Supplementary Table 1. The MRI protocol used in the study

	Details of protocols
MRI protocol	MRI scans were performed using a 3-T Magnetom Verio (Siemens, AG, Erlangen, Germany) at pre-EVT, post-EVT, and 5 days after EVT, except for 17 patients, for whom the 5-day post-EVT MRI was conducted using a 1.5-T Philips scanner. The protocol included the acquisition of diffusion-weighted imaging, time-of-flight MRA, susceptibility-weighted imaging, perfusion-weighted imaging (PWI and dMRA after bolus injection of 0.1 mg/kg of gadolinium [TE 1.17 ms, TR 3.15 ms, flip angle 25° with 30 dynamic acquisitions and a temporal resolution of 2.28 seconds/volume for a voxel size of 1.0×0.9×2.5 mm]). dMRA and PWI sequences were not acquired on day 5.
MR contrast	In this study, we used gadoterate meglumine. We used a total of 0.2 mL/kg of gadolinium for each acquisition. The dosage was split into two administrations: patients received 0.1 mL/kg before dMRA and another 0.1 mL/kg before PWI. In total, the patients in this study received 0.4 mL/kg of gadolinium on the same day. The dosages were authorized by the Ethics Committee of the Germans Trias i Pujol Hospital, and informed consent was obtained from each patient.

EVT, endovascular treatment (pre-EVT, at hospital admission; post-EVT, <2 hours after EVT); MRI, magnetic resonance imaging; MRA, magnetic resonance angiography; PWI, perfusion weighted imaging; dMRA, dynamic MRA; TE, echo time; TR, repetition time.

Supplementary Table 2. Statistical analyses

Statistical test	Variables	Adjusted by
Multivariable linear regression	Pre- and post-EVT venous delay and infarct volumes post-EVT and at day 5	Successful reperfusion, number of passes, pre-EVT infarct volume, time from onset to MRI pre-EVT, site of occlusion, and HIR
Ordinal logistic regression	Pre- and post-EVT venous delay and mRS at 3 months	Age, sex, successful reperfusion, baseline NIHSS, site of the occlusion, and HIR

EVT, endovascular treatment (pre-EVT, at hospital admission; post-EVT, <2 hours after EVT); MRI, magnetic resonance imaging; HIR, hypoperfusion intensity ratio; mRS, modified Rankin Scale; NIHSS, National Institutes of Health Stroke Scale.

Supplementary Table 3. Characteristics of the stroke patients undergoing EVT

Characteristics	Total sample (n=94)
Age (yr)	69.9±13.2
Female sex	41 (43.6)
Smoking	24 (25.5)
Hypertension	64 (68.1)
Dyslipidemia	40 (42.6)
Diabetes	16 (17.0)
Atrial fibrillation	30 (31.9)
Stroke etiology*	
Atheroembolic	30 (31.9)
Cardioembolic	37 (39.4)
Undetermined	27 (28.7)
Onset to admission (min)	252 [135–429]
NIHSS baseline	17 [12–21]
Glycemia baseline (mg/dL)	120 [101–143]
Wake up stroke (yes)	22 (23.4)
Site of occlusion	
Intracranial carotid	9 (9.6)
Tandem	23 (24.5)
MCA M1 segment	49 (52.1)
MCA M2 segment	13 (13.8)
Previous intravenous alteplase	47 (50.0)
Onset to groin (min)	319 [235–516]
Time from MRI pre-EVT to end of procedure (min)	103 [78–140]
Conscious sedation	90 (95.7)
Final mTICI grade	
mTICI 0	6 (6.4)
mTICI 2a	7 (7.4)
mTICI 2b	19 (20.2)
mTICI 2c	27 (28.7)
mTICI 3	35 (37.2)

Values are presented as mean±standard deviation, median [interquartile range], or n (%).
NIHSS, National Institutes of Health Stroke Scale; MCA, middle cerebral artery; M1, M1 segment of the MCA; M2, M2 segment of the MCA; MRI, magnetic resonance imaging; EVT, endovascular treatment; mTICI, modified Thrombolysis in Cerebral Infarction.
*According to the Trial of ORG 10172 in Acute Stroke Treatment (TOAST) etiology.