Supplementary Table 2. Imaging criteria for imaging phenotypes of covert brain infarction

CBI imaging phenotypes	Criteria
Cavitatory lesions (lacunes)	Inclusion criteria Lesions ≤15 mm in diameter that follow CSF signal on all sequences (high T2w, low FLAIR, and low T1w). Typically slit- or wedge-shaped with irregular margins. A hyperintense rim on FLAIR/T2w suggests a chronic ischemic origin with high diagnostic certainty Exclusion criteria Findings consistent with dilated perivascular spaces, such as fluid-filled channels that follow penetrating vessels through gray or white matter; round, ovoid, or linear shape depending on slice orientation; diameter <3 mm when imaged perpendicular to the vessel; or multiple, bilateral, symmetrical distribution typical of perivascular spaces
Acute cerebral infarction (DWI positive lesions)	Inclusion criteria Characterized by high DWI signal with a low ADC value, together with high T2w/FLAIR and low T1w signal indicating acute ischemic changes Exclusion criteria Lesions better explained by other causes of high DWI signal (e.g., multiple sclerosis lesions, abscess, or other inflammatory conditions)
Other chronic infarction	Inclusion criteria T2w/FLAIR hyperintensity with T1w hypointensity and signal distinct from CSF (i.e., non-cavitated). Includes: (1) Combined gray and white matter lesions involving both cortical and subcortical regions (2) Isolated gray matter lesions in the cortex or basal ganglia (3) Large subcortical non-cavitated infarcts (≥15 mm) that match a specific vascular territory (e.g., medial or lateral lenticulostriate arteries) and/or are new compared with a previous MRI within 3 months Exclusion criteria Lesions that satisfy the diagnostic criteria for other diseases (e.g., multiple sclerosis, severe trauma, radiation injury, or drug toxicity)

CBI, covert brain infarction; CSF, cerebrospinal fluid; T2w, T2-weighted imaging; FLAIR, fluid-attenuated inversion recovery; T1w, T1-weighted imaging; DWI, diffusion weighted imaging; ADC, apparent diffusion coefficient; MRI, magnetic resonance imaging.

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