**Supplemental Table I. Full Selection Criteria**

**General inclusion criteria for all participants**

1. Written informed consent (from the patient or, where jurisdictions allow it, from their legally appointed agent).
2. Sufficient proficiency in English or French to undergo clinical and neuropsychological assessment.
3. Willing to be audio-recorded for certain assessments and to have the audio-recordings available without identifying information for analysis for 25 years.
4. Geographic accessibility to the study site.
5. Must have a study partner who can participate as required in the protocol (provide corroborative information). Study partner must have regular contact with the participant (at least one interaction per week).
6. Absence of other significant known chronic brain disease such as: moderate to severe chronic static leukoencephalopathy (including previous traumatic injury), multiple sclerosis, a serious developmental handicap, malignant tumors, Parkinson’s disease (other than for the Parkinson’s/ LBD cohort), and other rarer brain illnesses
7. Absence of ongoing alcohol or drug abuse that in the opinion of the investigator may interfere with the subject’s ability to comply with the study procedures.
8. Total score on the MoCA≥13
9. Absence of symptomatic stroke within the previous year
10. Able to undergo MRI scan (i.e. no medical contraindications or inability to tolerate the procedure.

**Subcortical Ischemic Vascular MCI additional inclusion criteria:**

1. 60-90 years old.
2. Meets NIA-AA core clinical criteria for amnestic or multiple domain Mild Cognitive Impairment, operationalized as:
   * 1. Report from patient or informant of a change in cognition.
     2. One or more of: a) logical memory II score below cutoffs established by the Alzheimer’s Disease Neuroimaging Initiative; b) Consortium to Establish a Registry for Alzheimer’s Disease word list recall <6 out of 10; c) MoCA score 13-24, or d) global Clinical Dementia Rating >0.
     3. Score >14/23 n the Lawton-Brody scale for instrumental activities of daily living.
     4. Global Clinical Dementia Rating ≤0.5 (i.e., not demented).
3. No causes of impaired cognition other than vascular or neurodegenerative disease, with other causes ruled out by standardized work up for dementia including brain imaging (e.g., mass lesion) and blood work (e.g. vitamin B12 deficiency, hypothyroidism, chronic kidney disease).
4. No history of previous symptomatic stroke (asymptomatic MRI or CT evidence of silent brain infarction is not an exclusion)
5. Clinical or research CT or MRI showing either: a) 2 or more supratentorial silent brain infarcts, OR b) extensive white matter disease defined as score ≥2 on the ARWMC scale for MRI or CT.
6. No carotid revascularization planned.

**Mixed Dementia additional inclusion criteria:**

* 1. 60-90 years of age.
  2. Subject meets the NIA-AA core clinical criteria for Mixed Etiology dementia:
     1. Report from patient or informant of a change in cognition.
     2. Two or more of: a) logical memory II score below cutoffs established by the Alzheimer’s Disease Neuroimaging Initiative; b) Consortium to Establish a Registry for Alzheimer’s Disease word list recall <7 out of 10; c) MoCA score 13-24, or d) positive response to the question: Has the participant had any changes in personality or behaviour in the last year.
     3. Positive response to the question: The cognitive deficits interfere with independence in everyday activities such as paying bills or managing medications Yes/No
     4. One or more of the following suggesting that non-AD causes of dementia may be present: sudden onset, focal neurological features, early extrapyramidal signs, metabolic abnormalities, cerebrovascular disease, or MRI T2 or FLAIR signal abnormalities, or evidence for another concurrent, active neurological disease, or a non-neurological medical comorbidity or use of medication that could have a substantial effect on cognition.