**Supplementary material**

**Table S1.** Descripitive statistics of neuropsychological tests.

| | n | M | SD | Minimum | Maximum |
|---|---|---|---|---|---|
| Word List Learning | 187 | -2,87 | 1,71 | -7,52 | 1,55 |
| Word List Delayed Recall | 186 | -2,29 | 1,25 | -4,74 | 0,83 |
| Word List Intrusions | 130 | -0,44 | 1,24 | -3,33 | 2,83 |
| Word List Savings | 176 | -1,76 | 2,02 | -6,03 | 5,93 |
| Word List Recognition | 185 | -1,70 | 1,81 | -5,62 | 2,74 |
| Semantic Fluency | 185 | -1,90 | 1,31 | -5,39 | 1,88 |
| Phonematic Fluency | 177 | -0,97 | 1,32 | -4,69 | 2,00 |
| Trail Making Test A | 160 | -1,43 | 1,49 | -4,24 | 2,58 |
| Trail Making Test B | 114 | -1,36 | 1,44 | -6,75 | 2,41 |
| Clock Drawing Test | 180 | 2,71 | 1,37 | 1,0 | 6,0 |
| Boston Naming Test | 187 | -0,98 | 1,64 | -5,51 | 1,89 |
| Mini Mental Status | 186 | -3,18 | 2,25 | -9,72 | 1,45 |
| Constructional Praxis | 178 | -0,88 | 1,69 | -5,89 | 1,64 |
| Constructional Praxis Recall | 179 | -2,09 | 1,62 | -6,64 | 1,76 |
| Constructional Praxis Savings | 176 | -1,66 | 1,34 | -4,35 | 1,52 |

Number (n), mean (M) and standard deviation (SD) as well as the lowest (Minimum) highest score after z-standardization (Maximum) of the results of neuropsychological tests.

**Table S2.** Descriptive statistics of CSF-parameters.

| | n | M | SD | Minimum | Maximum |
|---|---|---|---|---|---|
| Aβ1-42 [pg/ml] | 190 | 576,06 | 314,44 | 80,0 | 1643,0 |
| Aβ ratio | 87 | 1,02 | 0,52 | 0,41 | 2,26 |
| tTau [pg/ml] | 189 | 632,60 | 363,85 | 133,0 | 2290,0 |
| pTau [pg/ml] | 188 | 81,34 | 49,21 | 10,8 | 259,0 |
| NSE [µg/l] | 188 | 19,27 | 7,80 | 4,4 | 52,7 |
| S-100B [pg/ml] | 177 | 3579,03 | 1306,63 | 652 | 11230 |

Number (n), mean (M) and standard deviation (SD) as well as the lowest (Minimum) and the highest score (Maximum) of CSF parameters. Aβ1-42 = Amyloid-β 1-42, Aβ ratio = Amyloid-β-ratio, tTau = total tau protein, pTau = phosphorylated tau protein, NSE = neuron specific enolase, S100B = protein S100B.

**Table S3.** Correlations between phosphorylated tau protein and neuropsychological test results.

| **pTau** | Word List Learning | Word List Delayed Recall | Word List Savings | Word List Recognition | Phonematic Fluency | Boston Naming Test | Mini Mental Status | Constructional Praxis Savings | Clock Drawing test |
|---|---|---|---|---|---|---|---|---|---|
| ρ | -0,242 | -0,152 | -0,021 | -0,175 | 0,141 | -0,084 | -0,136 | -0,191 | 0,143 |
| p | 0,001 | 0,040 | 0,780 | 0,018 | 0,062 | 0,258 | 0,065 | 0,012 | 0,058 |
| n | 185 | 184 | 174 | 183 | 175 | 185 | 184 | 174 | 178 |

Correlations between phosphorylated tau protein (pTau) and the neuropsychological test results are shown with Spearman's coefficient of correlation (ρ), p and number of included patients (n).

**Table S4.** Correlations between total tau protein and neuropsychological test results.

| **tTau** | Word List Learning | Word List Delayed Recall | Word List Savings | Word List Recognition | Phonematic Fluency | Boston Naming Test | Mini Mental Status | Constructional Praxis Savings | Clock Drawing test |
|---|---|---|---|---|---|---|---|---|---|
| ρ | -0,177 | -0,067 | 0,069 | -0,103 | 0,072 | -0,042 | -0,146 | -0,105 | 0,115 |
| p | 0,016 | 0,365 | 0,363 | 0,163 | 0,339 | 0,565 | 0,047 | 0,167 | 0,125 |
| n | 186 | 185 | 176 | 184 | 176 | 186 | 185 | 175 | 179 |

Correlations between total tau protein (tTau) and the neuropsychological test results are shown with Spearman's coefficient of correlation (ρ), p and number of included patients (n).

**Table S5.** Correlations between neuron specific enolase and neuropsychological test results.

| **NSE** | Word List Learning | Word List Delayed Recall | Word List Savings | Word List Recognition | Phonematic Fluency | Boston Naming Test | Mini Mental Status | Constructional Praxis Savings | Clock Drawing test |
|---|---|---|---|---|---|---|---|---|---|
| ρ | -0,051 | 0,044 | 0,133 | -0,018 | 0,102 | -0,027 | 0,004 | -0,011 | -0,053 |
| p | 0,493 | 0,556 | 0,080 | 0,812 | 0,181 | 0,711 | 0,957 | 0,884 | 0,478 |
| n | 185 | 184 | 174 | 183 | 175 | 185 | 184 | 175 | 179 |

Correlations between neuron specific enolase (NSE) and the neuropsychological test results are shown with Spearman's coefficient of correlation (ρ), p and number of included patients (n).

**Table S6.** Correlations between protein S100 and neuropsychological test results.

| **S100** | Word List Learning | Word List Delayed Recall | Word List Savings | Word List Recognition | Phonematic Fluency | Boston Naming Test | Mini Mental Status | Constructional Praxis Savings | Clock Drawing test |
|---|---|---|---|---|---|---|---|---|---|
| ρ | 0,060 | 0,000 | -0,026 | 0,065 | 0,120 | 0,013 | 0,105 | 0,062 | -0,115 |
| p | 0,429 | 0,997 | 0,735 | 0,394 | 0,123 | 0,869 | 0,169 | 0,426 | 0,135 |
| n | 174 | 173 | 166 | 172 | 166 | 174 | 175 | 167 | 169 |

Correlations between protein S100 and the neuropsychological test results are shown with Spearman's coefficient of correlation (ϱ), p and number of included patients (n).