Table S1 The list of 29 AAA class hospitals participating in this study

Number	Hospital Name
1	Guangdong Provincial Hospital of Chinese Medicine
2	First Affiliated Hospital of Guangxi University of Chinese Medicine
3	Hubei Provincial Hospital of Chinese Medicine
4	First Affiliated Hospital of Heilongjiang University Of Chinese Medicine
5	Guang'anmen Hospital China Academy of Traditional Chinese Medicine
6	Jiangsu Provincial Hospital of Chinese Medicine
7	TCM Integrated Hospital of Southern Medical University
8	The Sixth People's Hospital Affiliated to Shanghai Jiao Tong University
9	First Affiliated Hospital of Guiyang College of Traditional Chinese Medicine
10	Tong De Hospital, Zhejiang Province
11	Hangzhou Hospital of Chinese Medicine
12	Dongzhimen Hospital of Beijing University of Chinese Medicine
13	Affiliated Hospital of Chengdu University of Traditional Chinese Medicine
14	First Affiliated Hospital of Tianjin University Of Chinese Medicine
15	Anhui Provincial Hospital of Chinese Medicine
16	Heilongjiang Academy of Traditional Chinese Medicine
17	Longhua Hospital Affiliated to Shanghai University of Traditional Chinese Medicine
18	Liuzhou Hospital of traditional Chinese Medicine
19	Shaanxi Provincial Hospital of Chinese Medicine
20	Xijing Hospital of The Fourth Military Medical University
21	Xiyuan Hospital, Academy of Traditional Chinese Medicine
22	First Hospital of Peking University
23	First hospital of Shanxi Medical University
24	Huadu District People's Hospital of Guangzhou
25	Guangzhou No.1 People's Hospital
26	China PLA General Hospital
27	China-Japan Friendship Hospital
28	General Hospital of Guangzhou Military Command of PLA
29	Third Military Medical University Xinqiao Hospital

Table S2 Baseline characteristics among patients in the CHM group and non-CHM group (after 1:2 matching with a caliper of 0.05)

Variables	CHM (104)	Non-CHM (55)	Z/χ^2	P	SD (after matching)
Sex			0.00	0.98[†]	0.00
Male	66 (63.5)	35 (63.6)			
Female	38 (36.5)	20 (36.4)			
Age (year)			0.09	0.77[†]	0.05
<60	58 (55.8)	32 (58.2)			
≥60	46 (44.2)	23 (41.8)			
Primary disease			8.83	0.03[‡]	0.49
Chronic nephritis syndrome	75 (72.1)	33 (60.0)			
Primary nephrotic syndrome	7 (6.7)	8 (14.5)			
IgA nephropathy	3 (2.9)	7 (12.7)			
Others	19 (18.3)	7 (12.7)			
BMI (kg/m^2)			1.68	0.44[‡]	0.22
<18.5	40 (38.5)	16 (29.1)			
18.5–23.9	55 (52.9)	35 (63.6)			
≥24	9 (8.7)	4 (7.3)			
Pulse pressure difference	53.0(47.3–63.8)	58.0 (48.0–70.0)	-0.98	0.33*	0.16
ALB (g/L)			0.23	0.64[†]	0.08
≤35	12 (11.5)	5 (9.1)			
>35	92 (88.5)	50 (90.9)			
Hb (g/L)			0.04	0.85[†]	0.03
≤115	78 (75.0)	42 (76.4)			
>115	26 (25.0)	13 (23.6)			
K (mmol/L)			12.41	0.00[‡]	0.55
≤3.5	1 (1.0)	8 (14.5)			
3.5–5.5	98 (94.2)	43 (78.2)			
>5.5	5 (4.8)	4 (7.3)			
CO$_2$CP (mmol/L)			0.01	0.92[†]	0.02
≤22	54 (51.9)	29 (52.7)			
>22	50 (48.1)	26 (47.3)			
eGFR (mL/min/1.73 m^2)			0.02	0.89[†]	0.02
<10	73 (70.2)	38(69.1)			
≥10	31 (29.8)	17 (30.9)			

Values are given as n (%), or median (P25–P75). *, Mann-Whitney U test; [†], chisquare test; [‡], Fisher's exact test. CHM, Chinese herbal medicine; BMI, body mass index; ALB, albumin; Hb, hemoglobin; K, serum potassium; CO$_2$CP, carbon dioxide combining power; eGFR, estimated glomerular filtration rate; SD, standardized difference.

Table S3 Cox model measured hazard ratio and 95% confidence intervals of dialysis associated with and without CHM and covariates among stage 5 CKD patients (after 1:2 matching with a caliper of 0.05)

Variables	Univariate analysis		Multivariate analysis	
	Crude HR (95% CI)	P	Adjusted HR (95% CI)	P
Treatment				
Non-CHM (reference)				
CHM	0.46 (0.31,0.68)	<0.001	0.47(0.30,0.72)	<0.01
Sex				
Male (reference)				
Female	1.14 (0.78,1.66)	0.49	–	–
Age (year)				
<60 (reference)				
≥60	0.73 (0.50,1.07)	0.10	–	–
Primary disease				
Chronic nephritis syndrome (reference)				
Primary nephrotic syndrome	2.09 (1.09,3.99)	0.03	1.77 (0.92,3.41)	0.09
IgA nephropathy	1.27 (0.61,2.64)	0.52	1.27 (0.59,2.74)	0.54
Others	0.64 (0.37,1.12)	0.12	0.65 (0.37,1.15)	0.14
BMI (kg/m^2)				
18.5–23.9 (reference)				
<18.5	0.78(0.53,1.16)	0.22	–	–
≥24	0.71 (0.32,1.55)	0.39	–	–
Pulse pressure difference	1.01 (1.00,1.02)	0.18	–	–
ALB (g/L)				
≤35 (reference)				
>35	0.55 (0.28,1.07)	0.08	–	–
Hb (g/L)				
≤115 (reference)				
>115	0.34 (0.21,0.57)	<0.001	0.44 (0.26,0.74)	<0.01
K (mmol/L)				
3.5–5.5 (reference)				
≤3.5	3.90 (1.73,8.77)	<0.01	1.97 (0.84,4.59)	0.12
>5.5	2.73 (1.17,6.41)	0.02	1.40 (0.58,3.38)	0.45
CO$_2$CP (mmol/L)				
≤22 (reference)				
>22	0.43 (0.29,0.64)	<0.001	0.57 (0.37,0.86)	0.01
eGFR (mL/min/1.73 m^2)				
<10				
≥10	0.35 (0.21,0.56)	<0.001	0.46 (0.28,0.76)	<0.01

Crude HR: represented relative hazard ratio; adjusted HR: represented adjusted hazard ratio, adjusted for CHM use, primary disease, Hb, K, CO$_2$CP, and eGFR in the multivariate Cox regression analysis. CKD, chronic kidney disease; HR, hazard ratio; CI, confidence interval; CHM, Chinese herbal medicine; BMI, body mass index; ALB, albumin; Hb, hemoglobin; K, serum potassium; CO$_2$CP, carbon dioxide combining power; eGFR, estimated glomerular filtration rate.

Table S4 Adverse events

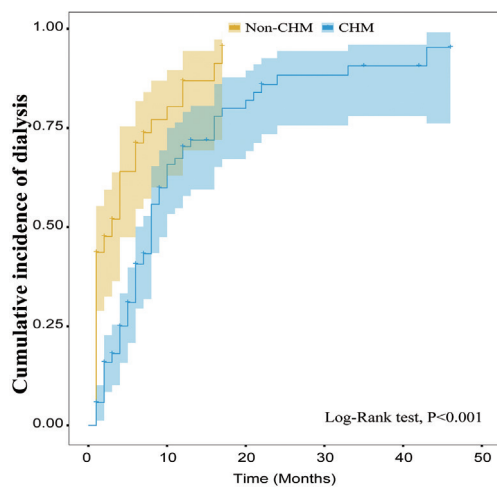| Items	CHM group (n=747)	Non-CHM group (n=67)	P
Hyperkalemia	160	2	0.59
Infection (unknown reasons)	4	1	0.08
Hypocalcemia	1	0	1.00
Constipation	1	0	1.00
Metabolic acidosis	9	0	1.00
Zoster	2	0	1.00
Cholecystitis	1	0	1.00
Hypokalemia	3	0	1.00
Electrolyte disturbances	1	0	1.00
Leukopenia	1	0	1.00
Multiple lacunar infarction	1	0	1.00
Fever	2	0	1.00
Pulmonary infection	2	0	1.00
Gastric distention	1	0	1.00
Abdominal pain	2	0	1.00
Ruptured abdominal aorta aneurysm	1	0	1.00
Allergic dermatitis	1	0	1.00
Fracture	1	0	1.00
Chronic renal failure worsens	6	0	1.00
Urinary tract infection	1	0	1.00
Bladder cancer	1	0	1.00
Upper respiratory tract infection	24	0	1.00
Eczema	1	0	1.00
Death	1	0	1.00
Gout attack	1	0	1.00
Dizziness	1	0	1.00
Epilepsy	1	0	1.00
Painless hematuria	1	0	1.00

CHM, Chinese herbal medicine.

Figure S1 Cumulative incidence rate of dialysis among patients with chronic kidney disease (CKD) stage 5 in the Chinese herbal medicine (CHM) group and the non-CHM group (after 1:2 matching with a caliper of 0.05).