	
P value	0.028†		0.195		0.002†		0.711		0.080	
Glasgow coma scale score										
Upon admission	15 (15-15)	15 (11-15)	15 (13-15)	14 (11-15)	15 (15-15)	15 (15-15)	15 (15-15)	15 (15-15)	15 (15-15)	15 (15-15)
P value	0.241		0.217		0.155		0.462		0.515	
Upon discharge	15 (15-15)	15 (11-15)	15 (13-15)	14 (10-15)	15 (15-15)	15 (15-15)	15 (15-15)	15 (11-15)	15 (15-15)	15 (11-15)
P value	0.255		0.100		0.906		0.222		0.207	
NIHSS score										
Upon admission	6 (3-13)	6 (3-13)	12 (10-15)	10 (4-18)	6 (3-8)	3 (2-4)	10 (6-14)	4 (3-12)	11 (3-26)	5 (3-9)
P value	0.834		0.461		0.094		0.418		0.476	
Upon discharge	6 (3-15)	6 (3-16)	12 (9-18)	9 (4-20)	4 (3-8)	3 (2-4)	14 (8-20)	5 (3-18)	12 (3-26)	5 (3-10)
P value	0.785		0.555		0.233		0.319		0.358	
mRS score										

Upon admission	4 (3-5)	3 (2-5)	3 (2-3)	5 (2-5)	3 (2-3)	1 (1-2)	2 (2-4)	2 (1-5)	3 (3-5)	3 (2-4)
P value	0.043*		0.106		<0.001*		0.868		0.112	
Upon discharge	4 (3-5)	3 (2-5)	3 (3-4)	3 (3-5)	3 (2-3)	1 (1-2)	2 (2-4)	2 (1-5)	3 (3-4)	3 (2-4)
P value	1.171		0.274		<0.001*		0.855		0.115	
Outcomes										
Death within 30 days	4 (9.3%)	18 (8.3%)	1 (4.3%)	27 (10.4%)	2 (1.7%)	1 (0.2%)	0 (0%)	6 (22.2%)	1 (2.6%)	12 (2.7%)
OR (95% CI)	1.12 (0.36-3.50)		0.39 (0.05-3.00)		7.16 (0.24-79.61)				0.93 (0.12-7.33)	
P value	0.517		0.305		0.124		0.107		0.709	
Recurrent stroke within 30 days	0 (0%)	1 (0.5%)	0 (0%)	2 (0.8%)	0 (0%)	2 (0.5%)	0 (0%)	0 (0%)	0 (0%)	2 (0.5%)
P value	0.833		0.843		0.607				0.846	
mRS score ≧ 3	33 (76.7%)	133 (61.6%)	18 (78.3%)	182 (70.3%)	68 (57.6%)	67 (16.0%)	3 (27.3%)	12 (44.4%)	30 (78.9%)	242 (55.4%)
OR (95% CI)	2.04 (0.95-4.35)		1.50 (0.54-4.20)		7.08 (4.52-11.10)		0.47 (0.10-2.16)		2.66 (1.23-5.73)	
P value	0.043†		0.301		<0.001†		0.272		0.007†	
Adjusted OR (95% CI)	2.03 (0.78-5.28)				7.85 (4.28-14.40)				2.47 (1.06-5.76)	
Adjusted P value	0.148				<0.001‡				0.037‡	

NS = nephrotic syndrome; OR = odds ratio; CI = confidence interval; NOACs = non-vitamin K antagonist oral anticoagulants; UTI = urinary tract infection; GI = gastrointestinal; NIHSS = national institute of health stroke scale; mRS = modified Rankin scale.

Data are presented as mean ± standard deviation, median (interquartile range) or n (%).

*P < 0.05, Student t test or Mann-Whitney U test; † P < 0.05, Chi-square test; ‡ P < 0.05, adjusted P value using multivariate logistic regression analysis.