

Supplemental tables

Supplemental table 1. Participation centers

Department	Hospital	City	Province	Site PI
Department of Interventional Neuroradiology	Beijing Tiantan Hospital, Capital Medical University	Beijing	Beijing	Zhongrong Miao
Department of Emergency	Xiangtan Central Hospital	Xiangtan	Hunan	Guangxiong Yuan
Department of Neurology	Linyi People's Hospital	Linyi	Shandong	Hongxing Han
Department of Neurology	Zhangzhou Affiliated Hospital of Fujian Medical University	Zhangzhou	Fujian	Wenhua Chen
Department of Neurosurgery	Tianjin huanhu hospital	Tianjin	Tianjin	Ming Wei
Department of Neurology	Anyang People's Hospital	Anyang	Henan	Jiangang Zhang
Department of Neurology	Yijishan Hospital of Wannan Medical College	Wuhu	Anhui	Zhiming Zhou
Department of Neurology	The first people's hospital of Chenzhou	Chenzhou	Hunan	Xiaoxi Yao
Department of Neurology	Binzhou People's Hospital	Binzhou	Shandong	Guoqing Wang
Department of Neurology	Yancheng Third People's Hospital	Yancheng	Jiangsu	Weigen Song
Department of Neurology	Lishui Municipal Central Hospital	Lishui	Zhejiang	Xueli Cai
Department of Neurology	China-Japan Union Hospital of Jilin University	Changchun	Jilin	Guangxian Nan
Department of Neurointervention	Dalian Municipal Central Hospital affiliated with Dalian Medical University	Dalian	Liaoning	Di Li
Department of Neurosurgery	Guangdong Provincial Hospital of Chinese Medicine	Guangzhou	Guangdong	Alvin Yi-Chou Wang
Department of Neurology	Zhongshan City People's Hospital	Guangzhou	Guangdong	Wentong Ling
Department of Neurology	Shantou Central Hospital	Shantou	Guangdong	Chuwei Cai
Department of Neurology	Nanyang Central Hospital	Nanyang	Henan	Changming Wen
Department of Neurology	Taizhou hospital of Zhejiang Province	Taizhou	Zhejiang	En Wang
Department of Neurosurgery	Liaocheng People's Hospital	Liaocheng	Shandong	Liyong Zhang
Department of Neurology	Baotou Centre Hospital	Baotou	Inner Mongolia	Changchun Jiang
Department of Neurology	Shenzhen Hospital, Southern Medical University	Shenzhen	Guangdong	Yajie Liu
Department of Neurology	Maoming People's Hospital	Maoming	Guangdong	Geng Liao
Department of Neurology	The Second Affiliated Hospital of Guangzhou Medical University	Guangzhou	Guangdong	Xiaohui Chen

Department of Cerebrovascular Disease	Henan Provincial People's Hospital, Zhengzhou University	Zhengzhou	Henan	Tianxiao Li
Department of Neurology	Yongchuan Hospital of Chongqing Medical University	Chongqing	Chongqing	Shudong Liu
Department of Neurology	The affiliated hospital of South West medical university	Luzhou	Sichuan	Jinglun Li
Department of Neurology	Shanxi Provincial People's Hospital	Taiyuan	Shanxi	Yaxuan Sun
Department of Neurology	The Second Affiliated Hospital to Xiamen Medical College	Xiamen	Fujian	Na Xu
Department of Neurology	Shengli Oilfield Central Hospital	Dongying	Shandong	Zong'en Gao
Department of Neurology	Songyuan Jilin oil Field Hospital	Songyuan	Jilin	Dongsheng Ju
Department of Interventional Neuroradiology	Liao Cheng the third people's hospital	Liaocheng	Shandong	Cunfeng Song
Department of Neurology	The First People's Hospital of Changzhou	Changzhou	Jiangsu	Jinggang Xuan
Department of Neurology	Taiyuan Central Hospital	Taiyuan	Shanxi	Feng Zhou
Department of Neurology	Affiliated Jiangmen Traditional Chinese Medicine Hospital of Ji'nan University	Jiangmen	Guangdong	Qing Shi
Department of Neurology	Sichuan Mianyang 404 Hospital	Mianyang	Sichuan	Jun Luo
Department of Neurology	JingJiang People's Hospital, the Seventh Affiliated Hospital of Yangzhou University	Jingjiang	Jiangsu	Yan Liu
Department of Neurosurgery	Tianjin TEDA Hospital	Tianjin	Tianjin	Zaiyu Guo
Department of Neurosurgery	The second Nanning People's Hospital	Nanning	Guangxi	Tong Li
Department of Neurology	West China Hospital, Sichuan University	Chengdu	Sichuan	Hongbo Zheng
Department of Neurosurgery	First Affiliated Hospital School of Medicine Shihezi University	Shihezi	Xinjiang	Linzhi Dai
Department of Neurology	Siping Central People's Hospital	Siping	Jilin	Junfeng Zhao
Emergency and Critical Stroke Ambulance Center	Langfang Changzheng Hospital	Langfang	Hebei	Liqiang Gui
Department of Neurology	Beijing Luhe Hospital, Capital Medical University	Beijing	Beijing	Xiaokun Geng
Department of Neurology	Mianyang Central Hospital	Mianyang	Sichuan	Yufeng Tang
Department of Neurology	Hangzhou First People's Hospital	Hangzhou	Zhejiang	Congguo Yin
Department of Neurosurgery	The affiliated Hospital of Guizhou Medical University	Guiyang	Guizhou	Hua Yang

Supplemental table 2. Study organization

Member	Department	Hospital
Steering Committee		
Yongjun Wang	Department of Neurology	Beijing Tiantan Hospital, Capital Medical University
Yilong Wang	Department of Neurology	Beijing Tiantan Hospital, Capital Medical University
Liping Liu	Department of Neurology	Beijing Tiantan Hospital, Capital Medical University
David S. Liebeskind	Department of Neurology	University of California at Los Angeles
Zhongrong Miao	Department of Interventional Neuroradiology	Beijing Tiantan Hospital, Capital Medical University
Zeguang Ren	Department of Neurosurgery	The Affiliated Hospital of Guizhou Medical University
Vitor Mendes Pereira	Department of Neurosurgery, Division of Surgery	St Michael's Hospital, University of Toronto
Independent imaging Core Lab		
Jing Jing	Tiantan Neuroimaging Center of Excellence (T-NICE)	China National Clinical Research Center for Neurological Diseases
Zhe Zhang	Tiantan Neuroimaging Center of Excellence (T-NICE)	China National Clinical Research Center for Neurological Diseases
Yingkui Zhang	Tiantan Neuroimaging Center of Excellence (T-NICE)	China National Clinical Research Center for Neurological Diseases
Wei Wu	Department of Neurology	Qilu Hospital, Shandong University
Data safety and monitoring board		
Jianmin Liu	Neurovascular Center	Changhai Hospital, Naval Medical University
Chen Yao	Department of Medical Statistics	Peking University First Hospital
Kangning Chen	Department of Neurology	The Southwest Hospital of Army Medical University
Clinical event committee		
Kun Fang	Department of Neurology	Huashan Hospital, Fudan University
Bo Song	Department of Neurology	The First Affiliated Hospital of Zhengzhou University
Yi Dong	Department of Neurology	Huashan Hospital, Fudan University
Executive committee		
Zhongrong Miao	Department of Interventional Neuroradiology	Beijing Tiantan Hospital, Capital Medical University

Xiaochuan Huo	Department of Interventional Neuroradiology	Beijing Tiantan Hospital, Capital Medical University
Gaoting Ma	Department of Interventional Neuroradiology	Beijing Tiantan Hospital, Capital Medical University
Guangxiong Yuan	Department of Emergency	Xiangtan Central Hospital
Hongxing Han	Department of Neurology	Linyi People's Hospital
Wenhao Chen	Department of Neurology	Zhangzhou Affiliated Hospital of Fujian Medical University
Ming Wei	Department of Neurosurgery	Tianjin huanhu hospital
Jiangang Zhang	Department of Neurology	Anyang People's Hospital
Zhiming Zhou	Department of Neurology	Yijishan Hospital of Wannan Medical College
Xiaoxi Yao	Department of Neurology	Chenzhou First One Hospital
Guoqing Wang	Department of Neurology	Bin zhou People's Hospital
Weigen Song	Department of Neurology	Yancheng Third People's Hospital
Xueli Cai	Department of Neurology	Lishui Municipal Central Hospital
Guangxian Nan	Department of Neurology	China-Japan Union Hospital of Jilin University
Di Li	Department of Neurointervention	Dalian Municipal Central Hospital affiliated with Dalian Medical University
Yizhou Wang	Department of Neurosurgery	Guangdong Provincial Hospital of Chinese Medicine
Wentong Ling	Department of Neurology	ZhongShan City People's Hospital
Chuwei Cai	Department of Neurology	Shantou Central Hospital
Changming Wen	Department of Neurology	Nanyang Central Hospital
En Wang	Department of Neurology	Taizhou hospital of Zhejiang Province
Liyong Zhang	Department of Neurosurgery	Liaocheng People's Hospital
Changchun Jiang	Department of Neurology	Baotou Centre Hospital
Yajie Liu	Department of Neurology	Shenzhen Hospital, Southern Medical University
Geng Liao	Department of Neurology	Maoming People's Hospital
Xiaohui Chen	Department of Neurology	The Second Affiliated Hospital of GuangZhou Medical University
Tianxiao Li	Department of Cerebrovascular Disease	Henan Provincial People's Hospital, Zhengzhou University
Shudong Liu	Department of Neurology	Yongchuan Hospital of Chongqing Medical University
Jinglun Li	Department of Neurology	The affiliated hospital of South West medical

		university
Yaxuan Sun	Department of Neurology	Shanxi Provincial People's Hospital
Na Xu	Department of Neurology	The Second Affiliated Hospital to Xiamen Medical College
Zong'en Gao	Department of Neurology	Shengli Oilfield Central Hospital
Dongsheng Ju	Department of Neurology	Songyuan Jilin oil Field Hospital
Cunfeng Song	Department of Interventional Neuroradiology	Liao Cheng the third people's hospital
Jinggong Xuan	Department of Neurology	The First People's Hospital of Changzhou
Feng Zhou	Department of Neurology	Taiyuan Central Hospital
Qing Shi	Department of Neurology	Affiliated Jiangmen Traditional Chinese Medicine Hospital of Ji'nan University
Jun Luo	Department of Neurology	Sichuan Mianyang 404 Hospital
Yan Liu	Department of Neurology	JingJiang People's Hospital, the Seventh Affiliated Hospital of Yangzhou University
Zaiyu Guo	Department of Neurosurgery	Tianjin TEDA Hospital
Tong Li	Department of Neurosurgery	The second Nanning People's Hospital
Hongbo Zheng	Department of Neurology	West China Hospital, Sichuan University
Linshi Dai	Department of Neurosurgery	First Affiliated Hospital School of Medicine Shihezi University
Junfeng Zhao	Department of Neurology	Siping Central People's Hospital
Liqiang Gui	Emergency and Critical Stroke Ambulance Center	Langfang Changzheng Hospital
Xiaokun Geng	Department of Neurology	Beijing Luhe Hospital, Capital Medical University
Yufeng Tang	Department of Neurology	Mianyang Central Hospital
Congguo Yin	Department of Neurology	Hangzhou First People's Hospital
Hua Yang	Department of Neurology	The affiliated Hospital of Guizhou Medical University

Supplemental table 3. Registered Large infarct core volume thrombectomy trials

Trial	TENSION	LASTE	TESLA	RESCUE - Japan LIMIT	SELECT - 2	ANGEL - ASPECT
NCT number	NCT03094715	NCT03811769	NCT03805308	NCT03702413	NCT03876457	NCT04551664
Participating Country(ies)	Europe, Canada	Europe, United States	United States	Japan	United States, Canada, Europe	China
Major imaging inclusion criteria	NCT or DWI ASPECTS 3 - 5	NCT or DWI ASPECTS 0 - 5 (4-5 for > 80 y)	NCT or ASPECTS 2 - 5	CT ASPECTS 3 - 5 or DWI ASPECTS 3 - 5	1. ASPECTS \geq 6 and CTP core \geq 50 cc 2. ASPECTS 3 - 5 and core \geq 50 cc 3. ASPECTS 3 - 5 and core <50 cc	1. ASPECTS 3 - 5 2. ASPECTS >5 (>6 h) and core 70 - 100 cc 3. ASPECTS <3 and core 70 - 100 cc

Trial	TENSION	LASTE	TESLA	RESCUE - Japan LIMIT	SELECT - 2	ANGEL - ASPECT
NIHSS score	<26	>5	>6	≥6	≥6	6 - 30
Age, y	>18	≥18	18 - 85	>18	18 - 85	18 - 80
Time window	<12 h LSW	<6.5 h LKW	Random <24 h	Random <6 h LKW, 6 - 24 FLAIR (-)	Treat <24 h (0 - 12 vs 6 - 24)	Random <24 h
Occlusion site	Terminal ICA and MCA M1	Intracranial ICA, MCA M1 or M1 - M2	Terminal ICA and M1	Terminal ICA and M1	ICA or MCA M1, tandem	Terminal ICA and/or MCA M1 Tandem occlusion included
Required time limit from randomization to puncture	No	Yes Randomization to arterial access 30 min	No	Yes Randomization to arterial access 60 min	No	Yes Randomization to arterial access 60 min
Bridging therapy permitted	Yes	Yes	Yes	Yes	Yes	Yes
Intervention model	EVT, no specified device	EVT, no specified device	FDA - approved EVT devices	EVT, no specified device	EVT with SR Device: Trevo, Solitaire, and EmboTrap	EVT, IA - thrombolysis, angioplasty Device: Solitaire, EMBOTRAP, Reco SR, Penumbra aspiration catheter, or CFDA - approved EVT devices
Major exclusion criteria	Mass effect on CT Vascular disease prevent MT (eg, aortic dissection or aneurysm, no arterial trans femoral access)	Suspicion of aortic dissection, excessive tortuosity of cervical vessels on vascular imaging Multiple occlusion Cervical tandem lesion that requires stent placement	Refractory hypertension Mass effect on CT Tandem lesion Difficult endovascular access on vascular images	Mass effect on CT Clinical evidence of chronic occlusion High risk of hemorrhage (platelet <40,000/ μ L, APTT >50 s or PT - INR >3.0)	Mass effect on CT Inability to undergo CTA and/or CTP tPA 3 - 4.5 h With special situation* ICA dissection or aortic dissection Multiple occlusions	Refractory hypertension Mass effect on CT Multiple occlusions INR >1.7 or APTT >35 s; platelet count <100×10 ⁹ /L
Primary outcome	mRS score shift analysis	mRS score at 90 and 180 d	Utility - weighted 90 - d mRS score	mRS score 0 - 3 at 90 d	Shift on 90 - d mRS score	mRS score at 90 d
Actual study start date	July 20, 2018	April 7, 2019	July 16, 2019	November 2018	October 11, 2019	September 28, 2020

Source: <https://clinicaltrials.gov>. ANGEL-ASPECT, Study of EVT in Acute Anterior Circulation LVO Patients with a large infarCT core; Core: rCBF <30% on CT perfusion or ADC <620. ADC indicates apparent diffusion coefficient; APTT, activated partial thromboplastin time; ASPECTS, Alberta Stroke Program Early CT Score; CFDA, China Food and Drug Administration; CT, computed tomography; CTA, computed tomography angiography; CTP, computed tomography perfusion; DWI, diffusion-weighted imaging; EVT, endovascular treatment; FDA, US Food and Drug Administration; FLAIR, fluid-attenuated inversion recovery; IA, intra-arterial; ICA, internal carotid artery; INR, international normalized ratio; LASTE, Large Stroke Therapy Evaluation; LKW, last known well; LSW, last seen well; LVO, large vessel occlusion; MCA, middle cerebral artery; mRS, modified Rankin Scale; MT, mechanical thrombectomy; NCCT, noncontrast CT; NCT, National Clinical Trial; NIHSS, National Institutes of Health Stroke Scale; PT-INR, Pro-thrombin Time-International Normalized Ratio; RESCU-Japan LIMIT, Randomized Controlled Trial of Endovascular Therapy for Acute Large Vessel Occlusion With Large Ischemic Core; rCBF, relative cerebral blood flow; SELECT-2, Thrombectomy for Emergent Salvage of Large Anterior Circulation Ischemic Stroke; SR, stent retriever; TESLA, Thrombectomy for Emergent Salvage of Large Anterior Circulation Ischemic Stroke and tPA, tissue plasminogen activator.

* (1) Age >80 y, (2) current anticoagulant use, (3) history of diabetes and prior stroke, (4) NIHSS >25, and (5) ischemic involvement of more than one-third of MCA territory.