Ischaemic Stroke Progression: Minimum, Preferred, and Optional Dataset Recommendations.

Dataset	Minimal	Preferred	Optional
Demographics	• Age • Sex • Ethnicity		
Index event, Acute Therapies & Baseline function	• Baseline NIHSS (including sub item detail) • Pre-morbid mRS • TOAST classification • IVT administered (and interval to treatment) • EVT performed (and interval to treatment)	• Interval from stroke onset • Acute interventions other than recanalisation (e.g. BP-lowering interventions, anticoagulant reversal) • Craniectomy performed • Independent vs dependent pre-stroke • Dementia prior to stroke • Socioeconomic status	• Blood pressure variability
Medical History	• AF • Smoking status • Prior history of coronary artery disease • Diabetes Mellitus • Hyperlipidaemia • Alcohol intake (g/week) • Hypertension • Previous ischaemic stroke • Previous TIA	• Height & weight (to calculate BMI) • Charlson Co-morbidity index[6] • Infection • Peripheral arterial disease	• Frailty status (e.g. Clinical Frailty Scale)[7] • Systolic BP • Diastolic BP
Medication Use (pre-event)		• Antiplatelet • Anticoagulant • Statin • Anti-hypertensive medication use	
Baseline Imaging†	• LVO • MeVO/DVO[3] • mTICI score (in patients undergoing EVT)	• ASPECTS[4] (at baseline)* • Collateral status on baseline imaging[8] • Core volume on perfusion imaging[5] • Mismatch volume on perfusion imaging[5] • White matter hyperintensities (Fazekas scale)[9]	• Penumbra volume on baseline perfusion imaging[5] • Clot imaging features • Brain network imaging biomarkers • Blood brain barrier integrity imaging markers • Venous drainage markers on imaging[10] • Perivascular spaces (number on MRI)[11] • Chronic lacunar infarcts[12] • Chronic non-lacunar infarcts[12] • CAA diagnostic criteria met using Boston[13] or Edinburgh[14] Criteria (+/- individual components e.g. CMBs, siderosis)

Baseline Laboratory. Electroencephalogram & histological Variables	• Glucose (baseline)	• eGFR • White blood cell count	• Thrombus histological findings (H&E, MSB) • Troponin T/I • BD-Tau • Procalcitonin • Neurofilament light chain • CRP (or High-sensitivity CRP) • cfDNA, DNAse activity, MPO histone complexes • Serum LDH • Glial Fibrillary Acidic Protein • Copeptin • Cortisol • BNP/NTproBNP • Electroencephalogram biomarkers
Outcomes‡	• Infarct volume at 24h • Functional outcome (mRS 90 days) • All-cause death	• NIHSS at 24 hours • NIHSS at 7 days or discharge • Dementia • Haemorrhagic transformation (ECASS or Heidelberg)[15]	• Post-stroke fatigue (using a standardised tool)[16,17] • Anxiety and depression (using a standardised tool)[17,18] • EQ-5D-5L (patient reported quality of life questionnaire)[19] • MACE** • Post-stroke neurological complications (malignant edema, haemorrhagic transformation) • Post-stroke systemic complications (eg. post-stroke pneumonia, VTE, acute decompensated heart failure)

The interval from index event to biomarker measurement is considered as a minimum item of information.†The imaging modality in all instances should be captured. *Although ASPECTS was developed on, and is best validated for, non-contrast CT, it could also be assessed on MRI if MRI is obtained as the primary baseline imaging modality. ‡ For each outcome, the time interval between index event and outcome should be reported. **It is recommended that MACE should always at a minimum include the individual components of 3-point MACE: recurrent non-fatal stroke (ischaemic or ICH), non-fatal myocardial infarction, and cardiovascular death. AF, atrial fibrillation; ASPECTS, Alberta Stroke Program Early CT Score; BMI, body mass index; BNP, brain natriuretic peptide; BP, blood pressure; CAA, cerebral amyloid angiopathy; cfDNA, cell-free deoxyribonucleic acid; CMBs, cerebral microbleeds; CRP, C-reactive protein; CT, computerised tomography; DNAse, deoxyribonuclease; DVO, distal vessel occlusion; eGFR, estimated glomerular filtration rate; LDH, lactate dehydrogenase; IVT, intra-venous thrombolysis; LVO, large vessel occlusion; MeVO, medium vessel occlusion; mTICI, modified Thrombolysis in Cerebral Infarction score; MPO, myeloperoxidase; MRI, magnetic resonance imaging; mRS, modified Rankin scale; NIHSS, National Institute for Health Stroke Scale; NTproBNP, N-terminal prohormone of brain natriuretic peptide; TIA, transient ischaemic attack; TOAST, The Trial of Org 10172 in Acute Stroke Treatment.