

Supplementary Materials to:

Title: Plasma phosphorylated tau 217 and longitudinal trajectories of A β , tau, and cognition in cognitively unimpaired older adults

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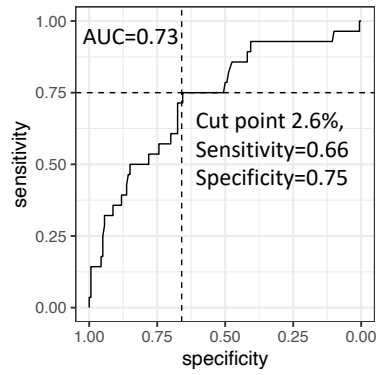
Study Year	Plasma %pTau217	PiB PET (A+)	FTP PET
1 (Baseline)	317	317 (75)	58
2	0	0 (0)	18
3	0	0 (0)	19
4	210	233 (70)	165
5	0	0 (0)	18
6	126	153 (47)	154
7	0	1 (1)	0
9	70	97 (31)	98
12	2	1 (0)	15

Supplementary Table 1. Sample size for plasma %pTau217, PiB PET, and FTP PET at each time point. The number of participants who were A+ at each time point was indicated in parentheses in the third column. Most PET and all blood sample collections were performed in study years 1, 4, 6, 9, and 12 (“imaging years”). FTP PET was introduced mid-study, and many participants had their first FTP PET in non-imaging years.

Participant	Age	Sex	<i>APOE</i>	Serum Creatinine	PiB CL	Baseline %pTau217	Follow-up %pTau217 (Study Year)
A	70.5	M	ε3/ε3	0.99	95.7	3.63	5.36 (4), 10.63 (6), 9.60 (9)
B	68.8	M	ε3/ε4	1.04	72.9	1.25	5.06 (4)
C	72.5	M	ε3/ε4	0.79	71.0	1.88	NA

Supplementary Table 2. Characteristics of baseline high-PiB/low-intermediate %pTau217

participants. Baseline characteristics of 3 outliers with high PiB CL (>50 CL) and low-intermediate %pTau217 ($\leq 4.2\%$) are summarized. Notably, both participants with available follow-up %pTau217 data had high %pTau217 (>4.2%) on subsequent measures. The study year indicates the visit year (e.g., 1=baseline, 4=three years from baseline). NA=not applicable (missing data).



Supplementary Fig. 1. Receiver operating characteristic (ROC) curve of %pTau217 in identifying A- to A+ progressors. Area under the curve (AUC) = 0.73 (95% CI 0.62 to 0.84). The sensitivity (0.75) and specificity (0.66) for the convenience %pTau217 cut point (2.6%) that maximizes Youden's index are shown as horizontal and vertical dashed lines, respectively. (Related to **Fig. 2**)