

Table e-1. Number of participants with possible or definite primary age-related tauopathy at autopsy

| Classification | Global CDR ^a | CERAD semiquantitative neuritic plaque score | Braak stage | | | | | | total | |
|----------------|-------------------------|--|-------------|----|----|-----|----|----|-------|----|
| | | | 0 | I | II | III | IV | V | | VI |
| PART, definite | 0 | none | 8 | 18 | 21 | 15 | 10 | 0 | 0 | 72 |
| | 0.5 | none | 5 | 5 | 11 | 4 | 11 | 2 | 1 | 39 |
| | 1 | none | 2 | 6 | 7 | 4 | 6 | 0 | 3 | 28 |
| | 2 | none | 1 | 5 | 3 | 8 | 2 | 0 | 0 | 19 |
| | 3 | none | 4 | 0 | 3 | 2 | 2 | 1 | 0 | 12 |
| Amyloid sparse | 0 | sparse | 1 | 8 | 14 | 8 | 9 | 1 | 1 | 42 |
| | 0.5 | sparse | 1 | 5 | 8 | 15 | 17 | 1 | 5 | 52 |
| | 1 | sparse | 2 | 2 | 6 | 4 | 15 | 2 | 1 | 32 |
| | 2 | sparse | 0 | 2 | 6 | 3 | 10 | 10 | 10 | 41 |
| | 3 | sparse | 0 | 1 | 2 | 3 | 7 | 6 | 21 | 40 |

Abbreviations: PART = primary age-related tauopathy; CDR = clinical dementia rating; CERAD = Consortium to Establish a Registry for Alzheimer's Disease

^a CDR at last visit before death, within 1 year of autopsy

Table e-2. Adjusted odds of symptomatic primary age-related tauopathy (definite and possible combined), including Braak stage 0-VI

| Test | Adjusted analysis | | |
|---|-------------------|------------------|------------------|
| | OR | 95% CI | p-value |
| Age at last visit (years) | 0.99 | 0.95-1.04 | 0.77 |
| Education (years) | 0.93 | 0.86-1.01 | 0.08 |
| <i>APOE</i> (at least one ϵ 4 vs no ϵ 4 allele) | 1.80 | 0.75-4.36 | 0.19 |
| Depression | 3.66 | 2.10-6.38 | <.0001 |
| History of stroke (yes vs no) | 3.68 | 1.82-7.44 | 0.0003 |
| History of diabetes (yes vs no) | 0.67 | 0.29-1.56 | 0.36 |
| Braak stage (0 through VI) | 1.60 | 1.32-1.94 | <.0001 |
| Diffuse plaques (any vs none) | 0.99 | 0.57-1.70 | 0.96 |
| Microinfarct (yes vs no) | 1.48 | 0.87-2.52 | 0.15 |
| Amyloid angiopathy | 1.94 | 0.98-3.83 | 0.06 |

Abbreviations: PART= primary age-related tauopathy; OR = odds ratio; CI = confidence interval; *APOE* = apolipoprotein E

Table e-3. Adjusted odds of symptomatic primary age-related tauopathy, including Braak stage 0-VI but restricted to those with no hippocampal sclerosis

| Test | PART, definite | | | Amyloid sparse | | |
|---|----------------|-------------------|---------------|----------------|------------------|--------------|
| | OR | 95% CI | p-value | OR | 95% CI | p-value |
| Age at last visit (years) | 0.96 | 0.92-1.00 | 0.05 | 1.08 | 1.00-1.16 | 0.06 |
| Education (years) | 1.03 | 0.90-1.19 | 0.64 | 0.81 | 0.67-0.98 | 0.03 |
| <i>APOE</i> (at least one ε4 vs no ε4 allele) | 3.04 | 0.98-9.38 | 0.05 | 2.73 | 0.36-20.65 | 0.33 |
| Depression | 3.59 | 1.73-7.45 | 0.0006 | 6.87 | 0.38-124.91 | 0.19 |
| History of stroke (yes vs no) | 9.62 | 2.63-35.23 | 0.0006 | 1.32 | 0.41-4.27 | 0.64 |
| History of diabetes (yes vs no) | 0.42 | 0.12-1.53 | 0.19 | 3.37 | 0.55-20.47 | 0.19 |
| Braak stage 0 through 6 | 1.52 | 1.07-2.15 | 0.02 | 2.00 | 1.10-3.64 | 0.02 |
| Diffuse plaques (yes vs no) | 0.48 | 0.19-1.19 | 0.11 | 0.24 | 0.01-5.12 | 0.36 |
| Microinfarct (yes vs no) | 1.28 | 0.57-2.86 | 0.55 | 1.49 | 0.51-4.36 | 0.46 |
| Amyloid angiopathy | 1.18 | 0.40-3.44 | 0.76 | 3.41 | 1.43-8.12 | 0.006 |

Abbreviations: PART= primary age-related tauopathy; OR = odds ratio; CI = confidence interval; *APOE* = apolipoprotein E

Table e-4. Adjusted odds of symptomatic primary age-related tauopathy (definite and possible combined), excluding Braak stage V-VI

| Test | Adjusted analysis | | |
|---|-------------------|------------------|------------------|
| | OR | 95% CI | p-value |
| Age at last visit (years) | 1.00 | 0.96-1.04 | 0.97 |
| Education (years) | 0.92 | 0.85-1.00 | 0.04 |
| <i>APOE</i> (at least one ϵ 4 vs no ϵ 4 allele) | 1.63 | 0.70-3.80 | 0.26 |
| Depression | 3.72 | 2.09-6.63 | <.0001 |
| History of stroke | 3.54 | 1.77-7.07 | 0.0003 |
| History of diabetes (yes vs no) | 0.71 | 0.30-1.68 | 0.43 |
| Braak stage (0 through VI) | 1.40 | 1.13-1.72 | 0.002 |
| Diffuse plaques (any vs none) | 1.09 | 0.64-1.87 | 0.74 |
| Microinfarct (yes vs no) | 1.41 | 0.87-2.29 | 0.17 |
| Amyloid angiopathy | 1.71 | 0.91-3.21 | 0.10 |

Abbreviations: PART= primary age-related tauopathy; OR = odds ratio; CI = confidence interval; *APOE* = apolipoprotein E

Table e-5. Adjusted odds of symptomatic (clinical diagnosis of cognitive impairment) primary age-related tauopathy, including Braak stage 0-VI

| Test | PART, definite | | | Amyloid sparse | | |
|---|----------------|-------------------|-------------------|----------------|------------------|--------------|
| | OR | 95% CI | p-value | OR | 95% CI | p-value |
| Age at last visit (years) | 0.96 | 0.93-1.00 | 0.04 | 1.06 | 0.99-1.15 | 0.11 |
| Education (years) | 1.03 | 0.91-1.15 | 0.67 | 0.80 | 0.66-0.96 | 0.02 |
| <i>APOE</i> (at least one ε4 vs no ε4 allele) | 2.14 | 0.91-5.01 | 0.08 | 2.77 | 0.55-13.95 | 0.22 |
| Depression | 3.54 | 2.03-6.17 | <0.0001 | 5.34 | 0.69-41.29 | 0.11 |
| History of stroke (yes vs no) | 7.63 | 2.81-20.77 | <0.0001 | 1.02 | 0.39-2.68 | 0.97 |
| History of diabetes (yes vs no) | 0.55 | 0.16-1.92 | 0.35 | 1.47 | 0.33-6.50 | 0.61 |
| Braak stage 0 through 6 | 1.30 | 0.94-1.81 | 0.11 | 1.90 | 1.07-3.37 | 0.03 |
| Diffuse plaques (yes vs no) | 0.53 | 0.24-1.15 | 0.11 | 0.29 | 0.02-4.34 | 0.37 |
| Microinfarct (yes vs no) | 1.42 | 0.59-3.46 | 0.43 | 1.06 | 0.44-2.59 | 0.89 |
| Amyloid angiopathy | 1.69 | 0.67-4.27 | 0.27 | 3.13 | 1.43-6.83 | 0.004 |

Abbreviations: PART= primary age-related tauopathy; OR = odds ratio; CI = confidence interval; *APOE* = apolipoprotein E

Table e-6. Adjusted odds of symptomatic primary age-related tauopathy, including previously excluded comorbidities as covariates

| Test | PART, definite | | | Amyloid sparse | | |
|---|----------------|--------------------|---------------|----------------|--------------------|--------------|
| | OR | 95% CI | p-value | OR | 95% CI | p-value |
| Age at last visit (years) | 0.98 | 0.95-1.02 | 0.39 | 1.05 | 1.00-1.11 | 0.05 |
| Education (years) | 1.02 | 0.93-1.11 | 0.70 | 0.89 | 0.75-1.05 | 0.18 |
| Male sex | 1.97 | 0.87-4.47 | 0.11 | 2.29 | 1.19-4.43 | 0.02 |
| <i>APOE</i> (at least one ϵ 4 vs no ϵ 4 allele) | 1.70 | 0.86-3.38 | 0.13 | 2.09 | 0.49-8.93 | 0.32 |
| Depression | 3.15 | 1.71-5.82 | 0.0002 | 9.40 | 1.28-68.80 | 0.03 |
| History of hypertension (yes vs no) | 0.62 | 0.30-1.29 | 0.20 | 0.49 | 0.17-1.37 | 0.17 |
| Family history of cognitive impairment (yes vs no) | 1.23 | 0.62-2.43 | 0.55 | 1.10 | 0.58-2.08 | 0.78 |
| History of diabetes (yes vs no) | 0.62 | 0.36-1.08 | 0.09 | 0.65 | 0.24-1.81 | 0.41 |
| Braak stage 0 through 6 | 1.42 | 1.08-1.87 | 0.01 | 1.60 | 1.19-2.15 | 0.002 |
| Diffuse plaques (yes vs no) | 0.52 | 0.26-1.05 | 0.07 | 0.59 | 0.06-6.00 | 0.66 |
| Tau pathologies | 26.90 | 2.99-241.87 | 0.003 | NA | NA | NA |
| Other neurodegenerative disease | 21.48 | 3.23-142.67 | 0.002 | 13.54 | 1.62-113.34 | 0.02 |
| Lewy body disease | 1.91 | 0.78-4.71 | 0.16 | 4.64 | 1.34-16.07 | 0.02 |

Abbreviations: PART= primary age-related tauopathy; OR = odds ratio; CI = confidence interval; *APOE* = apolipoprotein E; NA = Not applicable