

Supplementary Table 1 Subgroup analysis of the anterior circulation

	ET	ST	P	OR (95%CI)
Number	23	24		
Primary outcome				
The modified Rankin Score at 6 months, 0-4	5 (23.8)	2 (9.1)	0.212	0.327 (0.057-1.891)
Secondary outcomes				
Mortality at 6 months	8 (38.1)	13 (59.1)	0.172	2.347 (0.690-7.982)
The modified Rankin Score at discharge, 0-4	9 (39.1)	4 (16.7)	0.093	0.311 (0.080-1.214)
Therapeutic process				
Mortality in ICU	0 (0)	3 (12.5)	0.248	
Life-sustaining treatment withdrawn	2 (8.7)	6 (25.0)	0.153	3.500 (0.627-19.540)
ICU LOS	19 (13,22)	20.5 (17,38.5)	0.162	1.029 (0.989-1.071)
Hospital LOS	41 (27,63)	47 (25,58)	0.282	1.011 (0.991-1.031)
Number of people available off the ventilator	11 (47.8)	14 (58.3)	0.471	1.527 (0.482-4.835)
Ventilation time	8 (2,12)	20 (8,30.75)	0.025	1.061 (1.008-1.118)
consciousness recovery	5 (21.7%)	10 (41.7%)	0.148	2.571 (0.714-9.225)
duration of consciousness recovery	2 (0,33)	13 (3,45)	0.159	1.020 (0.992-1.048)
Time without sedation in the ICU	13 (8,18)	17 (12.25,31.5)	0.157	1.030 (0.989-1.073)
Proportion of time without sedation in the ICU	0.82 (0.44,0.92)	0.87 (0.687,0.9375)	0.476	2.128 (0.266-17.022)
Time without analgesia in the ICU	17 (12,20)	18.5 (12.25,36)	0.108	1.039 (0.992-1.090)

Proportion of time without analgesia in ICU	0.95 (0.57,1)	0.93 (0.66,1)	0.608	1.572 (0.219-11.297)
Treatment costs (thousand)	215.7 (153.3-309.4)	255.9 (167.2-352.9)	0.360	
ICU treatment costs (thousand)	96.0 (61.3-132.5)	132.9 (91.1-190.9)	0.195	
Adverse events				
Tracheostomy-related complications	1 (4.3)	4 (16.7)	0.201	4.400 (0.453-42.736)
Pneumonia	11 (47.8)	13 (54.2)	0.664	1.289 (0.410-4.057)
Cardiovascular Diseases	3 (13.0)	4 (16.7)	0.728	1.333 (0.264-6.739)
Sepsis	1 (4.3)	6 (25.0)	0.077	7.333 (0.807-66.631)
Gastrointestinal Bleeding	4 (17.4)	4 (16.7)	0.947	0.950 (0.207-4.350)

Abbreviation: ET, early tracheostomy; ST, standard tracheostomy; ICU, intensive care unit; LOS, length of stay

Supplementary Table 2 Subgroup analysis of the posterior circulation

	ET	ST	P	OR (95%CI)
Number	27	25		
Primary outcome				
The modified Rankin Score at 6 months, 0-4	2 (9.1)	6 (27.3)	0.115	3.947 (0.715-21.778)
Secondary outcomes				
Mortality at 6 months	16 (72.7%)	11 (50%)	0.126	0.375 (0.107-1.317)
The modified Rankin Score at discharge, 0-4	5 (18.5%)	9 (36.0%)	0.162	2.475 (0.696-8.802)
Therapeutic process				
Mortality in ICU	2 (7.4%)	2 (8.3%)	0.902	1.136 (0.147-8.757)
Life-sustaining treatment withdrawn	4 (14.8%)	7 (28.0%)	0.251	2.236 (0.566-8.841)
ICU LOS	17 (12.5,26.5)	21 (13,27)	0.676	1.009 (0.968-1.052)
Hospital LOS	29 (18,49.5)	38 (29,63)	0.118	1.024 (0.994-1.055)
Number of people available off the ventilator	15 (55.6%)	12 (48.0%)	0.586	0.738 (0.248-2.200)
Ventilation time	9 (1.0,18.0)	14 (6.5,22)	0.501	1.016 (0.971-1.063)
consciousness recovery	7 (25.9%)	4 (16.0%)	0.385	0.544 (0.138-2.147)
duration of consciousness recovery	4 (0,19)	0 (0,13)	0.586	0.990 (0.954-1.027)
Time without sedation in the ICU	13 (7,17)	11 (7,23)	0.993	1.000 (0.957-1.046)
Proportion of time without sedation in the ICU	0.86 (0.655,0.93)	0.72 (0.44,0.90)	0.319	0.352 (0.045-2.746)
Time without analgesia in the ICU	17 (12.5,23)	12 (6,24)	0.554	0.988 (0.951-1.027)
Proportion of time without	1(0.98,1)	0.96 (0.37,1)	0.048	0.107 (0.012-0.984)

analgesia in ICU

Treatment costs	134.5 (97.0-259.5)	200.6	0.178	
(thousand)		(113.0-313.7)		
ICU treatment costs	90.1 (56.9-147.3)	111.4(56.8-166.	0.502	
(thousand)		2)		
Adverse events				
Tracheostomy-related	1 (3.7%)	5 (20.0%)	0.099	6.500 (0.703-60.133)
complications				
Pneumonia	10 (37.0%)	10 (40.0%)	0.826	1.133 (0.370-3.467)
Cardiovascular Diseases	3 (11.1%)	2 (8.0%)	0.705	0.696 (0.106-4.552)
Sepsis	3 (11.1%)	0 (0)	0.262	
Gastrointestinal Bleeding	2 (7.4%)	5 (20.0%)	0.200	3.125 (0.547-17.841)

Abbreviation: ET, early tracheostomy; ST, standard tracheostomy; ICU, intensive care unit; LOS, length of stay.

