**SI Table 1. Demographic and neuropsychological characteristics of participants by disease subgroup**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **DEMOGRAPHICS** | **CON** | **PSP** | **bvFTD** | **CON vs PSP** | **CON vs bvFTD** | **PSP vs bvFTD** |
|  |  |  |  | *p*-val (Bayes Factor) | | |
| *n* | 20 | 10 | 10 | -- | -- | -- |
| Gender | M15:F5 | M8:F2 | M10:F0 | n.s | n.s | n.s |
| Age | 66.75 (4.79) | 67.80 (8.61) | 62.10 (7.74) | n.s (0.39) | n.s (1.58) | n.s (0.91) |
|  |  |  |  |  |  |  |
| **NEUROPSYCHOLOGY** |  |  |  |  |  |  |
| *MMSE* | 29.65 (0.49) | 26.70 (1.95) | 27.10 (2.51) | **\*\*\*** (2.10e+4) | **\*\*\*** (166.36) | n.s (0.42) |
|  |  |  |  |  |  |  |
| *ACE-R* |  |  |  |  |  |  |
| Total | 96.60 (2.48) | 80.1 (9.81) | 80.30 (12.67) | **\*\*\*** (1.11e+5) | **\*\*\*** (2.77e+3) | n.s (0.40) |
| Attention | 17.90 (0.31) | 17.1 (1.20) | 16.80 (1.55) | n.s (5.92) | **\*** (9.57) | n.s (0.43) |
| Memory | 24.65 (1.46) | 21 (3.13) | 21.0 (5.27) | **\*** (149.73) | **\*** (6.80) | n.s (0.23) |
| Verbal Fluency | 12.60 (1.60) | 5.70 (2.91) | 5.70 (4.0) | **\*\*\*** (1.93e+6) | **\*\*\*** (4.32e+4) | n.s (0.40) |
| Language | 25.65 (0.81) | 24.0 (1.76) | 23.10 (2.56) | **\*** (22.82) | **\*\*\*** (80.14) | n.s (0.53) |
| Visuospatial | 15.80 (0.41) | 12.30 (4.14) | 13.70 (2.87) | **\*\*** (40.67) | n.s (13.00) | n.s (0.52) |
|  |  |  |  |  |  |  |
| *INECO* |  |  |  |  |  |  |
| Total | 25.20 (2.20) | 18.22 (3.95) | 15.0 (6.52) | **\*\*\*** (5.92) | **\*\*\*** (9.57) | n.s (0.43) |
| *FAB Total* | 17.20 (1.06) | 14.30 (2.11) | 12.22 (4.79) | **\*** (700.69) | **\*\*\*** (176.46) | n.s (0.69) |
|  |  |  |  |  |  |  |
| *Hayling* |  |  |  |  |  |  |
| Overall Scaled score | 5.85 (0.93) | 3.40 (2.27) | 1.90 (1.45) | **\*\*\*** (99.66) | **\*\*\*** (7.71e+6) | n.s (1.13) |
|  |  |  |  |  |  |  |
| *Graded - naming total* | 25.4 (2.85) | 19.4 (2.99) | 15.78 (6.44) | **\*\*** (1378.00) | **\*\*\*** (2491.34) | n.s (0.96) |
|  |  |  |  |  |  |  |
| *FRS Total* (Logit) | 4.23 (1.27) | -0.47 (2.77) | -1.35 (1.54) | **\*\*\*** (7.95e+3) | **\*\*\*** (1.91e+7) | n.s (0.52) |
|  |  |  |  |  |  |  |
| *CBI-R* |  |  |  |  |  |  |
| Total | 5.67 (6.03) | 51.10 (27.37) | 87.44 (31.94) | **\*\*\*** (3.47e+4) | **\*\*\*** (6.25e+7) | **\*\*** (3.70) |
| Memory and orientation | 2.06 (2.16) | 5.60 (4.70) | 15.78 (5.61) | n.s (4.85) | **\*\*\*** (4.11e+6) | **\*\*\*** (53.75) |
| Everyday skills | 0 (0) | 9.30 (7.29) | 8.11 (5.99) | n/a | n/a | n.s (0.47) |
| Self-care | 0 (0) | 5.60 (5.74) | 2.67 (2.96) | n/a | n/a | n.s (0.77) |
| Abnormal behaviour | 0.72 (1.02) | 3.90 (4.07) | 14.44 (8.14) | n.s (10.68) | **\*\*\*** (5.79e+4) | **\*\*\*** (16.92) |
| Mood | 0.67 (1.14) | 2.90 (2.38) | 5.33 (3.24) | **\*** (15.69) | **\*\*\*** (1.58e+3) | **\*** (1.30) |
| Beliefs | 0 (0) | 0.90 (1.52) | 2.0 (2.0) | n/a | n/a | n.s (0.76) |
| Eating habits | 0.17 (0.38) | 4.40 (3.78) | 9.44 (4.93) | **\*\*** (314.97) | **\*\*\*** (4.09e+5) | **\*\*** (2.97) |
| Sleep | 0.89 (1.23) | 3.56 (2.40) | 4.67 (3.04) | **\*** (38.62) | **\*\*\*** (205.18) | n.s (0.53) |
| Stereotypic and motor | 0.83 (1.15) | 5.30 (4.60) | 11.44 (5.25) | **\*\*** (51.56) | **\*\*\*** (6.71e+5) | **\*\*** (3.98) |
| Motivation | 0.33 (0.69) | 10.0 (6.32) | 14.44 (3.43) | **\*\*\*** (1.67e+4) | **\*\*\*** (1.08e+12) | **\*** (1.28) |

\*, *p* < 0.05; \*\*, *p* < 0.01; \*\*\*, *p* < 0.001, uncorrected

bvFTD, behavioral variant Frontotemporal Dementia; CON, Controls; PSP, progressive supranuclear palsy

BF, Bayes Factor; Conventional thresholds for Bayes Factors represent substantial (>3), strong (>10) and very strong (>30) evidence in favour of alternate hypothesis.

ACE-R, Addenbrooke's Cognitive Examination-Revised; CBI-R, Cambridge Behavioural Inventory Revised; FAB, Frontal Assessment Battery; FRS, Frontotemporal Dementia Rating Scale; MMSE, Mini-Mental State Exam

n/a - variance in controls were equal to zero, violating assumption of equality of variances