**Supplementary Table 1**. Factorial Analysis of Variance (ANOVA) by Waves and Gender (excluding healthy control cases)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Variables* |  |  | *df* | *MS* | *F* | *p* | *partial η2* |
| Age |  | Waves | 1 | 488 | 13.5 | 0.0003 | 0.03 |
|  |  | Gender | 1 | 452 | 12.49 | 0.0004 | 0.03 |
|  |  | Waves\*Gender | 1 | 189 | 5.23 | 0.0226 | 0.01 |
| Education |  | Waves | 1 | 105.48 | 4.70 | 0.0306 | 0.01 |
|  |  | Gender | 1 | 174.85 | 7.80 | 0.0054 | 0.02 |
|  |  | Waves\*Gender | 1 | 85.84 | 3.83 | 0.0517 | 0.01 |
| WMH |  | Waves | 1 | 408.72 | 7.30 | 0.0071 | 0.01 |
|  |  | Gender | 1 | 2.25 | 0.04 | 0.8411 | 0.00 |
|  |  | Waves\*Gender | 1 | 26.63 | 0.47 | 0.4906 | 0.00 |
| BGH |  | Waves | 1 | 227.66 | 32.22 | 0.0001 | 0.08 |
|  |  | Gender | 1 | 22.18 | 3.14 | 0.0771 | 0.01 |
|  |  | Waves\*Gender | 1 | 3.31 | 0.46 | 0.4937 | 0.01 |
| IFH |  | Waves | 1 | 0.19 | 0.07 | 0.7881 | 0.00 |
|  |  | Gender | 1 | 2.63 | 0.96 | 0.3257 | 0.00 |
|  |  | Waves\*Gender | 1 | 0.01 | 0.01 | 0.9659 | 0.00 |
| PVH |  | Waves | 1 | 18.19 | 4.03 | 0.0453 | 0.01 |
|  |  | Gender | 1 | 9.38 | 2.08 | 0.1503 | 0.01 |
|  |  | Waves\*Gender | 1 | 3.03 | 0.67 | 0.4134 | 0.00 |
| Scheltens Total |  | Waves | 1 | 1542.3 | 12.58 | 0.0004 | 0.03 |
|  |  | Gender | 1 | 124.9 | 1.01 | 0.3133 | 0.00 |
|  |  | Waves\*Gender | 1 | 79.7 | 0.65 | 0.4203 | 0.00 |
| MMSE |  | Waves | 1 | 2121.5 | 62.76 | 0.0000 | 0.14 |
|  |  | Gender | 1 | 44.0 | 1.30 | 0.2547 | 0.00 |
|  |  | Waves\*Gender | 1 | 33.4 | 0.99 | 0.3204 | 0.00 |

*Note.* WMH = White matter hyperintensity; BGH = Basal ganglia hyperintensity; IFH = infratentorial foci hyperintensity; PVH = Periventricular hyperintensity; MMSE = Mini-Mental Status Exam.

**Supplementary Table 2**. ANOVA Tukey HSD Test Mean Comparison

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | *Wave 1 (1995-1997)* |  | *Wave 2 (1998-2000)* |  | *Note 1* |
| *Variables* | *Male* *(M1)* | *Female (F1)* |  | *Male (M2)* | *Female (F2)* |  |  |
| Age | 85.25 | 88.81 |  | 88.90 | 89.66 |  | M1 was different from F1, M2, and F2\*\*  |
| Education | 12.20 | 11.79 |  | 14.19 | 11.89 |  | M2 was different from M1, F1, and F2\*  |
| WMH | 11.96 | 12.61 |  | 10.40 | 10.03 |  | M1 and F1 were difference from M2 and F2\*\* |
| BGH | 2.05 | 2.72 |  | 0.70 | 0.99 |  | M1 and F1 were difference from M2 and F2\*\*\* |
| IFH | 0.87 | 1.03 |  | 0.82 | 0.99 |  |  |
| PVH | 6.35 | 6.84 |  | 6.09 | 6.23 |  |  |
| Scheltens Total  | 21.10 | 23.15 |  | 18.01 | 18.24 |  | F1 was difference from M2 and F2\*\*\*  |
| MMSE | 20.03 | 18.74 |  | 24.21 | 24.12 |  | M1 and F1 were difference from M2 and F2\*\*\* |

 *Note 2.* WMH = White matter hyperintensity; BGH = Basal ganglia hyperintensity; IFH = infratentorial foci hyperintensity; PVH = Periventricular hyperintensity; MMSE = Mini-Mental Status Exam.

\* *p*  ≤ .05. \*\* *p* ≤ .01. \*\*\* *p* ≤ .001.

**Supplementary Table 3**. Education Level for All Cases (Wave 1 and 2 Combined)

|  |  |  |  |
| --- | --- | --- | --- |
| *Category* | *Healthy Control Cases* |  | *Dementing Cases* |
| *Count* | *Cumulative (Count)* | *Percent* |  | *Count* | *Cumulative (Count)* | *Percent* |
| 1-10th grade | 4 | 4 | 18.18 |  | 44 | 44 | 11.19 |
| 11th Grade, No Diploma | 1 | 5 | 4.54 |  | 24 | 68 | 6.10 |
| High School Diploma or GED | 6 | 11 | 27.27 |  | 131 | 199 | 33.33 |
| Some College | 2 | 13 | 9.09 |  | 49 | 248 | 12.47 |
| 2 years of College | 3 | 16 | 13.63 |  | 25 | 273 | 6.36 |
| 3 years of College | 0 | 0 | 0 |  | 13 | 286 | 3.31 |
| College Degree | 5 | 21 | 22.73 |  | 46 | 332 | 11.70 |
| Some Post-grad work | 1 | 22 | 4.55 |  | 12 | 344 | 3.05 |
| Master Degree | 0 | 0 | 0 |  | 10 | 354 | 2.54 |
| Some Doctoral Work | 0 | 0 | 0 |  | 10 | 364 | 2.54 |
| Doctoral Degree | 0 | 0 | 0 |  | 26 | 390 | 6.62 |
| Missing | 0 | 0 | 0 |  | 3 | 393 | 0.76 |