**Supplementary Material**

**Supplementary Table 1.** Demographic and clinical information on the study participants:Clinical presentation refers to the most prominent symptom at initial presentation. Family history is considered positive if at least one first order relative had a diagnosis of dementia, with “young onset” classed as an onset of symptoms before the age of 65. Those with a family history of young onset dementia were tested for known autosomal dominant mutations of neurodegenerative dementias, but none were found. The Addenbrook’s Cognitive Examination (ACE) III gives a score out of 100, incorporating a range of cognitive domains including attention, memory, verbal fluency, language, and visuospatial skills. All participants had ACE-III assessment on the day of the PET scan. Those seven participants for whom the PET scan led to a change in diagnosis are indicated by an \*. Further information on these seven individuals can be found in Table 1 of the main paper.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Patient ID | Age at symptom onset | Clinical presentation | Family history | Duration of symptoms at amyloid PET scan | ACE-III score |
| 1 \* | 63 | Speech difficulty | Yes – early onset | 5.1 | 31 |
| 2 | 56 | Visuoperceptual difficulty | No | 4.1 | 67 |
| 3 | 65 | Amnestic | No | 7.4 | 34 |
| 4 \* | 64 | Speech difficulty | Yes – late onset | 4.2 | 30 |
| 5 \* | 60 | Amnestic | No | 3.4 | 86 |
| 6 \* | 57 | Speech difficulty | Yes – late onset | 4.0 | 40 |
| 7 | 58 | Amnestic | No | 4.2 | 62 |
| 8 | 56 | Visuoperceptual difficulty | No | 14.1 | 58 |
| 9 | 73 | Amnestic | Yes – late onset | 7.4 | 86 |
| 10 \* | 64 | Behavioral change | Yes – early onset | 7.2 | 54 |
| 11 | 54 | Visuoperceptual difficulty | No | 5.0 | 93 |
| 12 | 60 | Visuoperceptual difficulty | No | 8.0 | 61 |
| 13 | 71 | Amnestic | Yes – late onset | 4.3 | 86 |
| 14 | 53 | Visuoperceptual difficulty | No | 5.9 | 24 |
| 15 | 55 | Amnestic | No | 4.8 | 45 |
| 16 \* | 60 | Amnestic | No | 10.0 | 69 |
| 17 | 54 | Amnestic | No | 2.9 | 49 |
| 18 | 55 | Amnestic | No | 3.1 | 31 |
| 19 | 48 | Amnestic | No | 3.9 | 64 |
| 20 \* | 55 | Speech difficulty | Yes – late onset | 5.1 | 70 |