### 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/χ²   | P     | SD (after matching) |
|--------------------------------|-----------|--------------|--------|-------|---------------------|
| Sex                            |           |              |        |       |                     |
| Male                           | 66 (63.5) | 35 (63.6)    | 0.00   | 0.98  |                     |
| Female                         | 38 (36.5) | 20 (36.4)    |        |       |                     |
| Age (year)                     |           |              |        |       |                     |
| <60                            | 58 (55.8) | 32 (58.2)    | 0.09   | 0.77  | 0.05                |
| ≥60                            | 46 (44.2) | 23 (41.8)    |        |       |                     |
| Primary disease                |           |              |        |       |                     |
| Chronic nephritis syndrome     | 75 (72.1) | 33 (60.0)    | 8.83   | 0.03  | 0.49                |
| 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/m²)                    |           |              | 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     |              | 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)      |        |       |                     |
| CO₂CP (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 m²)          |           |              | 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; CO₂CP, carbon dioxide combining power; eGFR, estimated glomerular filtration rate; SD, standardized difference.
| 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       | 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.
| 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).