

## **Supplement S1.** Searching strategy

### 1. MEDLINE (PubMed) 2022.08.21

#1	((cardiotonic pills) OR (Danshen Dripping Pills) OR (fufang danshen dripping pill) OR (fufang danshen tablet) OR (Fufang Danshen Pian) OR (fufang danshen) OR (复方丹参滴丸))	162
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### 2. CENTRAL (Cochrane)

#1	[mh "fufang danshen"] OR 'fufang danshen':ab,ti OR 'cardiotonic pills':ab,ti OR 'Danshen Dripping Pills':ab,ti OR 'Fufang Danshen Pian':ab,ti OR 'fufang danshen dripping pill':ab,ti OR '复方丹参滴丸'	63
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### 3. EMBASE

#1	' fufang danshen'/exp OR 'fufang danshen pian':ab,ti OR 'cardiotonic pills'/exp OR 'Danshen Dripping Pills':ab,ti OR 'fufang danshen dripping pill'/exp OR 'cardiotonic pills':ab,ti OR 'cardiotonic pills':exp OR 'fufang danshen tablet':ab,ti	211
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### 4. CNKI

#1	(SU="复方丹参滴丸" OR AB="复方丹参滴丸" OR SU="fubang danshen-diwan" OR AB="fubang danshen-diwan" OR SU="cardiotonic pills" OR AB="cardiotonic pills" OR SU="fubang danshen" OR AB="fubang danshen" OR SU="fubang danshen dripping pills" OR AB="fubang danshen dripping pills" OR SU="fubang danshen tablet" OR AB="fubang danshen tablet" OR SU="Fufang Danshen Pian" OR AB="Fufang Danshen Pian") AND (AB="randomized controlled trial" OR AB="clinical trial" OR AB="random allocation" OR AB="randomly allocated" OR AB="random" OR AB="placebo" OR AB="	2,199
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	随机对照研究" OR AB="临床随机对照试验" OR AB="随机对照" OR AB="临床试验")	
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## 5. KCI

#1	심적환 AND (당뇨 OR Diabetics)	2
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## 6. OASIS

#1	심적환 AND (당뇨 OR Diabetics)	3
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## 7. RISS

#1	심적환 AND (당뇨 OR Diabetics)	9
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Supplement S2. Characteristics of Included Studies

N O.	First author, year	Coun try	Sample size	Age (yr), Mean±SD (range)	Sex (M:F)	Disease Duration	Disease classification	Diagnostic criteria	Treatment group intervention	Control group intervention
1	Guo (2007)	China	39:39	T) 57.8 (46-69) C) 56.6 (44-70)	T: 47:31 C: 47:31	T) 9.6 (5.5– 16.5) C) 9.4 (6.5– 17.)	early DN	D1	CDDP + dietary control (0.8 g/(kg*d) with WM	Placebo + dietary control (0.8 g/(kg*d) with WM
2	Ye (2016)	China	50: 50	T) 67.36±2.01 C) 64.25±2.22	T) 24:26 C) 23:27	N/A	DM with asymptomatic myocardial ischemia	D2	CDDP	Conventional Therapy
3	Zhang (2009)	China	33:32	T) 58.0±11.2 C) 56.4±8.8	T) 21:12 C) 22:10	T) 10.4±5.8 C) 11.0±6.5	DR and DN	D1	CDDP 270 mg + Calcium hydroxybenzenesulfonate capsules 500 mg + Dietary control + Diabetic education + Protein 0.8 g (d*kg)+ insulin injection	Dietary control + Diabetic education + Protein 0.8 g (d*kg)+ insulin injection
4	Yang (2019)	China	50:50	T) 48.67±2.83 C) 48.15±2.22	T) 32:18 C) 31:19	T) 12.21±0.91 C) 2.62±0.95	DN		CDDP + irbesartan	irbesartan
5	JIA (2017)	China	50:50	T) 59.58±9.69 C) 58.06±13.0 1	T) 27:32 C) 30:20		DN	D3	CDDP + Valsartan	Valsartan
6	Zhao (2016)	China	37:37	T) 54.2±2.5 C) 57.8±1.1	T) 19:18 C) 21:16	T) 1–7 years C) 2–7 years	DM with asymptomatic myocardial ischemia		CDDP + β blockers + calcium blockers and other conventional treatment	β blockers + calcium blockers and other conventional treatment
7	Chen (2018)	China	60:60	T) 68.4±5.6 C) 68.5±5.5	T) 35:25 C) 33:27	T) 8.4±2.3 C) 8.5±2.2	DM Combined with Silent Myocardial Ischemia		CDDP	conventional treatment

<b>8</b>	Gu (2020)	China	41:41	T) 55.8±11.0 C) 56.5±10.5	T) 24:17 C) 19:22	T) 12.5±8.9 C) 13.1±8.5	DPN	CDDP	beloprost sodium	
<b>9</b>	Huang (2005)	China	39:40	T) 57.2 ± 0.4 C) 56.9±0.5	T) 23:16 C) 22:18	-	DM with Nailfold capillary abnormalities	D1	CDDP + DM med (In case of HT patient`s Enalapril was prescribed.)	DM med (In case of HT patient`s Enalapril was prescribed.)
<b>10</b>	Yuan (2013)	China	47:47	65 ± 5	52 : 42	8.6 ± 1.5	early stage renal disease of type 2 DM	D4	CDDP + prostaglandin E1	prostaglandin E1
<b>11</b>	Jin (2015)	China	36 : 36	T) 68.2 ± 5.2 C) 65.1±4.8	T) 18:18 C) 17:19	6–14 y	DM complicated with asymptomatic myocardial ischemia	CDDP	conventional treatment methods, including hypoglycemic, lipid- lowering and nitrolipid drugs,	
<b>12</b>	Lu (2017)	China	39 : 39	T) 43–68 C) 45–68 C) 25 : 14	T) 26 : 13 C) 6–13 y C) 6–12 y	DM and myocardial ischemia	CDDP	conventional treatment methods and the common drugs included hypoglycemic blockers.		
<b>13</b>	Li (2015)	China	49 : 49	T) 68.25 ± 4.78 C) 67.85 ± 4.64	T) 28 : 21 C) 30 : 19	T) 5.33 ± 1.81 C) 5.12 ± 1.78	DM complicated with asymptomatic myocardial ischemia	CDDP	conventional treatment such as glucose lowering, blood pressure lowering, lipid lowering and p- receptor blockers	
<b>14</b>	Lin (2017)	China	35 : 35	T) 57.2 ± 8.7 C) 58.5 ± 7.9	T) 24 : 11 C) 22: 13	T) 6.97 ± 5.23 C) 6.41 ± 5.64	DPN	D3 & D4	CDDP	oral Mecobalamin tablet
<b>15</b>	Wang (2016)	China	39 : 39	T) 55.9 ± 12.4 C) 56.4±12.3	T) 26 : 13 C) 27 :12	T) 9.5 ± 3.7 C) 9.2 ± 3.6	DM with asymptomatic myocardial ischemia and excluded the dysfunction of heart, kidney and	-	CDDP	routine treatment such as β Receptor blockers, hypoglycemic, lipid- lowering, calcium blockers, etc.

other important organs and mental disorders										
<b>16</b>	Wang (2015)	China	39 : 39	T) $66.26 \pm 0.74$ C) $66.25 \pm 0.75$	T) 19 : 20 C) 20 : 19	T) $7.24 \pm 0.15$ C) $7.25 \pm 0.14$	DM complicated with asymptomatic myocardial ischemia	-	CDDP	routine treatment. ( $\beta$ Receptor blockers, calcium blockers and nitrates)
<b>17</b>	Yin (2017)	China	35 : 35	T) $57.6 \pm 4.1$ C) $58.8 \pm 7.2$	T) 19 : 16 C) 18 : 17	T) $8.9 \pm 1.6$ C) $9.5 \pm 2.5$	DM and 24-hour urinary protein $\geq 30$ mg	D4	CDDP	irbesartan
<b>18</b>	Bai (2008)	China	48 : 48	T) $68 \pm 4$ C) $67 \pm 5$	T) 27 : 21 C) 26 : 22	T) $8.9 \pm 1.5$ C) $8.7 \pm 1.6$	early DN	-	CDDP + irbesartan (ambovide) orally	irbesartan (ambovide)

DN: Diabetic Nephropathy; DPN: Diabetic Peripheral Neuropathy; DR: Diabetic Retinopathy, DM: Diabetes Mellitus.

D1) 1997 ADA Criteria, diagnostic staging method of diabetic nephropathy in Mogensen, Denmark; D2) Diagnosis of DM complicated with asymptomatic myocardial ischemia; D3) 2013 edition of the Chinese Diabetes Prevention and Control Guidelines; D4) WHO criteria for the diagnosis of type 2 diabetes.

Supplement S3. Details of Clinical trial Results of Included Studies

<b>First author, year</b>	<b>Treatment duration (Dosage /day)</b>	<b>Outcome Variable</b>	<b>Effective Results</b>	<b>Adverse Events</b>
Guo (2007)	8 Week, tid*10 pills	① TER ② Microalbumin test ③ Beta 2 Microglobulin test ④ FBG ⑤ TC ⑥ TG ⑦ HDL-C ⑧ LSR ⑨ HSR ⑩ PV ⑪ Fibrinogen	① $12.02 \pm 1.43 * \Delta$ vs $18.83 \pm 3.64$ ② $1.88 \pm 0.55 * \Delta$ vs $2.75 \pm 1.33$ / $0.18 \pm 0.08 * \Delta$ vs $0.25 \pm 0.07$ ③ $6.14 \pm 1.70 **$ vs $6.24 \pm 1.57$ ④ $5.42 \pm 0.66 ** \Delta \Delta$ vs $7.60 \pm 0.63$ ⑤ $1.96 \pm 0.81 ** \Delta \Delta$ vs $3.44 \pm 0.78$ ⑥ $1.55 \pm 0.25 * \Delta$ vs $1.43 \pm 0.23$ ⑦ $8.48 \pm 1.75 ** \Delta$ vs $9.75 \pm 1.68$ ⑧ $4.68 \pm 1.50 **$ vs $4.96 \pm 1.66$ ⑨ $1.80 \pm 0.79 *$ vs $2.00 \pm 0.76$ ⑩ $2.90 \pm 0.78 **$ vs $3.12 \pm 0.78$	NR
Ye (2016)	10 pills (270mg)	① Hcy ② PA	① $6.04 \pm 1.24$ vs $19.84 \pm 5.14$ ② $8.34 \pm 1.41 *$ vs $11.21 \pm 4.14 *$	NR
Zhang (2009)	3 months, tid*10pills(270mg)	① TER ② LSR ③ HSR ④ PV ⑤ Platelet adhesion ⑥ Platelet aggregation rate ⑦ Sr ⑧ BUN ⑨ 24h Urine test	① Ameliorate $60.60 * \text{vs} 21.87$ / Stable $36.36 \text{vs} 59.38$ / Deteriorate $3.04 ** \text{vs} 18.75$ ② $8.6 \pm 1.6$ vs $10.6 \pm 1.7$ ③ $4.9 \pm 0.7$ vs $5.7 \pm 0.8$ ④ $1.5 \pm 0.3 *$ vs $1.7 \pm 0.3$ ⑤ $44 \pm 12 *$ vs $53 \pm 10$ ⑥ $55 \pm 14$ vs $64 \pm 11$ ⑦ $126 \pm 34 *$ vs $102 \pm 28 \Delta$ ⑧ $6.8 \pm 1.7 *$ vs $6.0 \pm 1.8 \Delta$ ⑨ $204 \pm 70 *$ vs $149 \pm 80 \Delta$	deteriorate (n=6)
Yang (2019)	1 month, tid*1 pills	① TER ② Serum albumin ③ Serum urea ④ Serum creatinine ⑤ ESR ⑥ WBV ⑦ PV	① $50$ vs $37$ ② $31.11 \pm 3.26$ vs $33.21 \pm 4.53$ ③ $11.25 \pm 1.24$ vs $22.45 \pm 3.55$ ④ $322.45 \pm 12.01$ vs $452.62 \pm 12.77$ ⑤ $9.23 \pm 0.21$ vs $10.11 \pm 0.41$ ⑥ $4.12 \pm 0.13$ vs $5.01 \pm 0.34$ ⑦ $1.66 \pm 0.21$ vs $1.82 \pm 0.11$	C) n=1 T) n=2

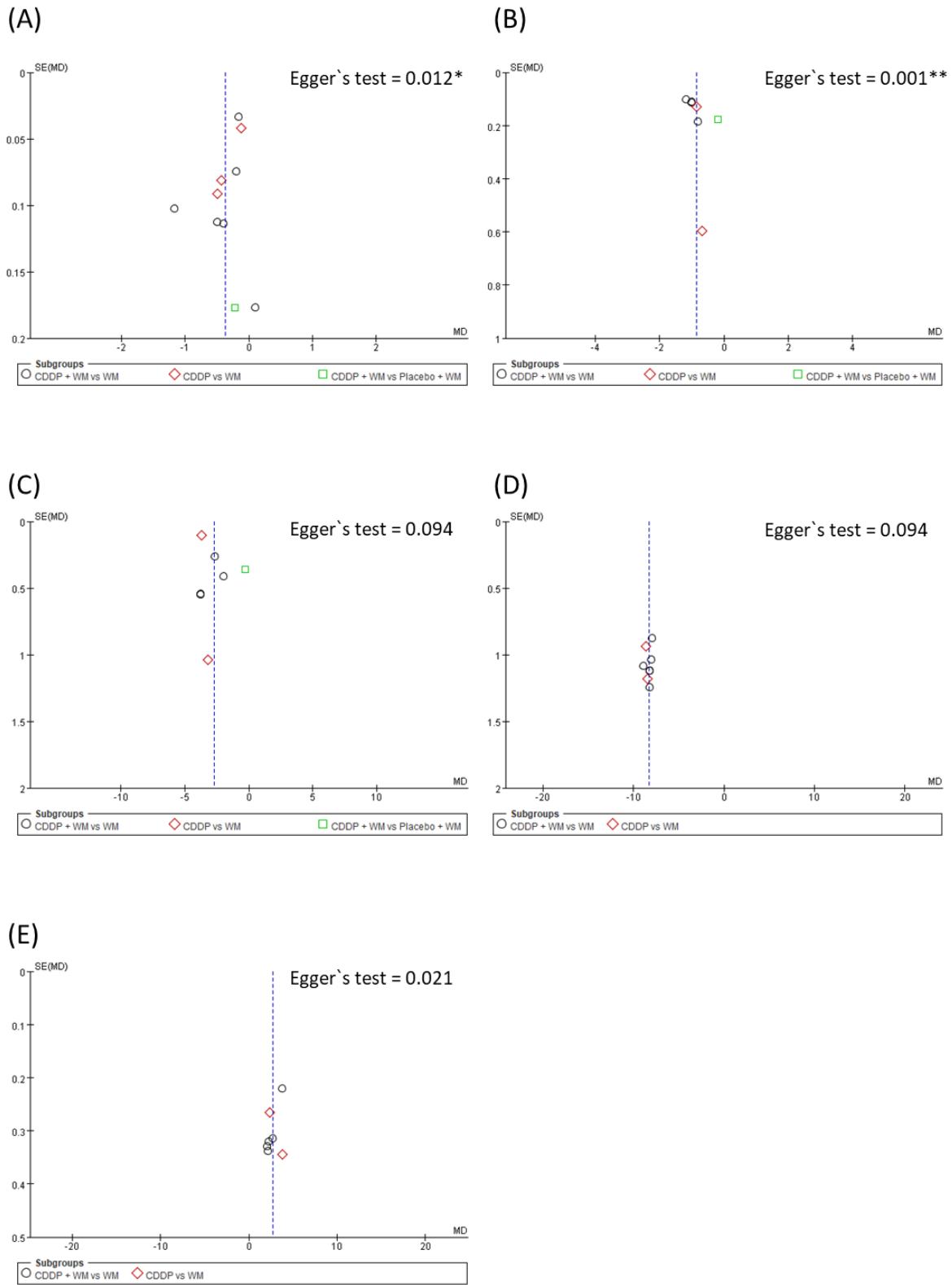
JIA (2017)	12weeks, tid*405mg	① ACR ② WBV ③ PV	① 6.06±3.56 vs 5.23±3.11(P=0.2209) ② 5.83±0.86 vs 5.47±0.87(P=0.0388) ③ 3.50±0.94 vs 3.60±0.82(P=0.5738)	NR
Zhao (2016)	Tid*10 pills	① TER ② PA ③ Hcy	① 87. 5 vs 57. 5 ② 9. 24 ± 1. 57 vs 5. 45 ± 1. 38 * ③ 9. 86 ± 5. 38 vs 18. 29 ± 4. 71 *	NR
Chen (2018)	8 weeks, tid*10 pills	① TER ② Hcy ③ APN ④ WBC( $10^9$ ) ⑤ RBC( $10^{12}$ ) ⑥ Platelet( $10^9$ ) ⑦ TC ⑧ TG ⑨ LDL-C ⑩ HDL-C	① 50 vs 58 ② 19.22±5.12 vs 11.23±4.45(P=0.000) ③ 4.53±1.05 vs 8.30±1.34(P=0.000) ④ 5.78±0.26 vs 5.88±0.25(P=0.034) ⑤ 4.56±0.07 vs 4.69±0.08(P=0.000) ⑥ 163.21±2.33 vs 165.33±2.32(P=0.000) ⑦ 5.63±1.17 vs 5.18±1.22(P=0.041) ⑧ 1.85±0.16 vs 1.40±0.21(P=0.000) ⑨ 3.86±1.42 vs 3.23±1.53(P=0.021) ⑩ 1.19±0.45 vs 1.68±0.47(P=0.000)	T) 10.00% n=6 C) 8.33% n=6
Gu (2020)	3 months, tid*10 pills	① TER ② median nerve MCV ③ median nerve SCV ④ common peroneal nerve MCV ⑤ common peroneal nerve SCV(m/s) ⑥ Abnormal foot pressure perception score ⑦ MnSi Symptom questionnaire scores ⑧ MnSi foot test score ⑨ VAS ⑩ WBV ⑪ PV ⑫ platelet aggregation rate ⑬ platelet adhesion rate	① 92.6 vs 77.8 ② 47.34±1.91* vs 51.05±2.11*# ③ 46.47±1.93* vs 48.95±2.13*# ④ 46.99±1.93* vs 49.73±1.95*# ⑤ 49.33±2.11* vs 51.97±2.01*# ⑥ 6.2±2.5* vs 5.1±1.6*# ⑦ 6.7±1.6* vs 5.1±1.4*# ⑧ 3.4±1.3* vs 2.1±1.0*# ⑨ 2.6±1.3* vs 1.4±0.8*# ⑩ 11.4±1.6* vs 9.6±1.2*# ⑪ 2.0±0.5* vs 1.5±0.3*# ⑫ 26.9±5.5* vs 21.2±4.3*# ⑬ 41.7±7.0* vs 38.2±5.1*#	NR
Huang (2005)	3 weeks, tid*10 pills	① TC ② TG ③ LSR ④ HSR ⑤ PV	① 3.55±1.21** vs 6.35±1.21 ② 1.38±0.86 ** vs 2.38±0.86 * ③ 8.21±1.47** vs 10.86±1.59 ④ 3.02±0.19**vs 4.19±0.62 * ⑤ 1.63±0.16** vs1.87±0.19	mild headache (n = 2)

		⑥ Hct ⑦ ESR	⑥ $2.07 \pm 0.49$ *vs $2.61 \pm 0.59$ ⑦ $40.96 \pm 2.92$ vs $41.98 \pm 3.23$	
Yuan (2013)	4 weeks, tid*10 pills	① Creatinine ② Blood urea nitrogen ③ 24-hour urine total protein ④ AER ⑤ HSR ⑥ LSR ⑦ PV ⑧ Fibrinogen	① $76 \pm 13$ vs $79 \pm 10$ ② $5.5 \pm 1.4$ vs $5.6 \pm 1.4$ ③ $0.12 \pm 0.06$ * vs $0.18 \pm 0.011$ ④ $61.5 \pm 9.8$ vs $73.6 \pm 9.1$ ⑤ $6.1 \pm 0.6$ * vs $7.1 \pm 0.5$ ⑥ $10.0 \pm 3.2$ * vs $13.8 \pm 2.0$ ⑦ $1.7 \pm 0.6$ * vs $2.1 \pm 0.5$ ⑧ $2.9 \pm 0.3$ * vs $3.7 \pm 0.8$	NR
Jin (2015)	1 year, tid* 10 pills(270mg)	① Hcy ② PA	① $8.29 \pm 1.42$ * vs $6.15 \pm 1.45$ * ② $11.2 \pm 4.8$ * vs $19.4 \pm 5.7$ *	NR
Lu (2017)	2 months, tid	① Hcy ② PA	① $11.3 \pm 4.2$ * vs $19.5 \pm 5.6$ * ② $8.31 \pm 1.42$ vs $6.22 \pm 11.48$	NR
Li (2015)	2 months, tid*10 pills	① Hcy ② APN	① $11.21 \pm 5.11$ * vs $19.25 \pm 5.12$ * ② $8.87 \pm 1.12$ * vs $6.17 \pm 1.89$ *	NR
Lin (2017)	3 months, tid*10 pills	① LSR ② HSR ③ PV ④ Hct ⑤ sensory nerve conduction velocity	① $17.25 \pm 4.05$ vs $20.48 \pm 4.58$ ② $4.85 \pm 2.16$ vs $5.54 \pm 2.78$ ③ $1.60 \pm 0.17$ vs $35.21 \pm 3.95$ ④ $35.21 \pm 3.95$ vs $39.47 \pm 4.12$ ⑤ $46.94 \pm 13.37$ vs $47.06 \pm 13.95$ / $55.83 \pm 8.74$ vs $56.74 \pm 10.38$ / $49.32 \pm 10.8$ vs $49.84 \pm 11.54$ / $45.05 \pm 10.77$ vs $45.85 \pm 10.89$	NR
Wang (2016)	8 weeks, tid*10 pills (270 mg)	① Hcy ② PA	① $11.3 \pm 4.2$ vs $19.5 \pm 5.6$ ( $P < 0.05$ ) ② $8.31 \pm 1.42$ vs $6.22 \pm 1.48$ ( $P < 0.05$ )	NR
Wang (2015)	2 months, tid*10 pills (270mg)	① APN ② Hcy	① $8.32 \pm 1.51$ * vs $6.12 \pm 1.31$ ② $11.25 \pm 4.48$ * vs $20.15 \pm 5.09$	NR
Yin (2017)	3 months, tid*10 pills	① Scr( c/ $\mu$ mol·L <sup>-1</sup> ) ② BUN ③ Beta 2 Microglobulin test ④ 24h Urine test ⑤ HSR ⑥ LSR ⑦ PV	① $86.46 \pm 21.35$ * vs $95.41 \pm 26.45$ * ② $5.28 \pm 1.27$ * vs $5.79 \pm 1.35$ * ③ $371.67 \pm 172.53$ * vs $521.52 \pm 225.38$ * ④ $208.14 \pm 21.36$ * vs $246.78 \pm 25.76$ * ⑤ $6.07 \pm 0.56$ * vs $6.92 \pm 0.53$ * ⑥ $10.05 \pm 0.53$ vs $13.76 \pm 0.32$ *	Dizziness (1 vs 3) nausea, vomiting (1 vs 3) lower limb pain (0 vs 2)

		(8) Fibrinogen	(7) $1.51 \pm 0.25^*$ vs $1.95 \pm 0.41^*$ (8) $2.68 \pm 0.24^*$ vs $3.55 \pm 0.48^*$	diarrhea (1 vs 3)
Bai (2008)	16 weeks, tid*10 pills	① HSR ② LSR ③ PV ④ Fibrinogen ⑤ Hct ⑥ TC ⑦ TG ⑧ HDL-C ⑨ LDL-C ⑩ Creatinine ⑪ BUN ⑫ Serum creatinine clearance(ml/min) ⑬ 24h Urine test ⑭ Urinary albumin excretion rate	① $6.2 \pm 0.6^*$ vs $7.2 \pm 0.5$ ② $10.1 \pm 3.2^*$ vs $13.9 \pm 2.0$ ③ $1.7 \pm 0.6^*$ vs $2.2 \pm 0.5$ ④ $2.9 \pm 0.3^*$ vs $3.8 \pm 0.9$ ⑤ $0.38 \pm 0.05^*$ vs $0.53 \pm 0.04$ ⑥ $4.8 \pm 0.6^*$ vs $6.5 \pm 0.4$ ⑦ $2.45 \pm 0.28$ vs $1.52 \pm 0.27^*$ ⑧ $1.07 \pm 0.35$ vs $1.11 \pm 0.26$ ⑨ $3.64 \pm 0.21^*$ vs $4.02 \pm 0.45$ ⑩ $75 \pm 13$ vs $79 \pm 10$ ⑪ $5.7 \pm 1.4$ vs $5.6 \pm 1.4$ ⑫ $83.0 \pm 26.8$ vs $83.8 \pm 24.6$ ⑬ $120 \pm 60^*$ vs $190 \pm 50^*$ ⑭ $61.4 \pm 9.8^*$ vs $73.5 \pm 9.1^*$	No side effects were reported

Hcy: Homocysteine ( $\mu\text{mol/L}$ ); HSR: high shear rate viscosity (mpa/s); LSR: low shear rate viscosity (mpa/s); PA: plasma adiponectin (mg/L); PV: plasma viscosity (mpa/s); WBV: whole blood viscosity (mpa/s); 24 h Urine protein: 24-hour quantitative determination of urinary protein (m/mg); 24 h Urine test: 24-hour Urine quantitative protein (mg/24 h).

Unit of each outcome variables: ACR (mg/mmol); AER ( $\mu\text{g}/\text{min}$ ); APN (mg/L); Beta 2 Microglobulin test (mg/L); Blood urea nitrogen (mmol/L); BUN (mmol/L); Creatinine ( $\mu\text{mol/L}$ ); FBG (mmol/L); Fibrinogen (g/L); Hcy ( $\mu\text{mol/L}$ ); HDL-C (mmol/L); LDL-C (mmol/L); Microalbumin test ( $\mu\text{g}/\text{min}$ ); PA (mg/L); Platelet adhesion (%); Platelet aggregation rate (%); Plasma viscosity (mpa/s); Serum albumin (g/L); Serum creatinine (mmol/L); Serum creatinine clearance (mL/min); Serum urea (mmol/L); Sr ( $\mu\text{mol/L}$ ); TC (mmol/L); TER (%); TG (mmol/L); Urinary albumin excretion rate ( $\mu\text{g}/\text{min}$ ); Whole blood viscosity (mpa/s); 24-hour urine total protein (g/24 h).



**Supplement S4.** Funnel plot illustrating publication bias. (A) Plasma viscosity, (B) high shear rate, (C) low shear rate, (D) homocysteine, and (E) plasma adiponectin.

## **Supplement S5.** GRADE assessment of included studies.

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	CDDP	Control	Relative (95% CI)	Absolute (95% CI)		
8	randomized trials	not serious	not serious	not serious	not serious	none	349	349	-	MD 8.32 lower (9.05 lower to 7.58 lower)	⊕⊕⊕⊕ High	

#### Plasma Adiponectin

7	randomized trials	not serious	not serious	not serious	not serious	none	310	310	-	MD 2.72 higher (2.13 higher to 3.32 higher)	⊕⊕⊕⊕ High	
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