

Supplementary data

Important outcome measures used in the trials are discussed as follows.

Mini–Mental State Examination (MMSE) is a 30-point questionnaire that is used to measure cognitive impairment. It is scored out of 30 with each item on the questionnaire getting weighted as one point. Lower score means more cognitive impairment and a higher score mean less cognitive impairment.

Alzheimer’s disease Assessment Scale-Cognitive section (ADAS-Cog) assesses cognitive function. It measures the following subdomains; learning, naming, following commands, orientation, constructional praxis, ideational praxis, recognition memory and remembering test instructions. The test usually includes three additional subjective scales containing impression of word finding difficulty, spoken language ability and comprehension. A final subjective scale measuring concentration and distractibility is sometimes added. The lower the ADAS-cog score the lesser the impairment.

Clinician interview-based impression of change plus caregiver input (CIBIC-plus) is a global assessment of the patient’s response to treatment and comprises 4 domains: general, cognition, behavior and activities of daily living (ADL). Scores are derived through interviews with both patient and caregiver. Scores range from 1 to 7 on a Likert scale, with lower scores indicating improvement, a score of 4 indicating no change and higher scores indicating worsening from baseline.

Severe impairment battery (SIB) assesses the severity of cognitive dysfunction of AD patients. It evaluates social interaction, memory, orientation, language, attention, praxis, visuospatial, construction and orienting to name. Scores range from 0 to 100, with lower scores indicating severe impairment.

Neuropsychiatric Inventory (NPI) assesses dementia-related behavioral symptoms. NPI examines 12 sub-domains of behavioral functioning: delusions, hallucinations, agitation/aggression, dysphoria, anxiety, euphoria, apathy, disinhibition, irritability/lability, aberrant motor activity, night-time behavioral disturbances and appetite and eating abnormalities. It is administrated to caregivers of dementia patients. Behaviors are rated on level of severity and frequency and then the individual scores are summed. High score means worse behavioral symptoms.