

Supplementary Table 1. Ongoing clinical trials of patients with intracranial large artery disease, excluding interventional/surgery trials

Title of the study	ClinicalTrials.gov identifier (country)	Number	Purpose	Primary endpoint	Comments
International Intracranial Dissection Study (I-IDIS)	NCT02756091 (Switzerland and Japan, etc.)	500	To investigate the outcome and recurrence after intracranial artery dissection	Modified Rankin Scale score and recurrence at 180 days after diagnosis	Luminal study
Prospective Observation for Serial Changes of Acute Intracranial Artery Dissection Using High Resolution MRI	NCT02914288 (South Korea)	20	To investigate the geometric changes in HR-MRI	Changes in dissection changes at 12 months	HR-MRI
CRYPTogenic stroke and occult Intracranial Atherosclerosis (CRYPTICAS study)	Not available (Spain)	110	To demonstrate ILAD in cryptogenic stroke patients	Hidden plaque (or non-atherosclerotic causes) on HR-MRI in cryptogenic stroke	HR-MRI, blood biomarkers
Moyamoya Disease Biomarkers in Patients With Intracranial Atherosclerotic Stroke	NCT02074111 (South Korea)	400	To investigate the proportion of patients with moyamoya disease among the patients who were diagnosed as having intracranial atherosclerotic stroke	Frequency of <i>RNF213</i> gene variants and HR-MRI findings in patients with intracranial atherosclerosis	Genetic study HR-MRI
Prevalence of Genetic Polymorphism on <i>RNF213</i> rs112735431 Gene in Non-cardioembolic Ischemic Cerebrovascular Disease	NCT02720861 (Thailand)	200	To determine the prevalence of genetic polymorphism on <i>RNF213</i> rs112735431 gene in non-cardioembolic ischemic cerebrovascular disease	<i>RNF213</i> rs112735431 gene frequency	Genetic study
Characterization of intracranial atherosclerotic stenosis using high-resolution MRI study (CHIASM)	Not available (USA)	90	To evaluate the interrater reliability for identifying wall pathology using HR-MRI	To demonstrate interrater agreement for identifying intracranial plaque components on HR-MRI and to evaluate 1-year stroke rate	HR-MRI
Intensive Statin Treatment in Acute Ischemic Stroke Patients With Intracranial Atherosclerosis	NCT02458755 (South Korea)	80	To investigate the HR-MRI findings at onset and after 6 month in patients with acute ischemic stroke due to intracranial atherosclerosis	Changes in vascular remodeling before and after the statin treatment	Serial HR-MRI
Stroke Mechanism Evolution in Intracranial Atherosclerotic Stenosis	NCT02705599 (China)	350	To explore the stroke mechanism evolution in patients with intracranial atherosclerotic stenosis by MRI from current first stroke to follow-up stroke recurrence	Ischemic stroke event	HR-MRI
The Role of Cerebral Hemodynamics in Moyamoya disease	NCT00629915 (USA)	56	To determine if people with moyamoya disease who have insufficient blood flow are at a higher risk for stroke	Ipsilateral ischemic stroke after enrollment up to 5 years	PET
Magnetic resonance imaging of intracranial vasculopathies (VWI)	NCT03032809 (USA)	50	To optimize HR-MRI sequence and image reconstruction in patients with intracranial stenosis	Degree of intracranial artery vessel wall enhancement	HR-MRI
Perfusion MRI in RCVS	NCT02756416 (UK)	10	To investigate whether early imaging abnormalities can predict RCVS complications and clinical outcomes	Changes in CBF and luminal changes	ASL MRI and MRA
Asymptomatic Moyamoya Registry (AMORE) ¹	Not available (Japan)	Not defined	To clarify the epidemiology, pathophysiology, and prognosis in asymptomatic moyamoya disease	Any ischemic and hemorrhagic stroke	TOF MRA, SPECT, or PET
Cognitive Dysfunction Survey of the Japanese Patients with Moyamoya Disease (COSMO-JAPAN Study) ²	Not available (Japan)	60	To establish the standard finding of the cognitive impairment in patients with moyamoya disease	SPECT, MRI, neuropsychological findings	¹²³ I-IMZ SPECT

HR-MRI, high-resolution magnetic resonance imaging; ILAD, intracranial large artery disease; PET, positron emission tomography; RCVS, reversible cerebral vasoconstriction syndrome; CBF, cerebral blood flow; ASL, arterial spin labeling; MRA, magnetic resonance angiography; TOF, time-of-flight; SPECT, single photon emission computed tomography; ¹²³I-IMZ, ¹²³I-iodemazenil.

References

1. Kuroda S; AMORE Study Group. Asymptomatic moyamoya disease: literature review and ongoing AMORE study. *Neural Med Chir (Tokyo)* 2015;55:194–198.
2. Takagi Y, Miyamoto S; COSMO-Japan Study Group. Cognitive dysfunction survey of the Japanese patients with moyamoya disease (COSMO-JAPAN Study): study protocol. *Neural Med Chir (Tokyo)* 2015;55:199–203.