Table e-1. Correlations between MRI and neuropsychological measures

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | T2-LL | | NBV | | CBV | | DGV | |
|  | r | *p-value* | r | *p-value* | r | *p-value* | r | *p-value* |
| **Cognitive test scores** |  |  |  |  |  |  |  |  |
| SDMT | -0.259 | *0.090* | 0.358 | ***0.017\**** | 0.481 | ***<0.001\*\*\**** | 0.183 | *0.230* |
| VLMT direct recall | -0.454 | ***0.002\*\**** | 0.441 | ***0.003\*\**** | 0.278 | *0.068* | 0.493 | ***<0.001\*\*\**** |
| VLMT delayed recall | -0.280 | *0.066* | 0.361 | ***0.016\**** | 0.218 | *0.155* | 0.414 | ***0.005\*\**** |
| VLMT recognition | -0.212 | *0.168* | 0.266 | *0.081* | 0.196 | *0.201* | 0.318 | ***0.033\**** |
| BVMT-R direct recall | -0.457 | ***0.002\*\**** | 0.484 | ***<0.001\*\*\**** | 0.435 | ***0.003\*\**** | 0.520 | ***<0.001\*\*\**** |
| BVMT-R delayed recall | -0.322 | ***0.033\**** | 0.418 | ***0.005\*\**** | 0.334 | ***0.027\**** | 0.474 | ***<0.001\*\*\**** |
| BVMT-R recognition | -0.164 | *0.286* | 0.091 | *0.559* | 0.014 | *0.928* | 0.130 | *0.395* |
| TMT-A | 0.159 | *0.304* | -0.391 | ***0.009\*\**** | -0.282 | *0.064* | -0.192 | *0.208* |
| TMT-B | 0.481 | ***<0.001\*\*\**** | -0.582 | ***<0.001\*\*\**** | -.529 | ***<0.001\*\*\**** | -0.475 | ***<0.001\*\*\**** |
| Digit span forward | -0.168 | *0.275* | 0.190 | *0.216* | 0.156 | *0.312* | 0.322 | ***0.031\**** |
| Digit span backward | -0.132 | *0.392* | 0.404 | ***0.007\*\**** | 0.268 | *0.079* | 0.487 | ***<0.001\*\*\**** |
| Block span forward | 0.102 | *0.511* | 0.039 | *0.802* | -0.034 | *0.825* | 0.152 | *0.320* |
| Block span backward | 0.047 | *0.762* | 0.148 | *0.336* | 0.056 | *0.716* | 0.127 | *0.405* |
| RWT phonetic | -0.250 | *0.101* | 0.066 | *0.671* | 0.035 | *0.824* | 0.115 | *0.450* |
| RWT semantic | -0.386 | ***0.010\*\**** | 0.368 | ***0.014\**** | 0.126 | *0.414* | 0.492 | ***<0.001\*\*\**** |
| RWT switching | -0.183 | *0.234* | 0.296 | *0.051* | 0.116 | *0.454* | 0.385 | ***0.009\*\**** |
| DKEFS TAS | -0.310 | *0.089* | 0.322 | *0.078* | 0.099 | *0.595* | 0.410 | ***0.022\**** |
| no. of impaired tests | 0.244 | *0.110* | -0.297 | ***0.050\**** | -0.159 | *0.303* | -0.357 | ***0.016\**** |
| no. of impaired domains | 0.253 | *0.098* | -0.236 | *0.123* | -0.132 | *0.393* | -0.336 | ***0.024\**** |
| **Questionnaires** |  |  |  |  |  |  |  |  |
| FSMC total | -0.128 | *0.407* | 0.017 | *0.915* | -0.031 | *0.841* | 0.020 | *0.898* |
| HADS A | -0.248 | *0.105* | 0.400 | ***0.007\*\**** | 0.315 | ***0.037\**** | 0.283 | *0.059* |
| HADS D | -0.037 | *0.813* | 0.072 | *0.641* | -0.015 | *0.924* | 0.064 | *0.677* |
| PDQ-20 total | -0.209 | *0.173* | 0.026 | *0.867* | 0.045 | *0.773* | 0.021 | *0.891* |

*Note.* BVMT-R= Brief Visuospatial Memory Test Revised; CBV= cortical brain volume; DGV= deep gray matter volume; DKEFS TAS= Delis-Kaplan Executive Function System Tower test total achievement score; FSMC= Fatigue Scale for Motor and Cognitive Functions, HADS= Hospital Anxiety and Depression Scale; NBV= normalized brain volume; PDQ-20= Perceived Deficit Questionnaire; RWT= Regensburger Verbal Fluency Test; SDMT= Symbol Digit Modalities Test; T2-LL= lesion load; TMT= Trail Making Test; VLMT= Verbaler Lern- und Merkfaehigkeitstest. Reported are Pearson’s correlation coefficients. Interpretation of p-values: \*<.05, \*\*<.01, \*\*\*<.001.