

Cohort

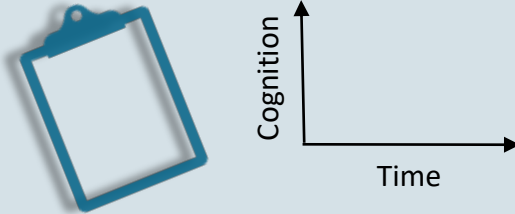


Late middle-aged cognitively normal individuals

n=167 (WRAP cohort)

- Baseline age 59±6 years
- Age at PET 67.5±6.2 years
- 115 females
- 73% with family history of dementia

Retrospective cognition



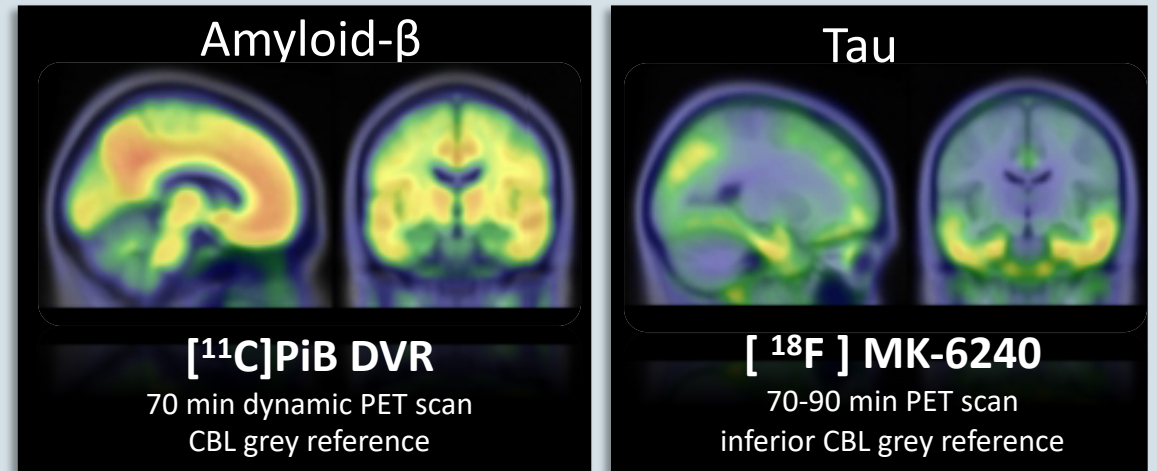
Longitudinal trajectories

7.8 ± 2.1 years → 6 MCI

Cognitive composite

- PACC-3: verbal learning, logical memory, digit symbol
- measured approx. every 2 years

PET imaging of pathology



[¹¹C]PiB DVR

70 min dynamic PET scan
CBL grey reference

[¹⁸F] MK-6240

70-90 min PET scan
inferior CBL grey reference

A+:
PiB DVR >1.19

A-	74% n=124	3% n=5
A+	14% n=23	9% n=15
	T-	T+

T+:
entorhinal SUVR >1.27
(+2 SD of A- group)

Key findings:

- Approximately 3x faster cognitive decline in A+/T+ group compared to other subgroups
- No age association with regional [¹⁸F]MK-6240 PET retention when accounting for global [¹¹C]PiB signal
- Strongest associations between global [¹¹C]PiB signal with [¹⁸F]MK-6240 signal in medial temporal lobe

