

Table S1: Data of the coagulation time in vitro of thrombin (n=5)

M: thrombin + ultrapure water; M+H: thrombin + PS H; M+Q: thrombin + PF saponins extract; coagulation did not occur in inactivated thrombin + PS H group;

| Groups | M | M+H | M+Q |
|----------|------------|------------|------------|
| Time (s) | 41.02±0.90 | 35.24±0.69 | 22.01±0.37 |

Table S2: Data of bleeding time (BT) in mice and Hemostasis effect of PS H and PF saponins extract (n=8)

Hemostatic effect = 100% × (blank group BT - drug group BT) / blank group BT

C: control(0.2% CMC-Na solution); H: PS H(H32, 32 mg/kg; H20, 20 mg/kg; H8, 8 mg/kg); Q: PF saponins extract (Q32, 32 mg/kg; Q16, 16 mg/kg); B: Yunnan Baiyao (1 g/kg); * compared with 0.2% CMC-Na (p<0.05)

| Groups | C | H32 | H20 | H8 | Q32 | Q16 | B |
|-----------------------|------------|------------|------------|------------|------------|------------|------------|
| BT (s) | 11.53±0.24 | 5.61±0.75* | 5.79±1.05* | 7.36±0.86* | 5.05±0.70* | 8.81±0.79* | 7.53±1.39* |
| Hemostatic effect (%) | | 51.34 | 49.78 | 36.17 | 56.2 | 23.59 | 34.69 |

Table S3: Data of the 4 blood coagulation parameters of PS H and PF saponins extract in rats (n=8)

C: control(0.2% CMC-Na solution); H: PS H(H20, 20 mg/kg; H12.5, 12.5 mg/kg; H5, 5 mg/kg); Q: PF saponins extract (Q20, 20 mg/kg; Q10, 10mg/kg); G: Gongxuenin (80 mg/kg); B: Yunnan Baiyao (0.6 g/kg); * compared with 0.2% CMC-Na (p<0.05); Prothrombin time (PT); Thrombin time (TT); Activated partial thromboplastin time (APTT); Fibrinogen (FIB);

| Groups | C | H20 | H12.5 | H5 | Q20 | Q10 | G | B |
|-----------|------------|-------------|------------|------------|------------|------------|------------|------------|
| PT (s) | 9.91±0.31 | 10.95±0.18* | 9.01±0.14* | 10.69±0.31 | 9.38±0.11 | 9.09±0.96* | 10.13±0.35 | 10.18±0.33 |
| APTT (s) | 17.16±1.75 | 15.25±0.42 | 17.35±2.35 | 15.64±0.66 | 14.68±0.35 | 14.96±0.37 | 14.73±0.21 | 14.38±0.29 |
| TT (s) | 56.08±3.36 | 59.13±0.90 | 55.46±4.70 | 56.25±1.78 | 54.63±0.95 | 55.89±0.80 | 56.14±1.16 | 55.65±1.12 |
| FIB (g/L) | 1.11±0.21 | 2.05±0.15* | 1.88±0.16* | 1.63±0.09* | 2.46±0.20* | 1.77±0.12* | 1.97±0.09* | 1.99±0.14* |

Table S4: Data of the liver function and blood lipid parameters of PS H and PF saponins extract in rats (n=8). C: control(0.2% CMC-Na solution); H: PS H(H20, 20

mg/kg; H12.5, 12.5 mg/kg; H5, 5 mg/kg); Q: PF saponins extract; G: Gongxuenin (80 mg/kg); B: Yunnan Baiyao (0.6 g/kg); * compared with 0.2% CMC-Na (p<0.05); Alanine aminotransferase (ALT), Aspartate aminotransferase (AST), Albumin (ALB), Total cholesterol (CHOL), Triglyceride (TG), total proteins (TP), High density lipoprotein (HDL) and Low density lipoprotein (LDL)

| Groups | C | H20 | H12.5 | H5 | Q20 | Q10 | G | B |
|--------------|------------|------------------|-------------|--------------|---------------|-------------|------------|------------|
| ALT U/L | 16.50±1.71 | 25.67±3.70 | 27.20±1.85* | 26.67±3.14 | 30.25±3.22* | 31.18±2.26* | 25.67±4.80 | 24.80±2.06 |
| AST U/L | 74.00±3.49 | 104.00± 9.63* | 78.86±3.54 | 104.36±9.28* | 111.00±17.13* | 96.88±10.18 | 83.71±5.48 | 81.25±7.88 |
| TP g/L | 51.23±2.10 | 56.23±2.70 | 52.54±1.63 | 57.40±1.85 | 50.40±3.45 | 56.33±1.92 | 52.26±2.29 | 58.68±5.64 |
| ALB g/L | 28.89±1.15 | 31.73±1.13 | 30.35±0.58 | 32.77±0.92 | 29.50±1.85 | 30.61±0.7 | 29.14±0.75 | 32.48±1.84 |
| CHOL m mol/L | 1.57±0.12 | 1.72±0.09 | 1.86±0.14 | 1.68±0.11 | 1.51±0.16 | 1.40±0.08 | 1.92±0.13 | 1.80±0.18 |
| TG m mol/L | 0.09±0.02 | 0.25±0.06 | 0.09±0.01 | 0.28±0.09 | 0.18±0.04 | 0.12±0.02 | 0.13±0.02 | 0.16±0.05 |
| HDL m mol/L | 0.28±0.02 | 0.29±0.01 | 0.35±0.02 | 0.29±0.01 | 0.28±0.04 | 0.26±0.02 | 0.35±0.03 | 0.33±0.03 |
| LDL m mol/L | 0.10±0.01 | 0.14±0.02 | 0.12±0.01 | 0.11±0.01 | 0.11±0.01 | 0.09±0.01 | 0.11±0.01 | 0.12±0.02 |