

Appendix 1

The CERAD-NAB consists of the following subtests:

- Verbal Fluency: tests language, verbal productivity, semantic memory, and cognitive flexibility by asking patients to name as many animals as possible in 60 seconds (maximum score for the CERAD total score = 24).
- Modified Boston Naming Test: tests word finding, identification, and visual perception by asking patients to name 15 drawn objects (maximum score = 15).
- Mini-Mental State Examination (MMSE): well-known and widely-used short cognitive battery testing orientation, concentration ability, memory, speech, and ideatoric and constructive praxis (maximum score = 30).
- Word List Test: tests immediate and delayed memory, and learning ability of non-associated verbal material. Patients are asked to recall as many of ten words as possible, immediately after having read them at the frequency of one every 2 seconds (word list learning, 3 trials; maximum score = 30). After 5-10 minutes, patients are again asked to recall as many of the ten words presented before as possible, without seeing them (word list recall; maximum score = 10). Finally, patients are asked to recognize the ten words among a list of 20 words (word list recognition: 10 original words, 10 novel words; maximum score = 10).
- Constructional Praxis Test: tests visuoconstructive abilities by asking patients to copy a circle, a diamond, intersecting rectangles, and a three-dimensional cube (maximum score = 11). After 5 minutes, patients are asked to reproduce as many of the drawings as possible, without seeing them (constructional praxis recall; maximum score = 11).

The CERAD-NAB-Plus is composed of 2 further tests focusing upon attention and executive function:

- Phonemic Fluency: patients are asked to name as many words as possible that begin with the letter “s” in 60 seconds.
- Trail Making Test (A and B): in part A, patients have to connect circles numbered 1-25 in ascending order. In part B, circles including numbers (1-13) as well as letters (A-L) have to be connected in ascending/alphabetical order alternating between consecutive numbers and letters (i. e. 1-A-2-B-3-C, etc.). The time needed to perform the test is recorded.

In most cases it is not possible to allocate the resulting variables to only one single cognitive domain. However, the list below exemplifies the relationship between cognitive domains and CERAD-NAB-Plus variables:

Variables of the CERAD-NAB-Plus	Cognitive domains
Animal Fluency	Semantic fluency, executive functions
Boston Naming Test	Visual Naming
Mini-Mental Status	Different areas (briefly)
Word list - Learning	Verbal episodic memory (encoding)
Word List – Intrusions	Verbal episodic memory (error control)
Figures - Copy	Visuo-Construction
Word list - Recall	Verbal episodic memory (recall)
Word list - Recognition	Verbal episodic memory (discriminability)
Word List - Savings	Verbal episodic memory
Figures - Recall	Non-verbal episodic memory (recall)

Figures - Savings	Non-verbal episodic memory
S-words	Phonemic fluency, executive functions
Trail Making Test, part A	Speed, executive functions
Trail Making Test, part B	Executive functions
Trail Making Test, part B/Trail Making Test, part A	Executive functions