Table S1. Self-rated questionnaire assessing the eligibility of ASCaM hospitals.

Evaluation items	Serial number	Evaluation factors	Score	Evaluation method	Scoring standards
Connection between prehospital and in-hospital (20)	1	The hospital selected for the thrombolysis map should have a person responsible for the thrombolysis project for acute ischemic stroke who is also responsible for coordinating communication between the project and the emergency center.	3.0	View personnel registration status	Deduct 3 points if no relevant personnel are identified.
	2	Set up a special reception telephone and set it to record in the prehospital emergency dispatching command system to ensure smooth 24-hour calls, and designated staff members are responsible for answering and recording calls. If a related WeChat public platform, mobile APP or intelligent digital monitoring transmission system is available, the hospital must guarantee that anyone can reply immediately at any time within 24 hours.	3.0	Field inspection of equipment and staffing	Deduct 1 point for each missing item until the score is zero.
	3	In case of inadequate or loss of medical capacity due to special circumstances (e.g., CT failure), the hospital's general-on-duty or project leader must inform the EMS command center by fax or dedicated landline in advance. The hospital must accept (suspected) cerebrovascular disease patients who are transferred by EMS 24/7.	3.0	Field inspection and regular spot checks	Deduct 3 points for no relevant capacity.
	4	Designated parking spaces are available in front of the ED. In the case of traffic congestion, the hospital has designated	3.0	Field inspection	Deduct 2 points for no specific parking space; deduct 2 points for no designated guidance personnel until the score is zero.

		personnel to guide emergency vehicles into the parking spaces.			
	5	Dedicated beds or stroke unit in the ED with prominent signage and sufficient beds (stretcher beds) for patient turnover.	4.0	Field inspection	Deduct 1 point for each missing item until the score is zero.
	6	The ED doctor shall immediately check a patient's status and sign receipt confirmation upon the patient's arrival.	4.0	Check staffing and actual capability	Deduct 3 points for no relevant personnel; deduct 2 points for insufficient ability until the score is zero.
Medical institution qualification (5)	1	Certification of a secondary or tertiary hospital, a specialty hospital, or an EMS networking hospital	5.0	Field inspection of hospital grade and approval documents	Tertiary hospitals: 5 points, secondary hospitals: 4 points, unrated hospitals: 3 points; EMS networking hospitals: 2 points.
Department setting (5)	1	Independent departments exist, such as Emergency Medicine, Neurology, Neurosurgery, Intensive Care Medicine, Anesthesiology, Medical Imaging (with a neuroimaging section), Medical Laboratory (with an emergency section), and Rehabilitation Medicine.	5.0	Check hospital practice permit and field inspection	Deduct 1 point for the absence of each mentioned department until the score is zero.
Medical equipment and facilities (10)	1	The hospital is equipped with an electrocardiogram, ECG monitor, defibrillator, resuscitation equipment and medications, and an oxygen supply. The hospital owns an ambulance(s) with GPS positioning and an on-board information transmission system, walkie talkie, car telephone or other communication equipment.	2.0	Field inspection	Deduct half a point for the absence of each mentioned equipment until the score is zero.

	2	Equipped with CT (24/7), an emergency laboratory (24/7), MRI, and transcranial Doppler	2.0	Field inspection	Deduct half a point for the absence of each mentioned equipment until the score is zero.
	3	In the emergency department, set up a dedicated observation room and a resuscitation room for IV thrombolysis patients equipped with the required neurological assessment tools, evaluation forms and medications. Alteplase is routinely stored in the emergency package/emergency pharmacy.	4.0	Field inspection	Deduct 1 point for the absence of each mentioned item until the score is zero. Assign a score of zero if alteplase is not routinely stored in the emergency package or emergency pharmacy.
	4	An in-hospital data transmission system (such as the PACS) and APP that can transmit and receive medical information, such as an electrocardiogram and neuroimages, is established. A neurointervention facility (such as a DSA suite) is established.	2.0	Field inspection	Deduct 1 point for the absence of an in-hospital data transmission system. Deduct 1 point for the absence of a neurointervention facility.
Staffing (10)	1	A 24/7-coverage stroke team consisting of neurologists, neurosurgeons, ED doctors, neurointerventionists and stroke nurses.	4.0	Inspection of institutional documents and field inspection	Deduct 3 points for the absence of a 24/7 stroke team. Deduct 1 point for the absence of each role with incomplete staffing. Deduct 1 point for no 24/7 coverage.
	2	At least one senior neurologist and neurosurgeon having received professional training in cerebrovascular disease are on duty 24/7.	3.0	Inspection of personnel registration status	Deduct 1.5 points for the absence of either a neurologist or neurosurgeon.
	3	The hospital has neuroradiologists, anesthesiologists, neurointerventionists, nurses, neurorehabilitators and a neurovascular sonographer.	3.0	Inspection of personnel registration status	Deduct 1 point for the absence of each staffing role until the score is zero.

Technical ability (40)	1	The emergency stroke team can complete the NIHSS and preliminary assessment within 10 minutes after arrival; all stroke team members present within 15 minutes; complete CT scan and interpretation within 30 minutes; collect all necessary laboratory examination results within 45 minutes.	4.0	Sampling of 3 cases in the past year. Simulation exercise when necessary	Deduct 1 point for incompletion of each requirement. This item does not score if not all stroke team members can be present within 15 minutes.
	2	The radiology department can perform MRI scans (including T1, T2, SWI, FLAIR, DWI, PWI, MRA, MRV and gadolinium contrast), CTA, CTP, DSA, transesophageal echocardiography and bubble echocardiography.	4.0	Sampling of 3 cases in the past year and field inspection	Deduct 1 point for the absence of each item until zero.
	3	Mean DNT < 60 min for intravenous thrombolysis. Patients who receive bridging therapy and cannot undergo endovascular treatment at the end of intravenous thrombolysis for various reasons must be transferred within 30 minutes (DI-DO) to capable hospitals.	8.0	Sampling of 3 cases in the past year and field inspection	Inability to carry out intravenous thrombolysis does not score. Deduct 5 points for a mean DNT > 60 minutes. Deduct 3 points for failure to transfer within 30 minutes or to conduct endovascular therapy.
	4	1 In-hospital therapies such as antiplatelets, antihypertensives, and statins can be used reasonably according to the guidelines. 2 Preventive measures targeting aspiration pneumonia, deep vein thrombosis, gastrointestinal bleeding and malnutrition can be properly applied. 3 Physical and physiological assessments such as limb, language, swallowing function assessments and early rehabilitation can be applied.	4.0	Sampling of 3 cases in the past year and field inspection	Deduct 1 point for not delivering standardized therapy for each item.

		4 Neurosurgeries such as decompressive craniectomy, hematoma evacuation, and ventricular drainage can be applied.			
	5	1 The hospital admitted more than 100 patients with AIS in the past year. 2 The hospital managed no fewer than 30 cases of intravenous thrombolysis in the past 3 years, or the cases per annum was not fewer than 20/year. 3 The hospital managed no fewer than 10 cases of endovascular therapy in the past 3 years, or the cases per annum was not fewer than 5/year.	20.0	Review the electrical medical records in the wards, thrombolysis records in the ER and alteplase usage in the pharmacy in the past calendar year	1 Admission of more than 100 AIS patients per year will collect 5 points, and 1 point will be deducted for every 10 patients below 100 (the full score is 5 points). 2 Accumulated completion of fewer than 10 thrombolysis cases or 5 cases/ year warrants a 10-point deduction, and each additional 10 cases will collect 1 point (the full score is 10 points). 3 Accumulated completion of fewer than 10 endovascular therapy cases or 5 cases/year warrants a 5-points deduction, each additional 2 cases will collect 1 point (the full score is 5 points).
Management system measures (10)	1	An established express in-hospital system for acute stroke patients exists. The entire system is chaired by the president/CEO or vice-president/vice-CEO of the hospital, and the directors and head nurses of the relevant departments are responsible for quality and safety control.	5.0	Inspection of institutional documents	This item does not score if the hospital has not established an express system for acute stroke patients. If the hospital president/CEO or vice-president/vice-CEO does not serve as the head of the in-hospital system, then 3 points are deducted.

					If the relevant department directors and head nurses are not responsible for quality and safety control, then deduct 0.5 points/person until the score is zero.
	2	Sound regulations are in place for stroke management and responsibilities; a complete thrombolysis workflow is established; a registry of acute stroke thrombolysis and interventional surgery exists; archives of paperwork such as informed consent and ER medical records for thrombolysis and interventional cases are available.	2.0	Inspection of institutional documents, medical records and archives	Each part of insufficient regulations warrants a 0.5-point deduction until the score is zero. This item does not score if a thrombolysis workflow is not established.
	3	A database for acute stroke cases enabling case registration and continuous quality improvement is established; a follow-up database and clinics for stroke patients are established; regular communication with the Urban Cerebrovascular Disease Quality Control Center.	3.0	Field inspection	Each part of insufficiency or absence warrants a 0.5-point deduction until the score is zero. This item does not score if the in-hospital stroke registry is not established.
Total			100		

Appendix

List of in-house registries/investigators of participating hospitals of Greater Shenyang Acute Stroke Care Map:

Shenyang First People's Hospital: Yi Sui (Principal Investigator, PI), Bing Xu, Yunxin Zhai, Xia Wang, Li Ren, Jin Zhou, Xu Wang, Li Li, Ying Xiao, Haoyue Zhu

The 202th Hospital of People's Liberation Army: Zhilin Jiang (PI)

The First Affiliated Hospital of China Medical University: Zhiyi He (PI), Jun Yang, Jiuhan Zhao, Ruixia Zhu, Qu Li, Ying Zhu, Jialu Wang, Xi Lu, Na Liu, Meiqing Lin, Yuehan Hao, Fang Liu, Xiaoqian Zhang, Xu Liu, Jiahui Liu, Huiyuan Zhang, Yuming Zheng, Lei Li, Su Meng, Feng Jin, Hefei Fu, Yiling Jiang, Fan Lou, Pan Hu, Jirui Wang, Ling Tang, Jinwei Li

Shengjing Hospital of China Medical University: Juan Fen (PI), Yan Gao, Lulu Wen, YongChuan Xu, Dong Han

Shenyang Emergency Medical Service Center Affiliated Hospital: Min Chang (PI)

The 463th Hospital of People's Liberation Army: Yansong Li (PI), Zuozheng Zhao, Te Liu

Shenyang Tenth People's Hospital: Jing Chen (PI), Li Sun

The Fourth Affiliated Hospital of China Medical University: Lianbo Gao (PI), Shen Tian, Huan Zhou, Yuan Jiang, Hui Jia, Qiansuo Liu, Changjiang Yu, Xiaofei Yu, Jie Li, Zhihua Yu, Zhenwei He, Yongliang Gao, Honghua Gao

Shenyang Fourth People's Hospital: Liyang Zhang (PI), Yan Liu, Mingming Dong

The Second Affiliated Hospital of Shenyang Medical College: Yisha Wang (PI), Qing Chang, Mei Guo, Jia Hao, Bo Chen

Shenyang 739 Hospital: Lihong Zhang (PI), Jing Yang

Shenyang 242 Hospital: Hui Liu (PI), Fenghui Liu, Hong Guo, Luwei Zhang, Li Zhang

The First Affiliated Hospital of Liaoning University of Traditional Chinese Medicine: Ying Hai (PI), Zhi Li

The General Hospital of Shenyang Military Region: Huisheng Chen (PI)

The People's Hospital of Liaoning Province: Xiaohong Chen (PI)

Jinqiu Hospital of Liaoning Province: Fusheng Bai (PI), Hongyan Lei, Yu Han, Lin You

Shenyang Medical College Affiliated Central Hospital: Runhui Li (PI), Hanshu Li, Tianming Cao, Chang Liu

Shenyang Fifth People's Hospital: Jinchun Wang (PI), Bin Zhao

Sujiatun District Central Hospital: Xiangjun Zhang (PI), Yang Zhao

Shenyang Second Hospital of Traditional Chinese Medicine: Kefei Fu (PI), Jian Yang, Qi Wang, Yunfa Xu, Lei Shi, Xun Wang, Deyuan Jiang, Zhe Jin, Yuxian Zhu, Li Guo, Chang Xu, Lin Lin, Yueqi Cui, Jun Chen, Hongyan Jing, Jian Li