Atrial cardiopathy: Minimum, Preferred, and Optional Dataset Recommendations.

Dataset	Minimal	Preferred	Optional
Demographics	• Age • Sex	• Ethnicity • Education	
Index event and stroke severity	• Index event type (Ischaemic stroke, TIA, or ICH) • Baseline NIHSS (total score) • EVT • ABCD2 score (TIAs only)	• TOAST[1] (or SSS-TOAST[20]) classification • ESUS[12] • IVT	
Pre-morbid functional status	• Pre-morbid mRS	• Independent vs dependent • Dementia prior to stroke	
Medical History	• AF on ECG on admission • Documented clinical history of AF known **prior** to stroke • New diagnosis of AF since stroke (AFDAS)[2] • Hyperlipidaemia • Hypertension • Diabetes mellitus • Prior ischaemic stroke • Prior ICH • Prior TIA • Prior history of coronary artery disease • Chronic kidney disease • Prior history of peripheral arterial disease	• Obstructive sleep apnoea • AF subtype (paroxysmal, persistent, or permanent)[20] • Smoking status • Alcohol (units per week) • Heart failure • Aortic valve disease • Mitral valve disease • Hyperthyroidism (history or by lab values) • Heart rate • Systolic BP • Diastolic BP • Previous relevant clinical bleeding • CHA2DS2-VASc • ABC-stroke score • Height and weight (to calculate BMI)	• HAS-BLED score • Charlson Co-morbidity Index[7] • Frailty status (e.g. Clinical Frailty Scale) • Prosthetic heart valve (and type)
Medication Use (pre-event)	• Antiplatelet • Anticoagulant • Statin • Anti-hypertensive medication use	• Any lipid-lowering drug • ACE inhibitor or ARB • Calcium channel blocker • Thiazide diuretic • Loop diuretic • Mineralocorticoid receptor antagonist • Beta-blocker • Anti-arrhythmics • Neprilysin inhibitors (e.g. Sacubitril) • Anticoagulant type (if applicable) • Anticoagulant dose (if applicable) • INR at time of stroke (if taking vitamin K antagonist)	
Baseline Neuroimaging†		• Number of (sub)-acute infarcts • Location of (sub)-acute infarcts (e.g. cortical, subcortical, watershed etc) • Size of (sub)-acute infarcts (diameter or volume) • Evidence of insular infarction Early infarct signs (e.g. ASPECTS)	• Number of established infarcts • Chronic lacunar infarcts[12] • Chronic non-lacunar infarcts[12] • Brain volume (WMV, GMV) • Core volume (perfusion imaging)[5] • Penumbra volume (perfusion imaging)[5] • Mismatch volume (perfusion imaging)

		• White matter hyperintensities (Fazekas scale)[9] • CAA diagnostic criteria met using Boston[13] or Edinburgh[14] Criteria (+/- individual components eg CMBs, siderosis) • White matter hyperintensity volume	• Mismatch ratio (perfusion imaging) • SO-EndAIF
Baseline Vascular imaging	• LVO	• Culprit vessel stenosis • MeVO/DVO[4] • Arterial dissection • Intra-luminal thrombus • Suspected culprit plaque	• Location of suspected culprit plaque • Plaque-RADS score (and individual components intra-plaque haemorrhage, ulceration etc)[21] • IMT
Cardiac Evaluation	• 12-lead ECG performed • Transthoracic echocardiography (TTE) performed • LA thrombus • PFO	• Cardiac monitoring modality for AF detection. • Duration of cardiac monitoring for AF detection • Trans-oesophageal echocardiography (TOE) • Cardiac MRI • LA diameter • LA volume • LA volume index • LA emptying fraction (passive/active/total) • LA fibrosis (Utah stage of LA LGE) • Atrial septal aneurysm • Mitral stenosis • Aortic stenosis • LV ejection fraction • LV thrombus • ECG waveform • LV WMA • P-wave duration • LV apical hypokinesis • Heart rate • LVH (by ECG or echocardiography) • AIB	• Cardiac CT • LA Strain • LA strain rate • LA morphology • LA spontaneous echo contrast • LA fibroelastoma/myoxma • LAA shape/morphology • LAA flow velocity • LAA thrombus • LAA orifice area • LAA volume • LAA trabeculation • LAA fibrosis • LAA spontaneous echo contrast • Valvular vegetations • Endocarditis • LV mass index • LVDd • LVDs • LV longitudinal strain • e’ • LV diastolic function (E/e’) • IV septal wall thickness • Posterior wall thickness • Aortic plaque thickness • Doppler peak E-wave velocity • Doppler A-wave velocity time integral • PTFV1 • P-wave area • PR interval • QTc • P wave axis • P wave axis
Baseline Laboratory Variables	• eGFR • LDL • NT-proBNP or BNP • Troponin T or troponin-I	• Creatinine • HDL • Total cholesterol • Triglycerides • MR-proANP or ANP or NT ANP • LP(a) • CRP or high-sensitivity CRP* • D-dimer	• Factor VIII • Fibrinogen • Cystatin C • GDF-15* • Copeptin* • ApoA1 • ApoB • IL-16* • D-dimer • Anti-thrombin-III • IL-6 • NFL* • BMP10 • Haemoglobin • Creatinine clearance • VCAM-1* • Midregional proadrenomedullin*

Outcomes‡	• AF • Recurrent ischaemic stroke • ICH • Myocardial infarction[24] • MACE* • Cardiovascular death[23] • All-cause death	• Diagnostic modality for AF detection • AF burden[22] • Silent brain infarcts • Systemic embolism • Acute decompensated HF[23] • Death due to HF[23] • Sudden cardiac death[23] • Functional outcome (mRS at 90 days) • Dementia • Major bleeding (using a standardised definition) • TIA	
The interval from index event to biomarker measurement is considered a minimum dataset item.* These items could consider more for prognosis than aetiology. ‡ 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 recurrent non-fatal stroke (ischaemic or ICH), non-fatal myocardial infarction, and cardiovascular death. Information regarding the imaging modality used should always be collected. AF, atrial fibrillation; AFDAS, atrial fibrillation detected after stroke; AIB, Apparent Integrated Backscatter; ANP, atrial natriuretic peptide; BMI, body mass index; BMP-10, Bone morphogenetic protein 1; BNP, brain natriuretic peptide; CAA, cerebral amyloid angiopathy; CABG, coronary artery bypass graft; CMBs, cerebral microbleeds; CRP, C-reactive protein; CT, computerised tomography; DVO, distal vessel occlusion; ECG, electrocardiography; eGFR, estimated glomerular filtration rate; e', tissue doppler-derived early diastolic velocity of the mitral annulus; ESUS, embolic stroke of undetermined source; EVT, endovascular thrombectomy; GDF-15, growth differentiation factor-15; GMV, grey-matter volume; HDL, high-density lipoprotein; HF, heart failure; ICH, intra-cerebral haemorrhage; IL-6, interleukin-6; IL-16, interleukin-16; IMT, intimal media thickness; IS, ischaemic stroke; IVT, intravenous thrombolysis; LA, left atrial; LAA, left atrial appendage; LDL, low density lipoprotein; LGE, late gadolinium enhancement; LP(a), lipoprotein (a); LV, left ventricle; LVDd, left ventricular diastolic dysfunction; LVH, left ventricular hypertrophy; LVO, large vessel occlusion; MACE, major adverse cardiovascular and cerebrovascular events; MEVO, medium vessel occlusion; MRA, magnetic resonance angiography; MRI, magnetic resonance imaging; MR-proANP, mid-regional pro-atrial natriuretic peptide; mRS, modified Rankin scale; NFL, neurofilament light chain; NIHSS, National Institute for Health Stroke Scale; NTproBNP, N-terminal prohormone of brain natriuretic peptide PFO, patent foramen ovale; PWTV1, p-wave terminal force in lead V1; SO-EndAIF, Scan Onset to End of Arterial Input Function. Reflects cardiac output efficiency; SSS-TOAST, Stop Stroke Study TOAST; TIA, transient ischaemic attack; TOAST, The Trial of Org 10172 in Acute Stroke Treatment; TOE, trans-oesophageal echocardiography; TTE, transthoracic echocardiography; VCAM-1, vascular cell adhesion molecule 1; WMV, white matter volume. † The imaging modality in all instances should be captured.			