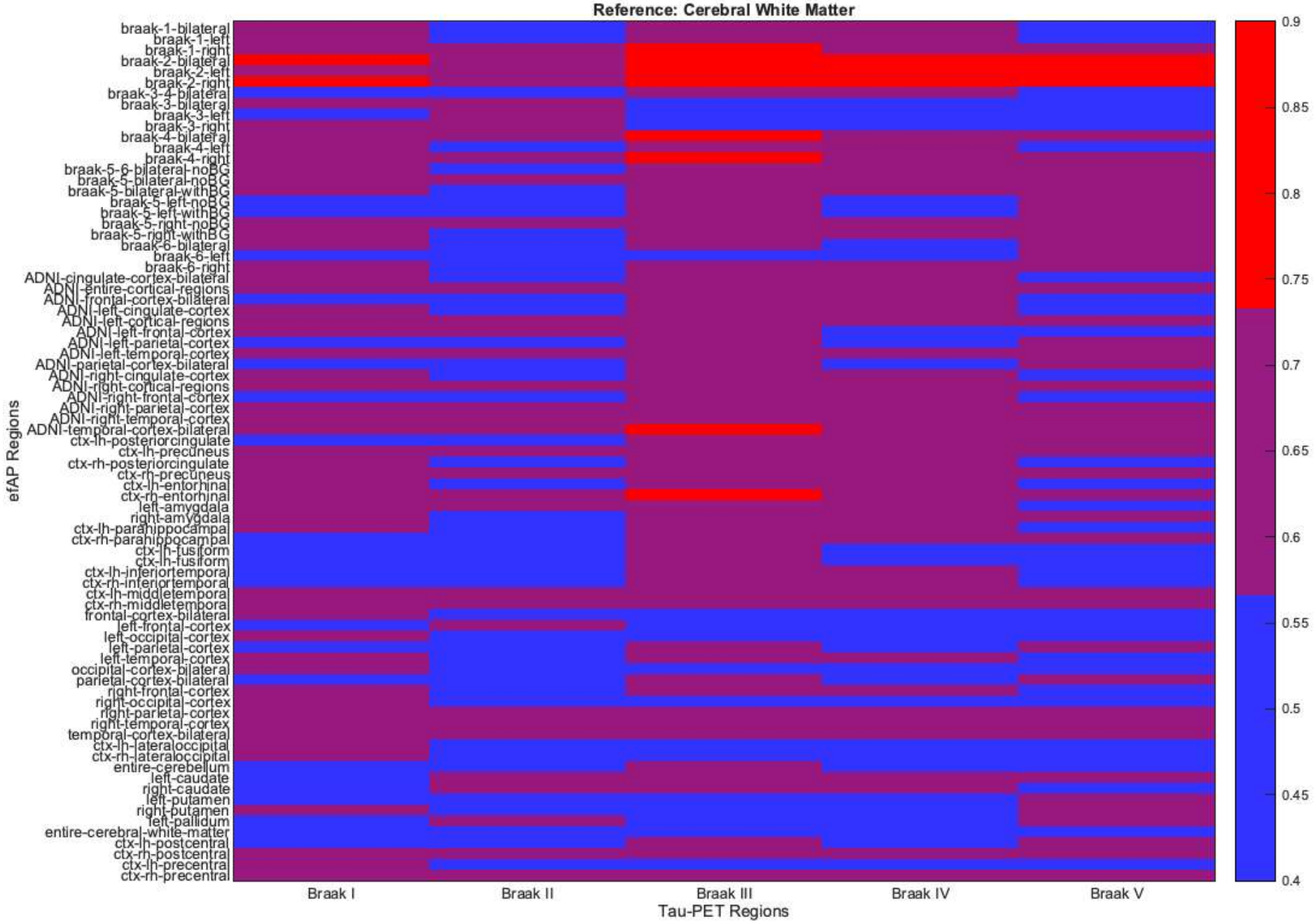
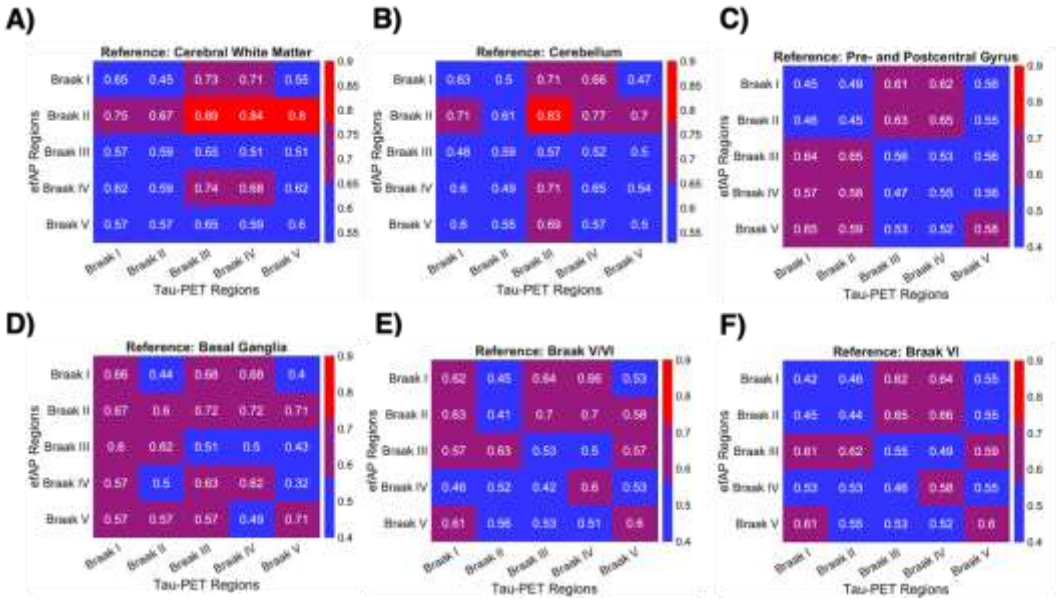
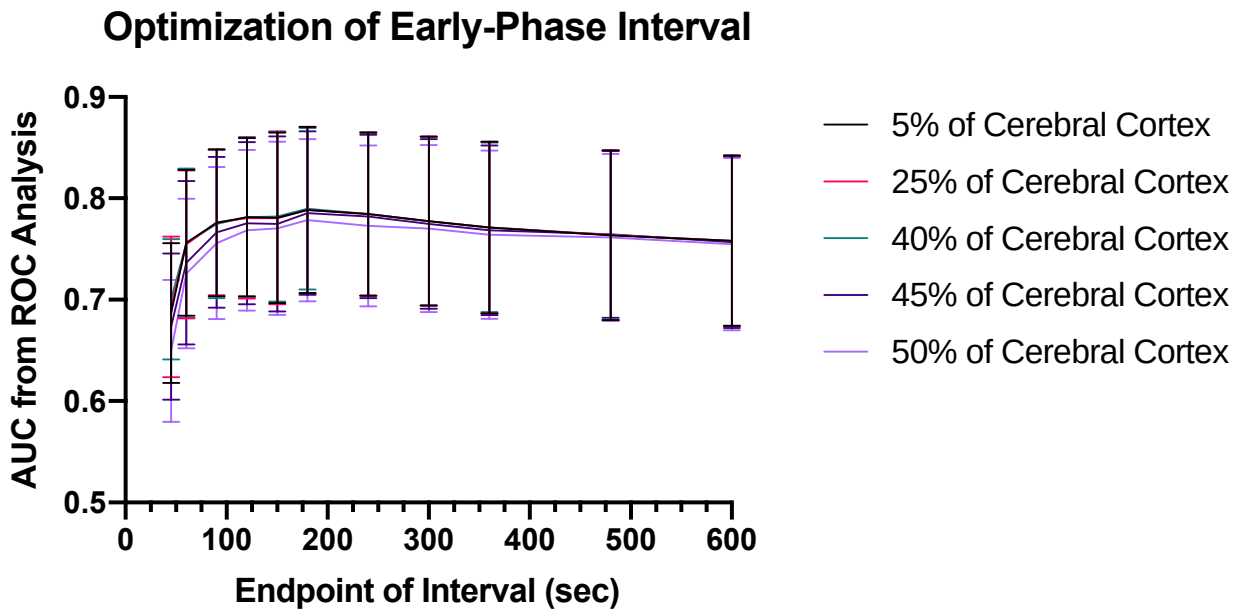

Reference: Cerebral White Matter
braak-1-bilateral
braak-1-left
braak-1-right
braak-2-bilateral
braak-2-left
braak-2-right
braak-3-4-bilateral
braak-3-bilateral
braak-3-left
braak-3-right
braak-4-bilateral
braak-4-left
braak-4-right
braak-5-6-bilateral-noBG
braak-5-bilateral-noBG
braak-5-bilateral-withBG
braak-5-left-noBG
braak-5-left-withBG
braak-5-right-noBG
braak-5-right-withBG
braak-6-bilateral
braak-6-left
braak-6-right
ADNI-cingulate-cortex-bilateral
ADNI-entire-cortical-regions
ADNI-frontal-cortex-bilateral
ADNI-left-cingulate-cortex
ADNI-left-cortical-regions
ADNI-left-frontal-cortex
ADNI-left-parietal-cortex
ADNI-left-temporal-cortex
ADNI-parietal-cortex-bilateral
ADNI-right-cingulate-cortex
ADNI-right-cortical-regions
ADNI-right-frontal-cortex
ADNI-right-parietal-cortex
ADNI-right-temporal-cortex
ADNI-temporal-cortex-bilateral
ctx-lh-posteriorcingulate
ctx-lh-precuneus
ctx-rh-posteriorcingulate
ctx-rh-precuneus
ctx-lh-entorhinal
ctx-rh-entorhinal
left-amygdala
right-amygdala
ctx-lh-parahippocampal
ctx-rh-parahippocampal
ctx-lh-fusiform
ctx-lh-fusiform
ctx-lh-inferiortemporal
ctx-rh-inferiortemporal
ctx-lh-middletemporal
ctx-rh-middletemporal
frontal-cortex-bilateral
left-frontal-cortex
left-occipital-cortex
left-parietal-cortex
left-temporal-cortex
occipital-cortex-bilateral
parietal-cortex-bilateral
right-frontal-cortex
right-occipital-cortex
right-parietal-cortex
right-temporal-cortex
temporal-cortex-bilateral
ctx-lh-lateraloccipital
ctx-rh-lateraloccipital
entire-cerebellum
left-caudate
right-caudate
left-putamen
right-putamen
left-pallidum
entire-cerebral-white-matter
ctx-lh-postcentral
ctx-rh-postcentral
ctx-lh-precentral
ctx-rh-precentral
efAP Regions
Braak I
Braak II
Braak III
Braak IV
Braak V
Tau-PET Regions
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4

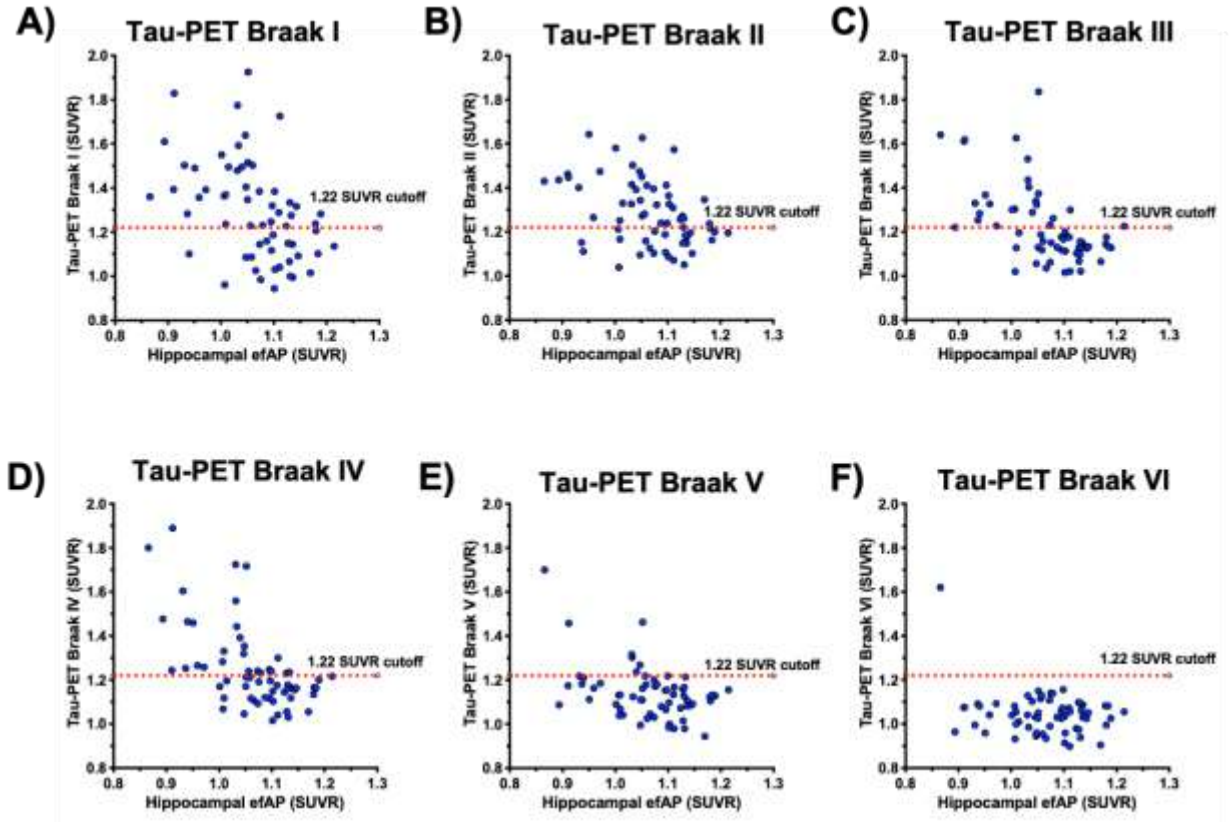
**SUPPLEMENTAL FIGURE 1. efAP Braak II region (hippocampus) chosen as optimum target region.** Area under the curve (AUC) was used to test the performance of the receiver operating characteristics (ROC) curve. AUC between the 79 efAP target regions being used as the predictor variable and tau PET Braak regions as the outcome variable. The color scale shows ranges of AUC values in the tables with blue being lowest, purple intermediate, and red highest.



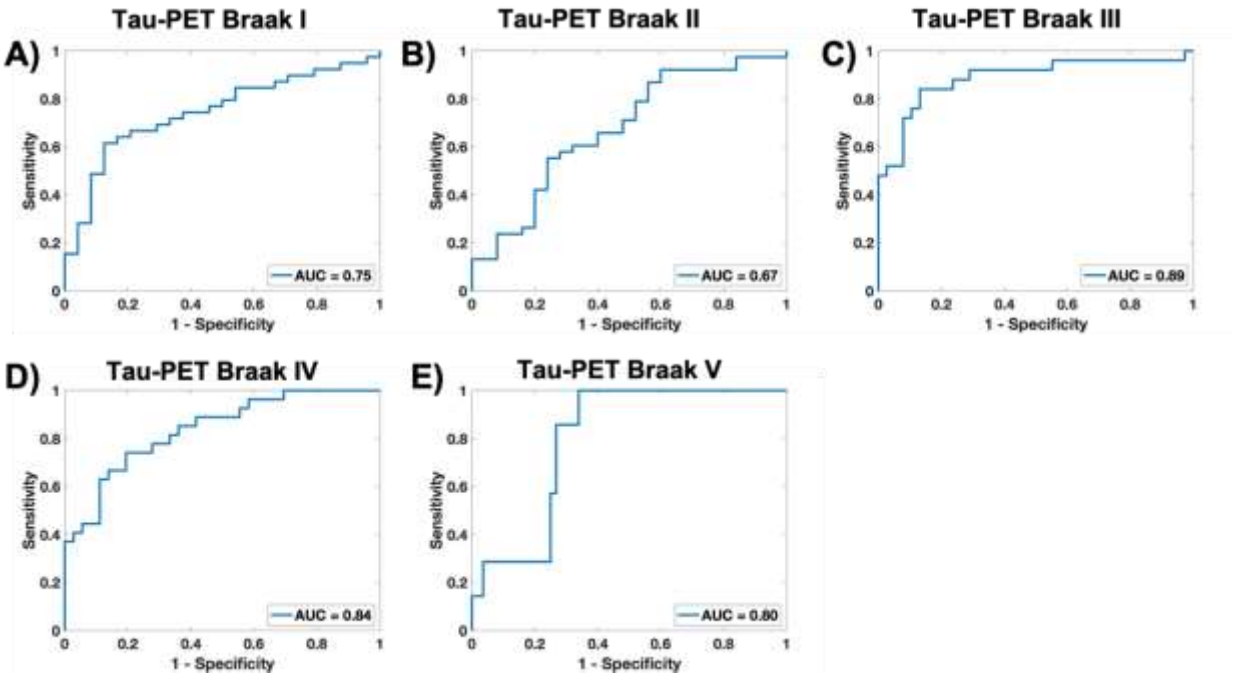

**SUPPLEMENTAL FIGURE 2. efAP cerebral white matter chosen as optimum reference region.** Area under the curve (AUC) was used to test the performance of the receiver operating characteristics (ROC) curve. AUC between the first 5 tau PET Braak regions shown for efAP being used as the predictor variable and tau PET as the outcome variable. Different reference regions for the calculation of efAP were compared: (A) cerebral white matter, (B) cerebellum, (C) pre- and postcentral gyrus, (D) basal ganglia, (E) tau PET Braak V and VI, and (F) Braak VI. The cerebral white matter showed the strongest AUC across efAP in Braak II target region, also known as the hippocampus  The color scale shows ranges of AUC values in the tables with blue being lowest, purple intermediate, and red highest.




**SUPPLEMENTAL FIGURE 3. First 180 seconds chosen as ideal efAP interval.** Representative data from early-phase optimization of efAP shown from 5 different start points based on peak cerebral cortex activity across 11 duration intervals. Area under the curve (AUC) were measured from receiver operating characteristics (ROC) curves when using efAP as predictor and tau PET Braak regions I – V as the outcome variable (mean ± standard deviation across 5 Braak regions).




**SUPPLEMENTAL FIGURE 4. Hippocampal efAP significantly correlated with tau PET Braak regions I through V.** Comparison of efAP and flortaucipir-PET across the regions representing the pathological tau PET Braak stages for amyloid-positive participants. (A) through (F) represent the regions for Braak stages I through VI, respectively. Univariate Pearson correlation showed significant correlations with Braak regions I through V ($r$ = –0.50, –0.43, –0.58, –0.66, and –0.48, $P < 0.001$). Note that only 1 individual in the study was tau-PET positive in Braak VI, preventing meaningful correlation with efAP.




**SUPPLEMENTAL FIGURE 5. Hippocampal efAP predicts tau positivity tau PET Braak regions.** Receiver operating characteristics (ROC) curve performed using efAP as predictor variable and tau PET Braak region as the outcome variable. (A) through (E) represent the regions for Braak stages I through V, respectively. Area under the curve (AUC) shown for each of the five relationships. Since only one subject was tau-positive in region corresponding to Braak VI, ROC curve not shown.