

**Supplementary Table 1.** Demographic data and laboratory results of asymptomatic hemodialysis patients with preserved left ventricular ejection fraction

	cTnT >0.03 ng/ml (n=42)	cTnT ≤0.03 ng/ml (n=46)	<i>p</i> value
Age (years)	68.2 ± 10.7	65.4 ± 11.7	0.24
Male, n (%)	17 (39.5%)	15 (31.9%)	0.44
BMI (kg/m <sup>2</sup> )	22.1 ± 2.7	21.3 ± 3.0	0.27
SBP (mmHg)	144.8 ± 16.1	148.2 ± 14.6	0.32
DBP (mmHg)	77.1 ± 9.9	77.0 ± 8.8	0.97
Hemodialysis duration (years)	6.0 ± 5.8	6.5 ± 4.6	0.68
Kt/V	1.65 ± 0.21	1.76 ± 0.24	0.10
IDWG (kgw)	2.84 ± 1.13	2.72 ± 0.95	0.77
IDWG (%)	5.1 ± 2.0	5.2 ± 1.7	0.61
<b>Co-morbidities, number (%)</b>			
CAD	18 (42.9%)	13 (28.3%)	0.15
Heart failure under control	7 (16.7%)	3 (6.5%)	0.18
Diabetes mellitus	28 (66.7%)	17 (37.0%)	0.005
Hypertension	37 (88.1%)	40 (87.0%)	0.87
LV hypertrophy	33 (78.6%)	35 (76.1%)	1.00
<b>Cardiovascular drugs, number (%)</b>			
CCB	26 (61.9%)	25 (54.3%)	0.47
β-Blocker	20 (47.6%)	22 (47.8%)	0.99

ACE inhibitors / A-II antagonists	20 (47.6%)	28 (60.9%)	0.21
Statin	7 (16.7%)	8 (17.3%)	0.93
<b>Serum biochemistry study</b>			
Calcium (mg/dL)	9.2 ± 0.7	9.3 ± 0.8	0.39
Phosphate (mg/dL)	4.3 ± 1.2	4.6 ± 1.4	0.43
Albumin (g/dL)	3.3 ± 0.4	3.4 ± 0.4	0.14
Cholesterol (mg/dL)	163.4 ± 40.0	162.8 ± 35.5	0.95
hs-CRP (mg/dL)	1.45 ± 2.04	0.57 ± 0.60	0.01
IL-6 (pg/mL)	12.8 ± 9.2	12.3 ± 8.8	0.81
PAI-1 (ng/ml)	158.3 ± 76.6	223.8 ± 195.0	0.06

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Abbreviations: ACE, angiotensin-converting enzymes; A-II, angiotensin II; BMI, body mass index; CAD, coronary artery disease; CCB, calcium channel blocker; cTnT, cardiac troponin T; DBP, diastolic blood pressure; ESRD, end-stage renal disease; hs-CRP, high sensitivity C-reactive protein; IDWG, inter-dialytic weight gain; IL, interleukin; LV, left ventricular; PAI-1, plasminogen-activator inhibitor type 1; SBP, systolic blood pressure.

Data are expressed as mean ± SD or number (%).

**Supplementary Table 2.** Echocardiography results of asymptomatic hemodialysis

patients with preserved left ventricular ejection fraction

	cTnT >0.03 ng/ml (n=42)	cTnT ≤0.03 ng/ml (n=46)	<i>p</i> value
LV EDVi (ml/m <sup>2</sup> )	69.3 ± 18.3	70.8 ± 20.3	0.76
LV mass index (gm/m <sup>2</sup> )	160.4 ± 67.6	137.3 ± 27.2	0.06
IVCe diameter (cm)	1.3 ± 0.3	1.2 ± 0.2	0.09
LV systolic function parameters			
LV EF (%)	63.0 ± 6.5	65.7 ± 5.1	0.07
Systolic myocardial velocity, s' (cm/sec)	8.2 ± 2.2	8.7 ± 1.7	0.23
GLS (%)	-16.4 ± 4.1	-19.6 ± 3.3	<0.001
Longitudinal SRs (sec <sup>-1</sup> )	-0.91 ± 0.21	-1.02 ± 0.22	0.03
CS (%)	-20.0 ± 6.0	-21.7 ± 6.0	0.24
Circumferential SRs (sec <sup>-1</sup> )	-1.89 ± 0.65	-1.95 ± 0.54	0.63
LV diastolic function parameters			
E (m/sec)	0.79 ± 0.31	0.81 ± 0.30	0.76
A (m/sec)	1.03 ± 0.36	1.04 ± 0.29	0.87
E/A	0.79 ± 0.33	0.83 ± 0.44	0.62
e' (cm/sec)	4.8 ± 1.3	4.9 ± 1.4	0.54
E/e'	16.7 ± 6.4	17.1 ± 8.5	0.80
LAVi (ml/m <sup>2</sup> )	35.5 ± 8.6	35.0 ± 7.8	0.83

Abbreviations: CS, systolic circumferential strain; cTnT, cardiac troponin T; EDVi,

end-diastolic volume index; EF, ejection fraction; E/e', early trans-mitral  
velocity to tissue Doppler mitral annular early diastolic velocity ratio; GLS,  
global left ventricular peak systolic longitudinal strain; IVCe, end-expiratory  
inferior vena cava diameter; LAVi, left atrial volume index; LV, left  
ventricular; SRs, systolic strain rate

Data are expressed as mean  $\pm$  SD

**Supplementary figure 1.** Comparisons of left ventricular global peak systolic longitudinal strain (GLS) and global longitudinal strain rate (LSRs) in end-stage renal disease patients with either high cardiac troponin T (cTnT >0.03 ng/ml) or low cTnT ( $\leq 0.03$  ng/ml) serum concentrations.

