Proposed Definitions of Selected Dataset Items

Dataset Item / Term	Proposed Definition	Reference
AF burden	A suggested definition is the proportion of time spent in AF expressed as a percentage of the recording time, undertaken during a specified monitoring duration	Doehner et al[23]
AFDAS	AF or flutter diagnosed in patients with stroke or TIA on short-term pr prolonged cardiac monitoring AND No prior history of AF AND No AF on ECG performed after the stroke in people without known AF	Sposato et al[2]
AF Subtype	Paroxysmal AF is considered AF that lasts 7 days or less. Persistent AF is present when an AF episode either lasts longer than 7 days or is terminated by cardioversion. Persistent AF is discerned from long-lasting persistent AF by its duration and recurrence pattern. Permanent AF is continuous AF that is no longer deemed suitable for rhythm control therapy	
Alcohol intake	Due to the variability in international reporting of alcohol units, it is suggested to record an estimated weekly intake in g/week to improve comparability between studies.	
Atrial cardiopathy	A pathological state of the atria characterised by structural, functional, and electrophysiological abnormalities that increase the risk of thromboembolism, independent of overt atrial fibrillation.	
Biomarker	A measurable indicator of a biological process, disease state, therapeutic response, or reaction to an exposure. It can be molecular (e.g., proteins), physiological (e.g., EEG), or imaging-based (e.g., lesion volume on CT or MRI).	FDA-NIH Biomarker Working Group[30]
Cerebral Haemorrhage Anatomical RaTing inStrument (CHARTS)	Classification system for ICH into broad categories of lobar, deep and infratentorial, and uncertain, with additional data captured regarding presence of intra-ventricular haemorrhage and cortical subarachnoid haemorrhage extension.	Charidimou et al [26]
Coronary artery disease	Suggested definition might include: Prior history of myocardial infarction, PCI, CABG, or angiographic/imaging evidence of coronary atherosclerosis.	
Cardiovascular death	Death resulting from an acute myocardial infarction, sudden cardiac death, death due to heart failure, death due to stroke, death due to cardiovascular procedures, death due to cardiovascular haemorrhage, and death due to other cardiovascular causes.	Hicks et al[25]
Diabetes mellitus	Suggested definition might include new or prior diagnosis by medical documentation or self-reported history, or on glucose-lowering medications pre-event	
ESUS	Stroke detected by CT/MRI that is not lacunar AND Absence of extracranial or intracranial atherosclerosis causing ≥50 percent luminal stenosis of the artery supplying the area of ischaemia AND No major-risk cardioembolic source of embolism AND No other specific cause of stroke identified.	Hart et al[12]
GRAEB Score	A measure of intra-ventricular volume ranging from 0-12. A maximum score of 4 is given for each lateral ventricle, where it is expanded and filled with blood and a maximum score of 2 is given for the third and fourth ventricles if they are similarly filled.	Graeb et al
Haematoma expansion	An increase in haematoma volume after initial intracerebral haemorrhage, typically occurring within the first few hours.	

	Haematoma expansion is a key predictor of poor functional outcome and mortality.	
Haematoma shape	(1) round, with round and smooth margins (2) irregular, with irregular, multinodular margins	Fujii et al[28]
Heart failure hospitalisation	1) Admitted to the hospital with a primary diagnosis of HF. AND 2) Length-of-stay in hospital extends for at least 24 hours. AND 3) New or worsening symptoms due to HF on presentation. AND 4) Objective evidence of new or worsening HF (exam and laboratory criterion)	Hicks et al[25]
Hospitalisation for unstable angina	1. Ischaemic discomfort at rest, or in an accelerating pattern with frequent episodes associated with progressively decreased exercise capacity. AND 2. Prompting an unscheduled hospitalisation within 24 hours of the most recent symptoms. AND 3. At least one of the following: a. New or worsening ST or T wave changes on resting ECG b. Definite evidence of inducible myocardial ischaemia c. Angiographic evidence of new or worse ≥ 70% lesion (≥ 50% for left main lesion) and/or thrombus in an epicardial coronary artery that is believed to be responsible for the myocardial ischaemic symptoms/signs. d. Need for coronary revascularisation procedure (PCI or CABG) for the presumed culprit lesion(s). AND 4. Negative cardiac biomarkers and no evidence of acute myocardial infarction.	Hicks et al[25]
Hyperlipidaemia	Suggested definition might include new or prior diagnosis by medical documentation or self-reported history, or on lipid-lowering medications pre-event	
Hypertension	Suggested definition might include new or prior diagnosis by medical documentation or self-reported history, or on anti-hypertensive medications pre-event	
LVO	Occlusion in one of the following vessel segments: - M1 segment - Large proximal M2 segment - Terminal ICA - P1 segment - A1 segment	Ospel et al[3]
Major adverse cardiovascular and cerebrovascular events	A composite clinical endpoint encompassing events such as myocardial infarction, stroke, and cardiovascular death. MACE is commonly used to evaluate cardiovascular risk and treatment efficacy.	
MeVO/DVO	A) Occlusion in one of the following vessel segments: 1. M2 or M3 segment 2. A2 or A3 segment 3. P2 or P3 segment AND B) Substantial clinical deficit (one of the following): NIHSS 5 or more NIHSS 3 - 5 with disabling deficit Note: large proximal M2 occlusions considered as part of the LVO spectrum rather than the MeVO spectrum	Ospel et al[3]
Myocardial infarction	Third Universal Definition	Thygesen et al[24]
Penumbra volume (imaging)	Penumbra volume = hypoperfusion volume – core volume. Different CT and MR perfusion software use different thresholds estimate “hypoperfusion” and “core”, and thence the software	Demeestere et al[5]

	and thresholds used should always be reported alongside the penumbra volume. Commonly, relative Cerebral Blood Flow <30% is used to define “core” and Tmax>6s is used to define penumbra	
Perivascular spaces	Number of perivascular spaces (PVS) visible in the entire brain on T2W imaging irrespective of their size. We suggest the following categories: 0-10, 11-20 and >20 PVS	Potter et al[11]
Plaque vulnerability	The propensity of an atherosclerotic plaque to rupture or thrombose, leading to vascular events. Vulnerable plaques are typically characterised by a thin or ruptured fibrous cap, large lipid core, inflammatory cell infiltration, intraplaque haemorrhage and neovascularisation.	
Prehospital diagnosis	Identification of a disease condition before hospital arrival, typically conducted by emergency medical services (EMS) personnel.	
Prior ICH	Suggested definition might include prior history of spontaneous non-traumatic intra-cerebral haemorrhage, by self-report or medical documentation.	
Prior TIA	Suggested definition might include prior history of retinal or hemispheric TIA, by self-report or medical documentation.	
SSS-TOAST/Causative Classification system	1. Supra-aortic large artery atherosclerosis. 2. Cardio-aortic embolism. 3. Small artery occlusion. 4. Other causes. 5. Undetermined causes: a) Cryptogenic b) Unclassified Link to online computer algorithm: https://ccs.mgh.harvard.edu/ccs_title.php	Ay et al[31]
Stroke progression	The clinical or biomarker-based worsening of ischaemic brain injury after the initial event, often driven by factors such as infarct growth, oedema formation, or secondary complications.	
Sudden cardiac death	Death that occurs unexpectedly and not within 30 days of an acute myocardial infarction, includes the following scenarios: a. Death witnessed and occurring without new or worsening symptoms. b. Death witnessed <60 minutes of the onset of new or worsening cardiac symptoms, unless the symptoms suggest acute MI c. Death witnessed and attributed to an identified arrhythmia. d. Death after unsuccessful resuscitation from cardiac arrest. e. Death after successful resuscitation from cardiac arrest and without identification of a specific cardiac or non-cardiac aetiology. f. Unwitnessed death in a subject seen alive and clinically stable ≤ 24 hours prior to being found dead without any evidence supporting a specific non-cardiovascular cause of death.	Hicks et al[25]
Surrogate marker	A biomarker used as a substitute for a clinical endpoint, expected to predict clinical benefit. Surrogate endpoints can enable accelerated regulatory approval if they are reasonably likely to predict meaningful outcomes.	
TOAST	Classification as follows: 1. Large-artery atherosclerosis. 2. Cardioembolism (high-risk/medium-risk sources). 3. Small-vessel occlusion. 4. Stroke of other determined aetiology. 5. Stroke of undetermined aetiology: a. Two or more causes identified. b. Negative evaluation. c. Incomplete evaluation.	Adams et al[1]
Type of acute surgical intervention for ICH	Information to be captured might include: 1. Craniotomy with haematoma removal. 2. Minimally invasive surgical haematoma removal. 3. Surgery with catheter placement with thrombolysis. 4. Decompressive craniectomy without haematoma removal. 5. External ventricular drainage with or without thrombolysis, and with or without minimally invasive surgical removal of intraventricular haemorrhage. 6. Cerebellar craniotomy with haematoma removal.	
Venous drainage markers (imaging)	Information to be captures might include at the very minimum presence or absence of asymmetric internal cerebral vein opacification (CTA or MRA). Alternatively, venous drainage delay can be assessed using semi-quantitative methods like the Cortical Vein Opacification	Hoffman et al[10]

	Score (COVES) although this is probably not always necessary and a simple dichotomous, qualitative assessment will likely suffice in most scenarios	

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