

Supplemental material

Table S1 | Risk factors of the 3-month poor outcome and END in univariable analysis of non-SIASO group

	Poor outcome (mRS=2-6) (n=71)	Favorable outcome (mRS=0-1) (n=158)	t/X ² /z Value	P Value	With END (n=22)	Without END (n=207)	t/X ² /z Value	P Value
Age ^a (years)	63.9(11.7)	60.9(12.0)	1.757	0.008	59.9(8.4)	62.00(12.3)	0.795	0.427
Men ^b , n (%)	45(63.4%)	117(74.1%)	2.695	0.101	18(81.8%)	144(69.6%)	1.443	0.325
Hypertension ^b , n (%)	53(74.6%)	113(71.5%)	0.240	0.624	16(85.0%)	150(62.2%)	0.001	0.979
Use antihypertensive therapy before IVT ^b , n (%)	9(12.7%)	16(10.1%)	0.185	0.667	2(9.1%)	23(11.1%)	0.072	1.000
Diabetes mellitus ^b , n (%)	18(25.4%)	44(27.8%)	0.155	0.694	6(27.3%)	56(27.1%)	0.000	0.982
History of hypercholesterolemia ^b , n (%)	28(39.4%)	63(49.9%)	0.010	0.921	11(50.0%)	80(38.6%)	1.033	0.309
Smokers/ex-smokers ^b , n (%)	21(29.6%)	57(36.1%)	0.921	0.337	8(36.4%)	70(33.8%)	0.057	0.811
AF ^b , n (%)	24(33.8%)	26(16.5%)	8.637	0.003	2(9.1%)	48(23.2%)	2.316	0.176
History of coronary heart disease ^b , n (%)	7(9.9%)	12(7.6%)	0.330	0.566	3(13.6%)	16(7.7%)	0.912	0.405
Previous stroke ^b , n (%)	12(16.9%)	21(13.3%)	0.518	0.472	3(13.6%)	33(14.5%)	0.012	1.000
Systolic blood pressure on admission ^a	156.4(25.0)	159.2(25.0)	-0.773	0.440	161.4(30.4)	158.0(24.3)	-0.615	0.539
OTT ^a (minutes)	210(45.1)	189.3(60.1)	2.860	0.005	200.0(57.4)	195.3(56.6)	-0.340	0.734

NIHSS on admission ^c (IQR, 25-75)	8.0(5.0-12.0)	4.0(3.0-8.0)	-5.626	<0.001	6(4.0-8.0)	5(4.0-9.0)	-0.378	0.706
SV-24h ^a	12.3(4.7)	12.7(5.9)	-0.396	0.693	11.8(4.2)	12.6(5.7)	0.643	0.521
SD-24h ^a	11.5(3.5)	12.1(3.2)	-1.189	0.236	11.0(2.4)	12.0(3.4)	1.274	0.204
CV-24h ^a	8.1(2.5)	8.8(2.4)	-1.853	0.064	7.8(2.1)	8.7(2.5)	1.558	0.121

Note: ^aMean(SD), *t*-test; ^bn (%), chi-square test; ^cMann–Whitney *U* test.

mRS, modified Rankin Scale; *NIHSS*, National Institutes of Health Stroke Scale; *OTT*, Onset to Treatment Time; *END*, Early Neurological Deterioration; *AF*, atrial fibrillation; *SV-24h*, successive variability of systolic blood pressure within the first 24 hours after IVT; *SD-24h*, standard deviation of systolic blood pressure within the first 24 hours after IVT; *CV-24h*, coefficient of systolic blood pressure variation within the first 24 hours after IVT; *SIASO*, Symptomatic Intracranial Artery Stenosis or Occlusion

Table S2 | Multivariate logistic regression of risk factors for 3-month poor outcome in non-SAISO group

Variable	3-month		
	β	<i>OR</i> (95% <i>CI</i>)	<i>P</i> value
Age	0.016	1.016 (0.988-1.045)	0.256
NIHSS on admission	0.204	1.226 (1.132-1.327)	<0.001
AF	0.755	2.129 (1.015-4.465)	0.046
OTT	0.011	1.011 (1.004-1.017)	0.001

NIHSS, National Institutes of Health Stroke Scale; *AF*, atrial fibrillation; *OTT*, Onset to Treatment Time; *SIASO*, Symptomatic Intracranial Artery Stenosis or Occlusion

TABLE S3 | Multivariate logistic regression of SV-24h for 3-month poor outcome in SAISO group
(An interactional analysis of age, AF, hypertension and SV-24h).

Variable	3-month		
	β	OR (95% CI)	P value
Age	0.045	1.046 (1.009-1.085)	0.015
Hypertension	-1.298	0.273 (0.004-16.644)	0.536
AF	-2.506	0.082 (0.000-122.915)	0.502
SV-24h	0.150	1.161 (1.031-1.308)	0.014
SV-24h by age	-0.004	0.996 (0.986-1.006)	0.389
SV-24h by hypertension	0.011	1.011 (0.941-1.087)	0.760
SV-24h by AF	0.057	1.059 (0.959-1.168)	0.257

AF, atrial fibrillation; SV-24h, successive variability of systolic blood pressure within the first 24 hours after IVT; SIASO, symptomatic intracranial artery stenosis or occlusion

TABLE S4 | Interaction effects of BPV and SIASO on the 3-month poor outcome in all patients with IVT.

Variable	3-month		
	β	OR (95% CI)	P value
Age	0.025	1.025 (1.004-1.047)	0.021
NIHSS on admission	0.189	1.208 (1.137-1.283)	<0.001
AF	0.433	1.543 (0.796-2.989)	0.199
SV-24h	-0.008	0.992 (0.937-1.050)	0.774
SIASO	-0.947	0.388 (0.067-2.247)	0.291
SV-24h by SIASO	0.099	1.104 (1.060-1.149)	<0.001

AF, atrial fibrillation; NIHSS, National Institutes of Health Stroke Scale; SV-24h, successive variability of systolic blood pressure within the first 24 hours after IVT; SIASO, symptomatic intracranial artery stenosis or occlusion

TABLE S5 | BPV patterns of the 3-month poor outcome in univariable analysis of SIASO group.

	Poor outcome (mRS=2-6) (n=73)	Favorable outcome (mRS=0-1) (n=37)	t value	P Value
SV-6h ^a	15.1(6.8)	12.1(4.9)	-2.620	0.010
SD-6h ^a	11.0(5.0)	9.4(3.7)	-1.810	0.073
CV-6h ^a	7.6(3.1)	6.7(2.6)	-1.511	0.134
SV-12h ^a	14.2(4.7)	11.5(4.0)	-3.115	0.003
SD-12h ^a	11.7(4.1)	10.0(3.7)	-2.289	0.025
CV-12h ^a	8.2(2.8)	7.3(2.8)	-1.642	0.103

Note: ^aMean (SD), t-test.

SV-6h, successive variability of systolic blood pressure within the first 6 hours after IVT; SD-6h, standard deviation of systolic blood pressure within the first 6 hours after IVT; CV-6h, coefficient of systolic blood pressure variation within the first 6 hours after IVT; SV-12h, successive variability of systolic blood pressure within the first 12 hours after IVT; SD-12h, standard deviation of systolic blood pressure within the first 12 hours after IVT; CV-12h, coefficient of systolic blood pressure variation within the first 12 hours after IVT; SIASO, symptomatic intracranial artery stenosis or occlusion

TABLE S6 | Multivariate logistic regression of BPV within the first 6 and 12 hours for 3-month poor outcome in SAISSO group.

Variable	3-month		
	β	OR (95% CI)	P value
Model 1			
Age	0.045	1.046 (1.007-1.087)	0.020
NIHSS on admission	0.178	1.195 (1.079-1.322)	0.001

AF	0.488	1.628 (0.376-7.057)	0.515
SV-6h	0.069	1.071 (0.980-1.171)	0.130
Model 2			
Age	0.039	1.040 (1.001-1.081)	0.047
NIHSS on admission	0.176	1.192 (1.074-1.324)	0.001
AF	0.511	1.667 (0.385-7.216)	0.494
SD-12h	-0.005	1.035 (0.994-1.079)	0.960
SV-12h	0.116	1.123 (0.992-1.272)	0.066

AF, atrial fibrillation; NIHSS, National Institutes of Health Stroke Scale; SV-6h, successive variability of systolic blood pressure within the first 6 hours after IVT; SV-12h, successive variability of systolic blood pressure within the first 12 hours after IVT; SD-12h, standard deviation of systolic blood pressure within the first 12 hours after IVT; SIASO, symptomatic intracranial artery stenosis or occlusion

TABLE S7 | Univariable analysis of BPV patterns in patients with HT or sHT in SIASO group.

	With HT (n=33)	Without HT (n=77)	t value	P Value	With sHT (n=6)	Without sHT (n=104)	t value	P Value
SV-24h ^a	13.6(3.7)	13.6(4.3)	-0.030	0.977	15.3(3.1)	13.5(4.2)	-1.061	0.291
SD-24h ^a	11.7(3.2)	12.2(4.0)	0.638	0.525	14.2(3.6)	12.0(3.7)	-1.403	0.164
CV-24h ^a	8.4(2.1)	8.7(2.7)	0.402	0.688	9.9(2.5)	8.5(2.5)	-1.313	0.192

Note: ^aMean (SD), t-test.

SV-24h, successive variability of systolic blood pressure within the first 24 hours after IVT; SD-24h, standard deviation of systolic blood pressure within the first 24 hours after IVT; CV-24h, coefficient of systolic blood pressure variation within the first 24 hours after IVT; HT, hemorrhagic transformation; sHT, symptomatic hemorrhagic transformation, SIASO, symptomatic intracranial artery stenosis or occlusion

TABLE S8 | Univariable analysis of BPV patterns in patients with HT or sHT in non-SIASO group.

	With HT (n=41)	Without HT (n=188)	t value	P Value	With sHT (n=5)	Without sHT (n=224)	t value	P Value
SV-24h ^a	12.0(4.7)	12.7(5.8)	0.654	0.514	12.8(7.5)	12.5(5.6)	-0.117	0.907
SD-24h ^a	11.3(3.3)	12.1(3.3)	1.375	0.171	12.3(1.6)	12.0(3.4)	-0.206	0.837
CV-24h ^a	8.3(2.0)	8.7(2.6)	0.870	0.385	8.6(1.4)	8.6(2.5)	-0.022	0.982

Note: ^aMean (SD), t-test.

SV-24h, successive variability of systolic blood pressure within the first 24 hours after IVT; SD-24h, standard deviation of systolic blood pressure within the first 24 hours after IVT; CV-24h, coefficient of systolic blood pressure variation within the first 24 hours after IVT; HT, hemorrhagic transformation; sHT, symptomatic hemorrhagic transformation; SIASO, symptomatic intracranial artery stenosis or occlusion