

Supplementary Table 1. Baseline data of the patients receiving sacubitril-valsartan.

|                                       | Total             | PD                | HD                  | <i>P</i> |
|---------------------------------------|-------------------|-------------------|---------------------|----------|
| Number of patients                    | 51                | 32                | 19                  |          |
| Gender (Female/Male)                  | 16/35             | 9/23              | 7/12                | 0.512    |
| Age(years) (median, IQR)              | 59(51-69)         | 58.5(51-68)       | 59(50-73)           | 0.605    |
| BMI(Kg/m <sup>2</sup> ) (median, IQR) | 25.3(22.6-27.7)   | 25.4(22.6-27.6)   | 24.6(22.0-29.0)     | 0.930    |
| Duration of dialysis (months)         | 24.8 (15.0-48.5)  | 20.0(13.0-34.8)   | 36.0(20.0-66.0)     | 0.090    |
| Hypertension, n(%)                    | 51(100%)          | 32(100%)          | 19(100%)            | 1.0      |
| Diabetes mellitus, n(%)               | 32 (62.7%)        | 20(62.5%)         | 12(63.2%)           | 1.0      |
| History of coronary disease, n(%)     | 31(60.8%)         | 25(78.1%)         | 6(31.6%)            | 0.001    |
| History of heart infarctus, n(%)      | 17(33.3%)         | 14(43.8%)         | 3(15.8%)            | 0.041    |
| <b>Causes of ESRD</b>                 |                   |                   |                     |          |
| Diabetes related kidney disease, n(%) | 26 (51.0%)        | 18(56.3%)         | 8(42.1%)            |          |
| Glomerulonephritis, n(%)              | 11(21.6%)         | 7(21.9%)          | 4(21.1%)            |          |
| Hypertensive nephropathy, n(%)        | 4(7.8%)           | 2(6.3%)           | 2(10.5%)            | 0.390    |
| Polycystic kidney disease, n(%)       | 2(3.9%)           | 0(0%)             | 2(10.5%)            |          |
| Others                                | 8 (15.7%)         | 5(15.6%)          | 3 (15.8%)           |          |
| <b>Laboratory indices</b>             |                   |                   |                     |          |
| Cholesterol, mmol/L (median, IQR)     | 3.59(3.06-4.23)   | 3.30(2.98-4.23)   | 3.77(3.26-4.33)     | 0.284    |
| LDL-C, mmol/L (median, IQR)           | 1.73(1.41-2.48)   | 1.68(1.40-2.43)   | 2.00(1.41-2.63)     | 0.413    |
| HDL-C, mmol/L (median, IQR)           | 0.95(0.73-1.16)   | 0.97(0.73-1.21)   | 0.95(0.73-1.15)     | 0.891    |
| Calcium, mmol/L (median, IQR)         | 2.25(2.13-2.36)   | 2.27(2.16-2.40)   | 2.19(2.06-2.31)     | 0.110    |
| Phosphorus, mmol/L (median, IQR)      | 1.48(1.24-1.90)   | 1.46(1.26-1.74)   | 1.61(1.24-1.97)     | 0.539    |
| PTH, pg/ml (median, IQR)              | 173.9(88.1-280.0) | 144.4(74.2-233.2) | 237.00(136.0-375.0) | 0.012    |
| HbA1c, % (median, IQR)                | 6.3(5.4-7.3)      | 6.2(5.3-7.5)      | 6.5(6.1-6.8)        | 0.616    |
| <b>Other medications</b>              |                   |                   |                     |          |
| ACEI/ARB*                             | 44(86.3%)         | 16(84.2%)         | 28(87.5%)           | 0.741    |
| CCB                                   | 43(84.3%)         | 28(87.5%)         | 15(78.9%)           | 0.417    |
| β-blocker                             | 31(60.8%)         | 28(87.5%)         | 3(15.8%)            | <0.001   |
| α-blocker                             | 18(35.3%)         | 11(34.3%)         | 7(36.8%)            | 0.859    |
| Diuretics                             | 40(78.4%)         | 27(84.3%)         | 13(68.4%)           | 0.180    |

Note: \* ACEI/ARB treatment before the initiation of SV. SV, sacubitril-valsartan; BMI, body mass index; PD, peritoneal dialysis; HD, hemodialysis; ESRD, end-stage renal disease; ACEI, angiotensin converting enzyme inhibitor; ARB, angiotensin receptor blocker; CCB, calcium channel blocker; IQR, interquartile range.

Supplementary Table 2. Comparison of echocardiography parameters between HD patients and the control group

|          | <b>HD group<br/>Baseline<br/>(19<br/>patients)</b> | <b>HD group<br/>follow-up<br/>(19<br/>patients)</b> | <b>Variant<br/>rate of<br/>HD group<br/>(%)</b> | <i>P</i> * | <b>Control<br/>group<br/>Baseline<br/>(19<br/>patients)</b> | <b>Control<br/>group<br/>follow-up<br/>(19<br/>patients)</b> | <b>Variant<br/>rate of<br/>control<br/>group (%)</b> | <i>P</i> ** | <i>P</i> *** |
|----------|--|---|---|------------|---|--|--|-------------|--------------|
| LVEF, %  | 63.0<br>(56.5-66.3)                                | 61.4<br>(57.8-65.0)                                 | -4.6<br>(-8.1 -7.0)                             | 0.275      | 65.0<br>(58.0-66.0)   | 65.0<br>(58.0-70.0)  | -1.5<br>(-4.6 - 4.8)                                 | 0.896       | 0.574        |
| LVDd, mm | 49.0<br>(45.0-55.5)                                | 51.5<br>(48.8-54.8)                                 | 3.0<br>(-2.1 -7.8)                              | 0.154      | 49.0<br>(47.0-52.0)   | 48.0<br>(45.0-53.0)  | 0<br>(-8.5 - 3.9)                                    | 0.451       | 0.124        |
| LAd, mm  | 42.0<br>(35.8-45.0)                                | 41.0<br>(34.8-47.8)                                 | -0.8<br>(-8.5 -15.6)                            | 0.796      | 39.0<br>(36.0-44.0)   | 40.0<br>(35.0-43.0)  | 0<br>(-8.3 - 7.5)                                    | 0.647       | 0.659        |
| RVDd, mm | 36.0<br>(28.0-38.0)                                | 34.0<br>(26.0-38.0)                                 | 0<br>(-10.5- 28.6)                              | 0.374      | 32.0<br>(30.5-36.5)   | 31.0<br>(30.0-36.0)  | -3.1<br>(-5.5 -1.5)                                  | 0.315       | 0.469        |
| RAAd, mm | 38.0<br>(31.3-41.8)                                | 36.0<br>(32.3-39.5)                                 | 4.9<br>(-9.1 - 15.2)                            | 0.593      | 33.0<br>(31.0-37.5)   | 35.0<br>(30.0-36.5)  | -7.7<br>(-11.9-7.8)                                  | 0.438       | 0.303        |
| IVSd, mm | 10.0<br>(9.4-12.3)                                 | 11.0<br>(10.0-12.3)                                 | 0<br>(-2.9 - 10.3)                              | 0.262      | 10.0<br>(8.0-12.0)  | 10.0<br>(10.0-12.0)  | 0<br>(0 - 12.2)                                      | 0.166       | 0.512        |

Note: Baseline and follow-up data of LVEF, LVDd, LAd and IVSd were available in 18 patients of the SV group and 19 patients of the control group. Baseline and follow-up data of RVDd and RAAd were available in 12 patients of the SV group and 9 patients of the control group. SV, sacubitril-valsartan; LVEF, left ventricular ejection fraction; LVEDd, left ventricular diastolic diameter; LAd, left atrium diameter; RVDd, right ventricular diastolic diameter; RAAd, right atrium diameter; IVSd, interventricular septum diastolic thickness. Data were expressed as median (interquartile range). *P*\* represented comparison between baseline and follow-up data in the PD group. *P*\*\* represented comparison between baseline and follow-up data in the control group. *P*\*\*\* represented comparison between variant rate of PD group and of control group.

Supplementary Table 3. The relevance of the echocardiographic parameters and values of atrial peptides in the SV group.

|                      | LVEF(%) |              | LVEDd(mm) |              | LAd(mm) |                  | RVDd(mm) |       | RAd(mm) |              | IVSd(mm) |              |
|----------------------|---------|--------------|-----------|--------------|---------|------------------|----------|-------|---------|--------------|----------|--------------|
|                      | r       | P            | r         | P            | r       | P                | r        | P     | r       | P            | r        | P            |
| BNP (Baseline)       | -0.580  | <b>0.001</b> | 0.445     | <b>0.011</b> | 0.556   | <b>0.001</b>     | 0.427    | 0.128 | 0.659   | <b>0.010</b> | 0.163    | 0.374        |
| BNP (Follow-up)      | -0.488  | <b>0.005</b> | 0.553     | <b>0.001</b> | 0.643   | <b>&lt;0.001</b> | 0.456    | 0.101 | 0.574   | 0.032        | 0.325    | 0.070        |
| NT-proBNP(Baseline)  | -0.255  | 0.307        | 0.133     | 0.600        | 0.629   | <b>0.005</b>     | -0.064   | 0.819 | 0.164   | 0.543        | 0.272    | 0.274        |
| NT-proBNP(Follow-up) | -0.061  | 0.259        | 0.259     | 0.300        | 0.426   | 0.078            | 0.165    | 0.542 | 0.375   | 0.169        | 0.488    | <b>0.040</b> |

Note: LVEF, left ventricular ejection fraction; LVEDd, left ventricular diastolic diameter; LAd, left atrium diameter; IVSd, interventricular septum diastolic thickness; RVDd, right ventricular diastolic diameter; RAd, right atrium diameter.

Supplementary Table 4. Association between application of SV with composite outcomes in dialysis patients.

|                       | Unadjusted risk        |          | Model <sup>a</sup>     |          | Model <sup>b</sup>     |          |
|-----------------------|------------------------|----------|------------------------|----------|------------------------|----------|
|                       | HR (95% CI)            | <i>P</i> | HR (95% CI)            | <i>P</i> | HR (95% CI)            | <i>P</i> |
| <b>SV (dichotomy)</b> |                        |          |                        |          |                        |          |
| Control Group         | 1.0 (reference)        |          | 1.0 (reference)        |          | 1.0 (reference)        |          |
| SV Group              | 1.246<br>(0.335-4.640) | 0.743    | 0.683<br>(0.157-2.964) | 0.611    | 0.675<br>(0.156-2.915) | 0.675    |

Note: SV, sacubitril-valsartan. a, Model<sup>a</sup> was adjusted for age, sex and diuretic use. b, Model<sup>b</sup> was adjusted for age, sex and ultrafiltration.