

Supplementary Methods

Data collection in ASTRAL registry

A range of baseline parameters are collected in ASTRAL in a prespecified manner : demographics (age, gender), medical history and cardiovascular risk factors including previous stroke or TIA or retinal ischemia, hypertension (defined as known office systolic blood pressure >140 mmHg and/or office diastolic blood pressure >90 mmHg; or if not previously documented inhospital blood pressure elevation above the same limits at discharge or requiring treatment at the time of discharge), diabetes mellitus (defined as fasting plasma glucose ≥ 7.0 mmol/L [126 mg/dl] and/or plasma glucose ≥ 11.1 mmol/L two hours after 75 g oral glucose tolerance test) and/or HbA1C $\geq 6.5\%$ [48 mmol/mol]), dyslipidemia (defined as LDL >100mg/dl [2.6mmol/l] in the past or at first testing after admission [usually performed <24h of admission]), current smoking (including active smokers and those who stopped smoking within the last two years before admission), atrial fibrillation, symptomatic documented coronary artery disease, oncological disease, migraine, alcohol abuse), current medications (antiplatelets, anticoagulants, antihypertensives, lipid-lowering drugs, insulin and oral antidiabetics), clinical symptoms and other features of the stroke (vascular territory, brain structures affected, NIHSS score at admission). Comorbidities according to Elixhauser and Charlson indexes are collected and include the categories congestive heart failure, obesity, alcohol abuse, drug abuse, depression, and myocardial infarction. Vital signs (skin temperature, blood pressure) and metabolic and hematologic parameters (glucose, creatinine, total cholesterol, white blood cells, haematocrit, platelet count) are measured at admission (usually in the emergency room) and at 24 to 48 hours after admission (usually in the stroke unit). Stroke pathophysiology is classified according to the TOAST classification, with dissection kept as a separate category. Leukoaraiosis is defined as presence of white matter lesions according to Fazekas classification (i.e. Fazekas score >0).¹

References

1. Schmidt R, Fazekas F, Kleinert G, et al. Magnetic resonance imaging signal hyperintensities in the deep and subcortical white matter. A comparative study between stroke patients and normal volunteers. *Arch Neurol*. 1992;49(8):825-827.