SUPPLEMENTARY MATERIAL

Figure 1. Flow diagram of participant selection

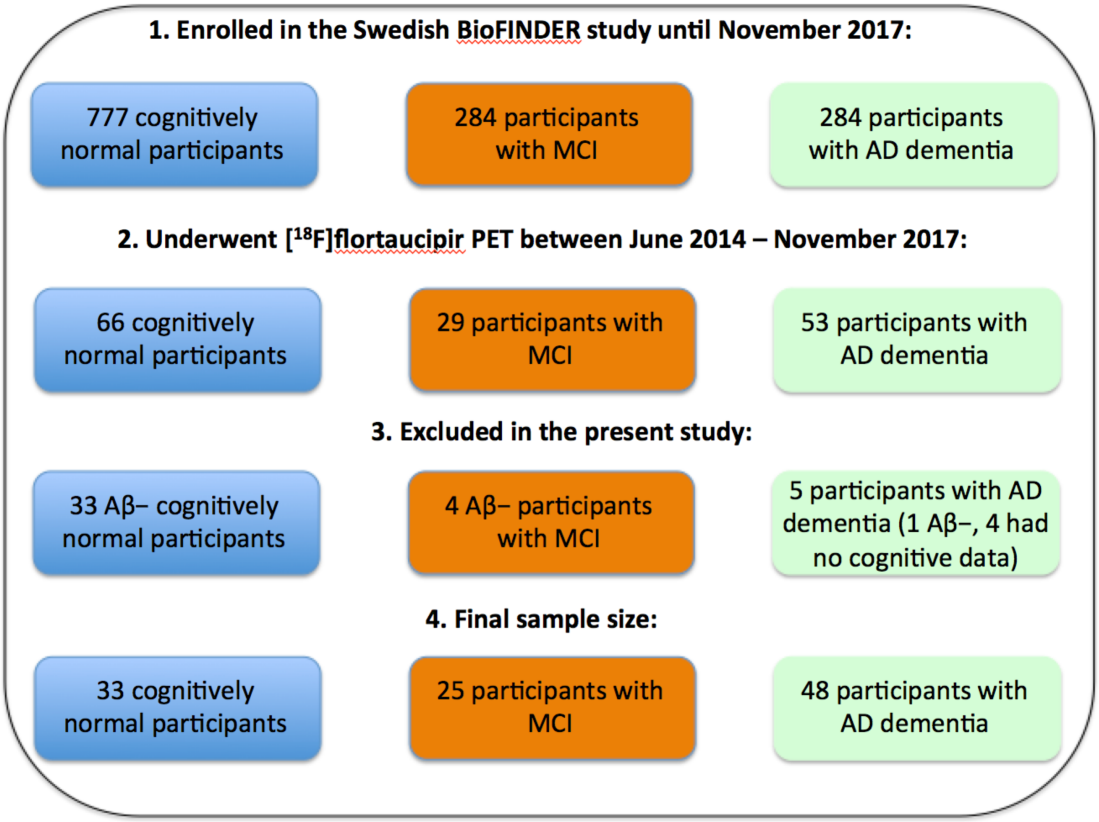

Table 1. Characteristics of subjects with missing neuropsychological data

	Cognitively normal		**Mild cognitive impairment**		**Alzheimer's disease dementia**	
	BioFINDER	Subsample	BioFINDER	Subsample	BioFINDER	Subsample
N	777	33	284	25	165	48
Age	71.5±5.3	74.4±7.3[a]	71.1±5.4	73.1±7.2	74.5±5.3	71.5±7.3[c]
Sex (male/female)	306/471	13/20[b]	167/117	16/9[b]	61/104	26/22
MMSE	28.9±1.1	29.1±1.1	27.0±1.8	25.6±2.8	20.8±4.1	21.4±4.9

"BioFINDER" represents all participants included in the BioFINDER study, while "Subsample" refers to the participants with [^{18}F]flortaucipir data available that were included in the present study.

[a] Subsample > BioFINDER, $p<0.05$; [b] More males in subsample, $p<0.05$; [c] Subsample < BioFINDER, $p<0.05$

Table 2. Characteristics of subjects with missing neuropsychological data

	ADAS1	**ADAS2**	**ADAS3**	**TMT**	**AQT**	**Animal Fluency**
N	6	10	8	9	14	11
Dx (preclinical/prodromal/dementia)	0/2/4	1/4/5	0/2/6	0/3/6	0/3/11	0/1/10
Age	69±6	71±8	70±8	67±8	67±7	71±9
Sex (male/female)	2/4	6/4	3/5	6/3	9/5	5/6
Education (years)	12±3	12±3	13±3	12±3	13±3	12±3
MMSE	18±4	22±5	20±4	19±7	19±6	21±5
Global [^{18}F]flortaucipir SUVR	1.71±0.42	1.44±0.46	1.67±0.36	1.78±0.31	1.74±0.38	1.58±0.28
Global [^{18}F]flutemetamol SUVR	0.95±0.22	0.94±0.21	0.92±0.23	0.98±0.0.20	0.99±0.17	0.99±0.10
Global cortical thickness	2.01±0.09	2.07±0.13	2.03±0.08	2.06±0.12	2.03±0.12	2.20±0.09

SUVR = Standardized uptake value ratio; MMSE = Mini-mental state examination; ADAS = Alzheimer's disease assessment scale; TMT = Trailmaking test; AQT = A quick test of cognitive speed; SDMT = Symbol digit modalities test.

* None of the variables in Table S1 were significantly associated with missing data in binary logistic regression models.

Table 3. Region-of-interest definition

Combined Region	FreeSurfer Labels	FreeSurfer Label Names
Lateral Parietal	1008, 1029, 1031, 2008, 2029, 2031	ctx-lh-inferiorparietal, ctx-lh-superiorparietal, ctx-lh-supramarginal, ctx-rh-inferiorparietal, ctx-rh-superiorparietal, ctx-rh-supramarginal
Medial Parietal	1010, 1025, 2010, 2025	ctx-lh-isthmuscingulate, ctx-lh-precuneus, ctx-rh-isthmuscingulate, ctx-rh-precuneus
Lateral Temporal	1001, 1009, 1015, 1030, 1034, 2001, 2009, 2015, 2030, 2034	ctx-lh-bankssts, ctx-lh-inferiortemporal, ctx-lh-middletemporal, ctx-lh-superiortemporal, ctx-lh-transversetemporal, ctx-rh-bankssts, ctx-rh-inferiortemporal, ctx-rh-middletemporal, ctx-rh-superiortemporal, ctx-rh-transversetemporal
Medial Temporal	1006, 1016, 2006, 2016	ctx-lh-entorhinal, ctx-lh-parahippocampal, ctx-rh-entorhinal, ctx-rh-parahippocampal
Frontal	1003, 1012, 1014, 1018, 1019, 1020, 1027, 1028, 1032, 2003, 2012, 2014, 2018, 2019, 2020, 2027, 2028, 2032	ctxcaudalmiddlefrontal, ctx-lh-lateralorbitofrontal, ctx-lh-medialorbitofrontal, ctx-lh-parsopercularis, ctx-lh-parsorbitalis, ctx-lh-parstriangularis, ctx-lh-rostralmiddlefrontal, ctx-lh-superiorfrontal, ctx-lh-frontalpole, ctx-rh-caudalmiddlefrontal, ctx-rh-lateralorbitofrontal, ctx-rh-medialorbitofrontal, ctx-rh-parsopercularis, ctx-rh-parsorbitalis, ctx-rh-parstriangularis, ctx-rh-rostralmiddlefrontal, ctx-rh-superiorfrontal, ctx-rh-frontalpole
Occipital	1005, 1011, 1013, 1021, 2005, 2011, 2013, 2021	ctx-lh-cuneus, ctx-lh-lateraloccipital, ctx-lh-lingual, ctx-lh-pericalcarine, ctx-rh-cuneus, ctx-rh-lateraloccipital, ctx-rh-lingual, ctx-rh-pericalcarine
Cortical	1001, 1002, 1003, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 2001, 2002, 2003, 2005, 2006, 2007,	ctx-lh-bankssts, ctx-lh-caudalanteriorcingulate, ctx-lh-caudalmiddlefrontal, ctx-lh-cuneus, ctx-lh-entorhinal, ctx-lh-fusiform, ctx-lh-inferiorparietal, ctx-lh-inferiortemporal, ctx-lh-isthmuscingulate, ctx-lh-lateraloccipital, ctx-lh-lateralorbitofrontal, ctx-lh-lingual, ctx-lh-medialorbitofrontal, ctx-lh-middletemporal, ctx-lh-parahippocampal, ctx-lh-paracentral, ctx-lh-

	2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035	parsopercularis, ctx-lh-parsorbitalis, ctx-lh-parstriangularis, ctx-lh-pericalcarine, ctx-lh-postcentral, ctx-lh-posteriorcingulate, ctx-lh-precentral, ctx-lh-precuneus, ctx-lh-rostralanteriorcingulate, ctx-lh-rostralmiddlefrontal, ctx-lh-superiorfrontal, ctx-lh-superiorparietal, ctx-lh-superiortemporal, ctx-lh-supramarginal, ctx-lh-frontalpole, ctx-lh-temporalpole, ctx-lh-transversetemporal, ctx-lh-insula, ctx-rh-bankssts, ctx-rh-caudalanteriorcingulate, ctx-rh-caudalmiddlefrontal, ctx-rh-cuneus, ctx-rh-entorhinal, ctx-rh-fusiform, ctx-rh-inferiorparietal, ctx-rh-inferiortemporal, ctx-rh-isthmuscingulate, ctx-rh-lateraloccipital, ctx-rh-lateralorbitofrontal, ctx-rh-lingual, ctx-rh-medialorbitofrontal, ctx-rh-middletemporal, ctx-rh-parahippocampal, ctx-rh-paracentral, ctx-rh-parsopercularis, ctx-rh-parsorbitalis, ctx-rh-parstriangularis, ctx-rh-pericalcarine, ctx-rh-postcentral, ctx-rh-posteriorcingulate, ctx-rh-precentral, ctx-rh-precuneus, ctx-rh-rostralanteriorcingulate, ctx-rh-rostralmiddlefrontal, ctx-rh-superiorfrontal, ctx-rh-superiorparietal, ctx-rh-superiortemporal, ctx-rh-supramarginal, ctx-rh-frontalpole, ctx-rh-temporalpole, ctx-rh-transversetemporal, ctx-rh-insula
L Temporoparietal	1001, 1008, 1009, 1015, 1030, 1031, 1034	ctx-lh-bankssts, ctx-lh-inferiorparietal, ctx-lh-inferiortemporal, ctx-lh-middletemporal, ctx-lh-superiortemporal, ctx-lh-supramarginal, ctx-lh-transversetemporal
R Temporoparietal	2001, 2008, 2009, 2015, 2030, 2031, 2034	ctx-rh-bankssts, ctx-rh-inferiorparietal, ctx-rh-inferiortemporal, ctx-rh-middletemporal, ctx-rh-superiortemporal, ctx-rh-supramarginal, ctx-rh-transversetemporal

Table 4. Associations between the imaging modalities with cognition in preclinical AD using non-parametric tests

	MMSE	ADAS – Immediate recall	ADAS – Delayed recall	TMT-A	AQT	ADAS – Naming	Animal fluency
[^{18}F]flortaucipir (n=33)							
Lateral parietal	-0.20	**-0.41***	**-0.46****	0.28	0.12	-0.18	-0.21
Medial parietal	-0.31	**-0.39***	**-0.33***	**0.44***	0.09	0.10	0.10
Lateral temporal	-0.30	**-0.36***	**-0.37***	**0.45****	0.07	-0.13	-0.22
Medial temporal	**-0.39***	-0.15	-0.21	**0.41***	0.19	-0.05	-0.11
Frontal	-0.17	**-0.37***	**-0.45****	**0.39***	0.15	-0.25	-0.20
Occipital	-0.26	-0.27	**-0.39***	**0.37***	0.06	-0.07	0.04
Whole brain	-0.26	**-0.39***	**-0.44****	**0.43***	0.06	-0.17	-0.17
[^{18}F]flutemetamol (n=30)							
Lateral parietal	-0.10	-0.09	-0.01	-0.03	0.13	-0.02	-0.06
Medial parietal	-0.13	-0.10	-0.01	0.13	0.07	-0.05	-0.12
Lateral temporal	-0.15	-0.08	0.04	-0.08	0.19	0.05	-0.11
Medial temporal	-0.11	-0.17	0.04	-0.06	0.22	-0.04	-0.08
Frontal	-0.27	-0.11	-0.03	0.08	0.10	0.03	-0.12
Occipital	-0.05	-0.09	0.08	-0.18	0.16	-0.05	-0.14
Whole brain	-0.17	-0.11	0.01	0.00	0.12	0.01	-0.11
Cortical thickness (n=33)							
Lateral parietal	0.22	0.17	0.05	-0.13	-0.19	-0.18	-0.06
Medial parietal	0.10	0.10	0.00	**-0.37***	-0.35	-0.16	-0.09
Lateral temporal	0.07	0.06	0.01	-0.26	-0.04	-0.21	-0.10
Medial temporal	-0.12	0.02	0.17	-0.14	0.21	0.22	-0.07
Frontal	0.17	0.09	0.09	-0.07	0.01	-0.10	0.08
Occipital	0.31	0.24	0.19	-0.29	-0.03	-0.03	-0.03
Whole brain	0.20	0.14	0.10	-0.20	-0.07	-0.13	-0.04

Data presented are standardized β-coefficients derived from non-parametric linear regression models, adjusting for age, sex and education: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

Table 5. Associations between partial volume corrected [^{18}F]flortaucipir SUVR and cognition

	MMSE	ADAS – Immediate recall	ADAS – Delayed recall	TMT-A	AQT-CS	ADAS – Naming	Animal fluency
PRECLINICAL AD:							
Lateral parietal	**-0.36***	**-0.57****	-0.29	0.29	0.27	0.12	-0.07
Medial parietal	-0.18	**-0.56****	-0.30	**0.36***	0.21	0.09	-0.03
Lateral temporal	-0.31	-0.34	-0.17	**0.38***	0.24	0.04	-0.15
Medial temporal	**-0.36***	-0.22	-0.20	**0.34***	0.19	-0.03	-0.22
Frontal	-0.25	**-0.36***	-0.19	**0.40***	0.21	0.00	-0.09
Occipital	-0.29	-0.25	-0.21	0.32	0.14	-0.03	0.04
Whole brain	-0.32	**-0.41***	-0.25	**0.38***	0.23	0.03	-0.13
PRODROMAL AD + AD DEMENTIA:							
Lateral parietal	**-0.30***	-0.10	-0.19	**0.55*****	**0.36****	-0.20	**-0.40****
Medial parietal	-0.23	-0.17	-0.24	**0.44****	**0.32***	-0.24	**-0.42****
Lateral temporal	**-0.32***	-0.15	**-0.27***	**0.43****	0.23	-0.10	**-0.39****
Medial temporal	-0.03	0.02	-0.14	-0.06	0.04	0.18	0.01
Frontal	-0.21	-0.23	-0.22	0.11	0.15	-0.21	**-0.38****
Occipital	-0.22	-0.08	**-0.28***	**0.49*****	0.20	0.06	**-0.28***
Whole brain	**-0.31***	-0.18	**-0.29***	**0.45****	**0.28***	-0.16	**-0.42****

Data presented are standardized β-coefficients derived from non-parametric linear regression models, adjusting for age, sex and education: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

Table 6. Associations between cortical thickness and cognition after additionally adjusting for MRI scanner type

	MMSE	ADAS – Immediate recall	ADAS – Delayed recall	TMT-A	AQT-CS	ADAS – Naming	Animal fluency
PRECLINICAL AD:							
Lateral parietal	0.25	0.25	0.02	-0.25	-0.16	-0.35	0.06
Medial parietal	0.10	0.19	-0.11	**-0.51****	-0.37	-0.24	0.04
Lateral temporal	-0.01	0.10	-0.05	-0.32	0.03	-0.36	0.00
Medial temporal	-0.19	0.06	0.09	-0.15	0.21	0.02	0.07
Frontal	0.09	0.14	-0.06	-0.06	0.05	-0.31	0.12
Occipital	0.16	0.24	0.16	**-0.46***	0.04	-0.23	0.09
Whole brain	0.13	0.19	0.02	-0.30	-0.02	-0.32	0.06
PRODROMAL AD + AD DEMENTIA:							
Lateral parietal	**0.35****	0.02	0.17	**-0.38****	**-0.43*****	-0.01	0.23
Medial parietal	0.23	-0.06	0.06	**-0.34****	**-0.45*****	-0.02	0.15
Lateral temporal	**0.34****	0.16	**0.25***	-0.22	**-0.30****	**0.25***	**0.38****
Medial temporal	**0.40****	0.27	**0.40****	-0.09	-0.19	0.18	**0.42****
Frontal	**0.28***	0.18	0.07	0.01	-0.06	0.14	**0.35****
Occipital	0.19	-0.14	0.15	**-0.36****	**-0.39****	-0.13	0.04
Whole brain	**0.37****	0.12	0.20	-0.23	**-0.31***	0.13	**0.35****

Data presented are standardized β-coefficients derived from linear regression models, adjusting for age, sex and education: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

Table 7. Associations between the three imaging markers and cognition in 68 (unilateral) FreeSurfer parcellations in preclinical AD

	MMSE	ADAS – Immediate recall	ADAS – Delayed recall	TMT-A	AQT-CS	ADAS – Naming	Animal fluency
[^{18}F]flortaucipir							
Left bankssts	-0.26	**-0.54****	**-0.42****	0.31	-0.02	0.02	-0.21
Left caudalanteriorcingulate	-0.18	-0.02	0.01	**0.45***	0.12	-0.20	0.19
Left caudalmiddlefrontal	0.08	**-0.44***	**-0.38***	0.28	-0.13	-0.06	-0.13
Left cuneus	-0.30	-0.21	-0.28	0.18	-0.07	-0.20	0.20
Left entorhinal	**-0.40***	-0.21	-0.20	**0.35***	0.24	0.03	-0.07
Left frontalpole	-0.21	**-0.49****	-0.25	0.05	0.18	-0.18	**-0.48***
Left fusiform	-0.23	**-0.36***	-0.18	**0.46****	0.26	-0.06	-0.04
Left inferiorparietal	-0.09	**-0.55****	**-0.38***	0.15	-0.05	0.01	-0.16
Left inferiortemporal	-0.19	**-0.40***	-0.17	**0.36***	0.26	0.06	-0.04
Left insula	-0.26	-0.24	-0.17	**0.43***	0.10	-0.03	-0.03
Left isthmuscingulate	-0.06	**-0.39***	-0.25	**0.37***	0.09	-0.03	0.09
Left lateraloccipital	-0.15	-0.28	-0.21	0.32	0.08	-0.04	0.14
Left lateralorbitofrontal	-0.20	-0.24	-0.14	**0.46****	0.19	-0.06	-0.27
Left lingual	**-0.37***	-0.28	-0.26	0.27	0.00	-0.20	0.10
Left medialorbitofrontal	**-0.36***	-0.16	-0.11	**0.45****	-0.18	-0.10	-0.23
Left middletemporal	-0.20	**-0.57*****	**-0.39***	**0.37***	0.17	-0.01	-0.17
Left paracentral	0.09	-0.26	-0.28	0.31	-0.25	-0.17	0.04
Left parahippocampal	-0.25	-0.18	-0.12	**0.36***	0.34	-0.12	-0.11
Left parsopercularis	-0.03	-0.28	-0.21	**0.47****	0.09	-0.04	-0.01
Left parsorbitalis	-0.04	-0.13	-0.12	**0.41***	0.16	-0.18	-0.36
Left parstriangularis	0.12	-0.21	-0.30	**0.60****	-0.01	0.00	-0.08
Left pericalcarine	-0.32	-0.29	-0.29	0.30	-0.02	-0.12	0.08
Left postcentral	0.08	-0.24	-0.28	0.29	-0.28	-0.18	-0.07
Left posteriorcingulate	-0.07	**-0.41***	-0.26	**0.43***	0.08	0.10	0.27
Left precentral	0.04	-0.21	-0.25	0.29	-0.26	-0.14	-0.12

Left precuneus	-0.15	**-0.52****	**-0.35***	0.33	0.07	0.03	0.09
Left rostralanteriorcingulate	-0.20	-0.15	-0.10	**0.46****	-0.03	-0.08	0.00
Left rostralmiddlefrontal	0.13	-0.32	**-0.40***	0.28	-0.19	-0.22	-0.23
Left superiorfrontal	-0.04	**-0.42***	**-0.40***	0.27	-0.20	-0.10	-0.16
Left superiorparietal	-0.09	**-0.42***	-0.33	0.19	-0.14	-0.07	-0.12
Left superiortemporal	-0.17	**-0.45***	**-0.43***	**0.36***	0.01	-0.17	-0.19
Left supramarginal	-0.05	**-0.57****	**-0.44****	0.27	0.03	-0.02	-0.15
Left temporalpole	-0.28	-0.26	-0.19	**0.46****	0.28	0.00	-0.13
Left transversetemporal	-0.17	-0.31	**-0.41***	0.26	-0.20	-0.21	0.00
Right bankssts	-0.14	-0.23	-0.19	0.30	0.00	-0.01	-0.15
Right caudalanteriorcingulate	-0.15	-0.04	-0.12	0.34	-0.04	-0.01	**0.45***
Right caudalmiddlefrontal	0.06	-0.28	-0.27	**0.36***	-0.27	-0.08	-0.10
Right cuneus	-0.18	-0.17	-0.21	0.25	-0.12	-0.19	0.09
Right entorhinal	**-0.35***	-0.13	-0.15	0.30	0.20	0.02	-0.08
Right frontalpole	-0.12	**-0.38***	-0.27	0.03	-0.03	-0.14	**-0.45***
Right fusiform	-0.20	-0.20	-0.10	**0.42***	0.24	-0.08	-0.22
Right inferiorparietal	-0.14	**-0.51****	**-0.34***	0.25	0.00	-0.01	-0.30
Right inferiortemporal	-0.22	-0.25	-0.10	**0.38***	0.21	-0.02	-0.23
Right insula	-0.30	-0.17	-0.06	**0.42***	0.09	-0.06	0.00
Right isthmuscingulate	-0.21	**-0.51****	-0.23	0.31	0.18	0.01	0.00
Right lateraloccipital	-0.16	-0.24	-0.18	0.30	0.06	-0.09	-0.09
Right lateralorbitofrontal	-0.30	-0.19	-0.02	**0.41***	0.27	-0.03	-0.24
Right lingual	-0.13	-0.23	-0.25	0.25	-0.07	**-0.39***	-0.07
Right medialorbitofrontal	-0.07	-0.15	-0.22	**0.38***	-0.09	0.05	-0.07
Right middletemporal	-0.32	-0.30	-0.20	**0.35***	0.13	-0.02	-0.26
Right paracentral	-0.11	-0.33	-0.14	0.28	-0.09	-0.16	-0.03
Right parahippocampal	-0.28	-0.20	-0.10	**0.34***	0.30	-0.03	-0.14
Right parsopercularis	-0.10	-0.09	-0.08	**0.43***	-0.02	-0.24	-0.01
Right parsorbitalis	-0.15	-0.26	-0.11	0.33	0.11	-0.11	**-0.43***
Right parstriangularis	-0.13	-0.25	-0.24	0.32	-0.08	-0.28	-0.30
Right pericalcarine	-0.10	-0.17	-0.25	0.29	-0.17	-0.28	0.22

Right postcentral	0.11	-0.23	-0.32	0.28	-0.31	-0.28	-0.15
Right posteriorcingulate	-0.10	-0.35	-0.14	**0.51****	0.12	0.15	0.19
Right precentral	0.06	-0.17	-0.22	0.32	-0.33	-0.21	-0.08
Right precuneus	-0.25	**-0.50****	-0.24	**0.43***	0.12	0.04	0.11
Right rostralanteriorcingulate	-0.08	-0.14	-0.20	**0.35***	-0.08	0.05	0.14
Right rostralmiddlefrontal	0.02	-0.30	**-0.36***	0.29	-0.14	0.30	-0.17
Right superiorfrontal	-0.02	-0.36	-0.31	0.31	-0.17	-0.03	-0.11
Right superiorparietal	-0.06	**-0.46****	**-0.38***	0.27	-0.20	-0.11	-0.15
Right superiortemporal	-0.16	-0.24	-0.22	**0.35***	0.04	-0.16	-0.21
Right supramarginal	-0.06	**-0.42***	**-0.40***	0.32	-0.01	-0.19	-0.29
Right temporalpole	**-0.41***	**-0.35***	-0.21	**0.38***	0.16	-0.00	-0.12
Right transversetemporal	0.01	-0.23	**-0.39***	0.33	-0.15	-0.15	-0.27
[^{18}F]flutemetamol							
Left bankssts	-0.07	-0.13	0.02	-0.04	0.19	-0.06	-0.04
Left caudalanteriorcingulate	-0.33	-0.13	0.01	-0.18	0.12	-0.06	-0.05
Left caudalmiddlefrontal	-0.24	-0.25	-0.05	-0.05	0.10	-0.15	-0.05
Left cuneus	0.12	-0.04	0.15	0.02	0.21	-0.35	-0.03
Left entorhinal	-0.10	-0.15	0.16	-0.04	0.26	-0.10	0.10
Left frontalpole	-0.20	-0.25	-0.13	-0.22	0.26	0.00	-0.17
Left fusiform	-0.04	-0.18	0.01	0.15	0.23	-0.08	-0.04
Left inferiorparietal	-0.05	-0.13	0.03	-0.03	0.21	-0.12	-0.01
Left inferiortemporal	-0.07	-0.14	0.03	0.04	0.24	-0.04	-0.03
Left insula	-0.17	-0.12	0.01	-0.08	0.13	0.02	-0.02
Left isthmuscingulate	-0.16	-0.18	-0.02	-0.14	0.22	-0.11	-0.09
Left lateraloccipital	0.09	0.02	0.20	0.16	0.25	-0.09	0.02
Left lateralorbitofrontal	-0.24	-0.12	0.04	-0.14	0.24	0.00	-0.06
Left lingual	0.04	-0.19	0.09	0.06	0.26	-0.21	-0.10
Left medialorbitofrontal	-0.18	-0.11	0.01	-0.14	0.16	-0.01	-0.04
Left middletemporal	-0.16	-0.14	0.02	0.00	0.23	0.00	-0.04
Left paracentral	-0.01	-0.22	-0.07	-0.10	0.02	-0.18	-0.18
Left parahippocampal	0.01	-0.23	-0.04	-0.05	0.17	-0.10	-0.06

Left parsopercularis	-0.21	-0.16	-0.06	-0.05	0.08	-0.06	0.02
Left parsorbitalis	-0.25	-0.15	0.00	-0.12	0.25	-0.03	-0.10
Left parstriangularis	-0.26	-0.18	-0.03	-0.08	0.17	-0.02	-0.05
Left pericalcarine	-0.05	-0.14	0.11	0.10	0.18	-0.26	-0.04
Left postcentral	-0.09	-0.21	-0.02	0.00	0.06	-0.20	0.01
Left posteriorcingulate	-0.16	-0.19	0.05	-0.21	0.11	-0.05	-0.03
Left precentral	-0.06	-0.26	-0.02	-0.02	0.06	-0.13	-0.09
Left precuneus	-0.10	-0.14	0.01	-0.13	0.09	-0.16	-0.01
Left rostralanteriorcingulate	-0.35	-0.09	0.01	-0.15	0.10	0.09	-0.09
Left rostralmiddlefrontal	-0.34	-0.20	-0.09	-0.11	0.19	-0.09	-0.05
Left superiorfrontal	-0.25	-0.15	-0.06	-0.18	0.06	-0.05	-0.09
Left superiorparietal	-0.06	-0.14	0.05	-0.02	0.15	-0.21	0.05
Left superiortemporal	-0.16	-0.18	-0.03	-0.06	0.17	0.02	-0.03
Left supramarginal	-0.10	-0.10	0.02	-0.01	0.19	-0.19	0.06
Left temporalpole	-0.18	-0.26	0.03	-0.04	0.34	0.04	0.05
Left transversetemporal	-0.13	-0.17	-0.01	0.04	0.18	0.00	-0.08
Right bankssts	-0.25	-0.15	0.06	0.11	0.27	0.09	-0.21
Right caudalanteriorcingulate	-0.38	-0.11	0.01	-0.27	0.10	0.09	0.01
Right caudalmiddlefrontal	-0.22	-0.17	0.08	-0.01	0.08	0.02	-0.06
Right cuneus	0.01	-0.14	0.13	0.12	0.18	-0.14	-0.25
Right entorhinal	0.01	-0.09	0.21	0.12	0.36	0.06	-0.05
Right frontalpole	-0.21	-0.16	-0.02	-0.24	0.31	0.00	-0.23
Right fusiform	0.01	-0.09	0.11	0.12	0.27	0.00	-0.16
Right inferiorparietal	-0.15	-0.18	0.03	0.02	0.21	-0.01	-0.15
Right inferiortemporal	-0.09	-0.05	0.13	0.13	0.25	0.03	-0.08
Right insula	-0.19	-0.02	0.17	0.31	0.18	0.01	0.03
Right isthmuscingulate	-0.14	-0.21	0.06	-0.13	0.20	-0.01	-0.18
Right lateraloccipital	-0.01	-0.15	0.09	0.18	0.24	0.04	-0.18
Right lateralorbitofrontal	-0.20	-0.04	0.13	-0.10	0.24	-0.01	-0.04
Right lingual	0.06	-0.23	0.09	0.17	0.27	-0.11	-0.26
Right medialorbitofrontal	-0.27	-0.08	0.02	-0.13	0.18	0.01	-0.02

Right middletemporal	-0.19	-0.08	0.12	0.08	0.26	0.05	-0.13
Right paracentral	-0.11	-0.23	0.09	-0.09	-0.01	0.01	-0.15
Right parahippocampal	-0.01	-0.18	0.05	0.09	0.25	-0.09	-0.11
Right parsopercularis	-0.19	-0.03	0.15	-0.01	0.21	-0.03	-0.02
Right parsorbitalis	-0.18	0.02	0.13	-0.13	0.16	-0.05	-0.02
Right parstriangularis	-0.22	-0.10	0.05	-0.10	0.10	-0.07	0.01
Right pericalcarine	0.05	-0.21	0.09	0.17	0.22	-0.09	-0.30
Right postcentral	-0.04	-0.17	0.08	0.13	0.14	-0.06	-0.08
Right posteriorcingulate	-0.18	-0.13	0.16	-0.14	0.09	0.06	-0.04
Right precentral	-0.03	-0.16	0.12	0.02	0.04	0.01	-0.09
Right precuneus	-0.17	-0.14	0.11	-0.12	0.12	-0.04	-0.10
Right rostralanteriorcingulate	**-0.40***	-0.10	0.05	-0.20	0.13	0.07	0.03
Right rostralmiddlefrontal	-0.29	-0.09	0.05	-0.11	0.17	-0.02	-0.02
Right superiorfrontal	-0.25	-0.11	0.05	-0.17	0.07	0.01	-0.02
Right superiorparietal	-0.15	-0.17	0.05	0.06	0.16	-0.07	-0.07
Right superiortemporal	-0.20	-0.11	0.13	0.11	0.27	0.06	-0.13
Right supramarginal	-0.09	-0.09	0.07	0.09	0.23	-0.12	0.01
Right temporalpole	-0.20	-0.19	0.12	0.05	0.34	0.02	-0.05
Right transversetemporal	-0.10	-0.03	0.19	0.13	0.30	0.04	-0.14
Cortical thickness							
Left bankssts	0.09	0.05	0.02	**-0.42***	-0.17	0.01	0.09
Left caudalanteriorcingulate	-0.20	0.02	-0.08	-0.18	0.11	-0.06	-0.19
Left caudalmiddlefrontal	0.18	0.20	0.04	-0.10	-0.34	-0.05	0.16
Left cuneus	0.18	0.19	-0.09	-0.10	-0.25	-0.18	0.07
Left entorhinal	-0.08	0.14	0.12	-0.24	-0.31	-0.05	0.19
Left frontalpole	-0.16	**-0.41***	-0.23	-0.07	-0.04	0.10	-0.01
Left fusiform	0.02	0.08	0.10	**-0.37***	-0.35	0.17	0.17
Left inferiorparietal	0.31	0.31	0.16	-0.12	-0.10	-0.16	0.01
Left inferiortemporal	0.20	0.25	0.11	-0.28	-0.19	0.00	-0.06
Left insula	0.11	**0.37***	0.15	-0.26	-0.11	0.18	-0.02
Left isthmuscingulate	-0.17	0.19	-0.05	-0.27	-0.17	-0.29	-0.04

Left lateraloccipital	0.18	0.26	0.15	-0.24	-0.23	-0.11	0.19
Left lateralorbitofrontal	0.30	0.09	-0.16	0.18	-0.24	0.12	0.13
Left lingual	-0.01	0.19	0.12	-0.11	-0.14	-0.02	-0.01
Left medialorbitofrontal	-0.03	-0.04	-0.17	0.12	-0.21	0.12	0.20
Left middletemporal	0.05	0.16	0.10	-0.19	-0.26	-0.02	0.12
Left paracentral	-0.01	0.13	0.00	-0.10	-0.17	-0.01	-0.08
Left parahippocampal	-0.21	-0.01	-0.07	0.09	-0.08	0.29	-0.05
Left parsopercularis	-0.02	-0.07	-0.04	-0.13	-0.16	0.06	0.02
Left parsorbitalis	0.27	0.13	-0.24	0.01	-0.14	-0.24	0.09
Left parstriangularis	0.03	-0.05	0.06	-0.09	-0.18	0.02	0.03
Left pericalcarine	-0.01	-0.07	0.11	-0.12	0.03	0.17	-0.24
Left postcentral	0.25	0.21	0.05	-0.10	-0.13	-0.11	-0.04
Left posteriorcingulate	-0.28	-0.15	-0.08	-0.14	0.15	-0.04	-0.27
Left precentral	0.14	0.12	0.00	0.00	-0.30	-0.05	0.03
Left precuneus	0.24	0.10	-0.08	-0.14	-0.16	-0.16	-0.11
Left rostralanteriorcingulate	-0.12	0.12	0.12	0.10	-0.16	0.24	0.02
Left rostralmiddlefrontal	0.13	0.26	0.12	-0.05	-0.22	-0.05	0.18
Left superiorfrontal	0.05	0.17	-0.06	-0.01	-0.27	-0.03	0.11
Left superiorparietal	0.22	0.13	0.07	0.02	-0.20	-0.03	-0.05
Left superiortemporal	0.05	-0.07	-0.15	-0.01	-0.21	0.24	-0.03
Left supramarginal	0.25	0.07	-0.02	0.06	-0.22	-0.02	0.02
Left temporalpole	0.02	0.18	0.02	-0.01	**-0.52****	0.06	0.26
Left transversetemporal	0.30	0.32	0.14	0.11	0.01	0.14	-0.25
Right bankssts	-0.01	0.18	0.13	-0.14	-0.18	0.11	0.08
Right caudalanteriorcingulate	0.09	-0.06	0.32	0.01	0.04	0.24	-0.06
Right caudalmiddlefrontal	0.33	0.20	-0.04	0.00	-0.13	-0.14	-0.02
Right cuneus	0.00	0.17	0.03	-0.16	-0.12	-0.03	0.01
Right entorhinal	0.23	0.03	0.02	-0.15	-0.10	0.06	0.08
Right frontalpole	-0.11	-0.14	-0.09	-0.14	0.10	0.05	-0.12
Right fusiform	0.07	0.08	0.04	-0.30	-0.09	0.18	0.03
Right inferiorparietal	0.32	0.29	-0.01	-0.15	-0.28	-0.22	0.13

Right inferiortemporal	0.10	0.09	0.06	**-0.38***	-0.21	-0.02	0.03
Right insula	0.01	-0.13	-0.10	-0.07	-0.25	0.19	-0.08
Right isthmuscingulate	-0.20	0.17	-0.07	-0.33	-0.35	**-0.46***	0.29
Right lateraloccipital	0.30	0.19	0.05	-0.33	-0.15	-0.02	0.01
Right lateralorbitofrontal	0.26	0.16	-0.13	0.08	**-0.48****	-0.02	0.19
Right lingual	0.17	0.11	0.12	-0.13	-0.16	0.06	0.10
Right medialorbitofrontal	0.08	0.16	0.08	0.09	-0.06	0.16	-0.07
Right middletemporal	0.04	0.13	-0.08	-0.20	**-0.35***	-0.33	0.08
Right paracentral	0.07	0.19	0.02	-0.17	-0.30	-0.12	0.26
Right parahippocampal	-0.22	0.08	0.10	0.06	0.32	0.09	0.02
Right parsopercularis	0.21	0.07	-0.12	0.02	-0.29	-0.01	-0.10
Right parsorbitalis	0.02	-0.04	-0.04	0.09	-0.22	-0.13	-0.09
Right parstriangularis	0.22	0.02	0.06	-0.02	-0.28	0.02	0.09
Right pericalcarine	0.21	0.29	0.18	-0.13	-0.01	-0.02	-0.02
Right postcentral	0.12	0.13	-0.02	-0.07	-0.23	-0.20	0.00
Right posteriorcingulate	0.08	-0.04	-0.16	0.03	0.08	-0.21	-0.03
Right precentral	0.11	0.20	-0.03	-0.04	-0.29	-0.20	0.02
Right precuneus	0.17	0.18	-0.05	-0.31	-0.07	-0.29	0.03
Right rostralanteriorcingulate	-0.31	0.00	0.08	-0.05	0.34	0.06	-0.26
Right rostralmiddlefrontal	0.26	0.23	0.12	0.21	-0.06	0.00	0.05
Right superiorfrontal	0.04	0.03	-0.07	0.06	-0.22	0.12	0.03
Right superiorparietal	0.17	0.11	0.00	0.01	-0.27	-0.11	0.04
Right superiortemporal	-0.11	0.00	-0.18	0.05	-0.33	0.06	-0.18
Right supramarginal	0.09	0.17	-0.09	-0.06	-0.23	-0.25	-0.09
Right temporalpole	0.21	0.21	0.15	0.26	**-0.37***	-0.10	0.22
Right transversetemporal	0.00	0.14	0.17	0.09	-0.02	0.22	0.07

Table 8. Associations between [^{18}F]flortaucipir, [^{18}F]flutemetamol and cortical thickness with cognition in prodromal AD

	MMSE	ADAS – Immediate recall	ADAS – Delayed recall	TMT-A	AQT-CS	ADAS – Naming	Animal fluency
[^{18}F]flortaucipir (n=25)							
Lateral parietal	-0.18	0.02	-0.11	**0.47***	0.15	-0.43	**-0.46***
Medial parietal	-0.14	-0.16	-0.17	**0.51***	0.16	-0.43	**-0.46***
Lateral temporal	-0.03	-0.02	-0.16	0.25	0.06	**-0.53***	-0.40
Medial temporal	0.17	0.14	-0.11	0.08	-0.11	-0.41	-0.19
Frontal	-0.05	-0.23	-0.28	0.23	-0.04	**-0.71*****	**-0.48***
Occipital	-0.01	-0.17	-0.17	**0.49***	-0.02	-0.24	-0.37
Whole brain	-0.05	-0.10	-0.18	0.35	0.04	**-0.55***	**-0.46***
[^{18}F]flutemetamol (n=18)							
Lateral parietal	-0.51	-0.09	-0.44	**0.57**	0.21	-0.23	-0.16
Medial parietal	-0.09	-0.17	-0.42	0.24	-0.17	-0.37	0.01
Lateral temporal	-0.27	0.01	-0.36	-0.06	0.12	-0.25	-0.01
Medial temporal	0.03	0.03	-0.29	-0.38	-0.27	-0.07	0.15
Frontal	0.08	0.02	-0.23	0.06	-0.10	-0.36	0.25
Occipital	-0.50	-0.06	-0.16	0.33	0.07	0.17	-0.18
Whole brain	-0.15	0.03	-0.33	0.17	-0.01	-0.23	0.12
Cortical thickness (n=25)							
Lateral parietal	0.38	-0.14	-0.04	-0.13	-0.29	-0.01	0.05
Medial parietal	0.41	-0.17	-0.08	-0.22	**-0.36**	-0.04	0.02
Lateral temporal	**0.44***	-0.01	0.24	-0.13	-0.10	**0.45***	0.31
Medial temporal	0.02	0.06	**0.56***	0.04	0.00	0.31	0.09
Frontal	**0.57****	0.15	0.12	-0.02	-0.02	0.27	0.27
Occipital	0.16	-0.29	-0.18	-0.08	-0.35	-0.13	-0.21
Whole brain	**0.50***	-0.04	0.12	-0.08	-0.14	0.23	0.16

Data presented are standardized β-coefficients derived from linear regression models, adjusting for age, sex and education: * $p<0.05$, ** $p<0.01$, *** $p<0.001$. TMTA and AQT were log-transformed prior to statistical analysis.

Table 9. Associations between [^{18}F]flortaucipir, [^{18}F]flutemetamol and cortical thickness with cognition in AD dementia

	MMSE	ADAS – Immediate recall	ADAS – Delayed recall	TMT-A	AQT-CS	ADAS – Naming	Animal fluency
[^{18}F]flortaucipir (n=48)							
Lateral parietal	-0.20	-0.04	-0.12	**0.49****	**0.30**	-0.03	-0.21
Medial parietal	-0.16	-0.20	-0.25	**0.35***	0.23	-0.22	-0.32
Lateral temporal	**-0.36***	**-0.38***	**-0.36***	0.35*	0.12	-0.31	**-0.35***
Medial temporal	**-0.34***	**-0.44****	**-0.32***	0.02	0.01	-0.13	-0.27
Frontal	**-0.50***	**-0.61****	-0.35	0.13	0.00	**-0.57****	**-0.56****
Occipital	-0.09	0.05	-0.19	**0.37****	**0.25**	0.20	-0.16
Whole brain	-0.36	-0.35	-0.30	0.36*	0.18	-0.27	**-0.40***
[^{18}F]flutemetamol (n=40)							
Lateral parietal	-0.12	0.09	-0.28	0.06	0.14	0.03	0.10
Medial parietal	-0.07	-0.02	-0.28	-0.02	0.05	-0.01	0.10
Lateral temporal	-0.12	0.04	**-0.31***	-0.07	0.04	0.03	0.19
Medial temporal	-0.28	0.02	-0.29	0.5	0.02	0.01	0.01
Frontal	-0.18	-0.01	-0.23	-0.02	0.05	0.02	0.07
Occipital	-0.18	-0.01	-0.23	0.17	0.23	0.02	0.07
Whole brain	-0.14	0.02	-0.27	0.01	0.10	0.03	0.10
Cortical thickness (n=48)							
Lateral parietal	0.20	-0.06	0.19	-0.33*	**-0.39****	-0.10	0.17
Medial parietal	0.05	-0.17	0.08	-0.26	**-0.39****	-0.11	0.04
Lateral temporal	0.27	0.14	0.23	-0.18	**-0.33***	0.16	**0.32***
Medial temporal	**0.36***	0.26	0.09	0.02	-0.13	0.04	**0.36***
Frontal	0.18	0.14	0.06	0.06	-0.03	0.10	**0.34***
Occipital	0.04	-0.20	0.15	**-0.36****	**-0.38****	-0.15	0.10
Whole brain	0.22	0.06	0.17	-0.18	**-0.29***	0.04	**0.32***

Data presented are standardized β-coefficients derived from linear regression models, adjusting for age, sex and education: * p<0.05, ** p<0.01, *** p<0.00
TMTA and AQT were log-transformed prior to statistical analysis.

Table 10. Associations between the imaging modalities with cognition in clinical AD using non-parametric tests

	MMSE	ADAS – Immediate recall	ADAS – Delayed recall	TMT-A	AQT	ADAS – Naming	Animal fluency
[^{18}F]flortaucipir (n=73)							
Lateral parietal	**-0.36***	-0.12	-0.16	**0.56*****	**0.33***	**-0.30***	**0.43****
Medial parietal	**-0.32***	-0.25	-0.26	**0.48****	**0.30***	**-0.38****	**0.49*****
Lateral temporal	**-0.35****	**-0.29***	**-0.36****	**0.36****	0.15	**-0.37****	**0.47*****
Medial temporal	**-0.26***	**-0.29***	**-0.33***	0.06	-0.05	-0.18	**0.29***
Frontal	**-0.36***	**-0.40****	**-0.37***	0.24	0.05	**0.39****	**0.50*****
Occipital	-0.21	-0.06	-0.19	**0.45*****	0.22	-0.07	**0.30***
Whole brain	**-0.37****	**-0.30***	**-0.31***	**0.44****	0.20	**-0.37***	**0.51*****
[^{18}F]flutemetamol (n=58)							
Lateral parietal	-0.19	0.02	**-0.26***	0.08	0.15	-0.04	-0.02
Medial parietal	-0.12	-0.07	**-0.31***	0.03	0.03	-0.03	-0.05
Lateral temporal	-0.20	-0.03	**-0.32***	-0.06	0.08	-0.05	-0.07
Medial temporal	-0.09	0.06	**-0.27***	-0.04	-0.01	-0.18	-0.04
Frontal	-0.18	-0.03	**-0.27***	-0.01	0.05	-0.03	-0.05
Occipital	-0.13	0.00	-0.16	0.21	0.22	-0.11	0.05
Whole brain	-0.19	-0.02	**-0.28***	-0.04	0.11	-0.06	-0.04
Cortical thickness (n=73)							
Lateral parietal	**0.32****	-0.04	0.07	**-0.36****	**-0.40*****	0.16	0.24
Medial parietal	0.23	-0.10	0.02	**-0.34****	**-0.43*****	0.13	0.15
Lateral temporal	**0.33****	0.11	0.23	-0.22	**-0.27***	**0.28***	0.41***
Medial temporal	**0.38****	**0.29***	**0.41****	-0.12	-0.11	0.27	0.41**
Frontal	0.22	0.08	0.05	-0.02	-0.04	0.15	0.36**
Occipital	0.15	0.17	0.05	**-0.30***	**-0.36****	0.00	0.04
Whole brain	**0.31****	0.03	0.13	**-0.23***	**-0.26***	0.20	0.35**

Data presented are standardized β-coefficients derived from non-parametric linear regression models, adjusting for age, sex and education: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

Table 11. Associations between the three imaging markers and cognition in 68 (unilateral) FreeSurfer parcellations in clinical AD

	MMSE	ADAS – Immediate recall	ADAS – Delayed recall	TMT-A	AQT-CS	ADAS – Naming	Animal fluency
[^{18}F]flortaucipir							
Left bankssts	**-0.31***	-0.23	-0.27	**0.47****	**0.28***	**-0.50*****	**-0.44****
Left caudalanteriorcingulate	-0.25	**-0.41****	-0.21	0.08	-0.05	**-0.57*****	**-0.43****
Left caudalmiddlefrontal	**-0.37***	**-0.41****	**-0.36***	0.19	**0.36***	**-0.49****	**-0.55*****
Left cuneus	-0.17	-0.12	**-0.29***	**0.33****	0.23	-0.04	**-0.26***
Left entorhinal	-0.19	**-0.26***	-0.19	-0.08	-0.07	-0.17	-0.18
Left frontalpole	**-0.26***	**-0.38****	**-0.29***	0.02	-0.04	**-0.48*****	**-0.39****
Left fusiform	**-0.33***	**-0.32***	**-0.35****	**0.39****	**0.26***	**-0.33***	**-0.42****
Left inferiorparietal	**-0.30***	-0.18	**-0.31***	**0.43****	**0.31***	**-0.40****	**-0.45****
Left inferiortemporal	**-0.36****	**-0.38****	**-0.39****	**0.33***	0.19	**-0.53*****	**-0.49*****
Left insula	**-0.30***	**-0.33****	**-0.29***	0.14	-0.03	**-0.54*****	**-0,37****
Left isthmuscingulate	-0.26	**-0.36***	**-0.37***	0.25	0.26	**-0.55*****	**-0.50*****
Left lateraloccipital	-0.23	-0.16	-0.26	**0.45*****	**0.28***	0.00	**-0.32***
Left lateralorbitofrontal	**-0.26***	**-0.41****	**-0.28***	0.04	-0.10	**-0.54*****	**-0.42****
Left lingual	-0.20	-0.14	**-0.27***	**0.34****	0.22	-0.01	**-0.33****
Left medialorbitofrontal	-0.21	**-0.38****	**-0.31***	0.03	-0.11	**-0.53*****	**-0.36****
Left middletemporal	**-0.34***	**-0.32***	**-0.38****	**0.30***	0.14	**-0.52*****	**-0.46****
Left paracentral	-0.10	-0.13	-0.05	**0.35****	0.15	-0.25	-0.24
Left parahippocampal	**-0.26***	**-0.36****	**-0.32***	0.10	0.11	**-0.37****	**-0.29***
Left parsopercularis	**-0.39****	**-0.42****	-0.26	0.17	0.22	**-0.63*****	**-0.51****
Left parsorbitalis	-0.25	**-0.43****	-0.24	0.00	-0.05	**-0.57*****	**-0.39****
Left parstriangularis	**-0.28***	**-0.39****	-0.21	0.03	0.02	**-0.58*****	**-0.42****
Left pericalcarine	-0.14	-0.09	**-0.26***	**0.34****	0.12	-0.01	**-0.30***
Left postcentral	-0.22	-0.18	0.00	**0.34****	**0.27***	**-0.34***	-0.24
Left posteriorcingulate	**-0.28***	**-0.37****	-0.26	**0.30***	0.20	**-0.56*****	**-0.53*****
Left precentral	-0.21	**-0.27***	-0.06	0.23	0.29*	**-0.34***	**-0.28***
Left precuneus	-0.28	-0.28	**-0.30***	**0.47****	**0.34***	**-0.44****	**-0.50*****

Left rostralanteriorcingulate	-0.22	**-0.37****	**-0.25***	0.02	-0.12	**-0.50*****	**-0.37****
Left rostralmiddlefrontal	**-0.35***	**-0.43****	**-0.30***	0.10	0.02	**-0.53*****	**-0.48****
Left superiorfrontal	**-0.35***	**-0.45****	**-0.30***	0.16	0.12	**-0.58*****	**-0.53*****
Left superiorparietal	**-0.28***	-0.10	-0.15	**0.53*****	**0.41****	-0.20	**-0.34***
Left superiortemporal	-0.21	**-0.26***	-0.23	0.25	0.11	**-0.51*****	**-0.30***
Left supramarginal	**-0.30***	-0.25	-0.15	**0.39****	**0.31***	**-0.57*****	**-0.43****
Left temporalpole	-0.14	-0.17	-0.21	-0.08	0.03	**-0.30***	-0.17
Left transversetemporal	-0.09	-0.12	-0.02	0.18	0.10	**-0.34****	-0.10
Right bankssts	**-0.35****	-0.16	**-0.29***	**0.56*****	**0.26***	-0.10	**-0.41****
Right caudalanteriorcingulate	-0.23	**-0.39****	-0.18	0.10	0.02	**-0.42****	**-0.39****
Right caudalmiddlefrontal	**-0.37***	-0.27	-0.23	0.27	**0.29***	-0.07	**-0.44****
Right cuneus	-0.21	-0.04	**-0.26***	**0.44*****	0.16	0.10	-0.23
Right entorhinal	-0.23	-0.25	**-0.28***	-0.06	-0.19	-0.08	-0.13
Right frontalpole	**-0.26***	**-0.37****	**-0.28***	0.09	-0.06	**-0.35****	**-0.38****
Right fusiform	-0.23	-0.16	-0.25	**0.37****	0.16	-0.08	**-0.25***
Right inferiorparietal	**-0.30***	-0.09	**-0.28***	**0.53*****	0.23	-0.07	**-0.41****
Right inferiortemporal	**-0.35****	-0.25	**-0.33***	**0.33****	0.12	-0.24	**-0.39****
Right insula	**-0.29***	**-0.30***	-0.25	0.17	0.01	**-0.28***	**-0.39****
Right isthmuscingulate	-0.21	**-0.30***	**-0.29***	**0.29***	0.19	**-0.33***	**-0.42****
Right lateraloccipital	-0.15	0.03	-0.20	**0.49*****	0.21	0.09	-0.21
Right lateralorbitofrontal	**-0.30***	**-0.41****	**-0.30***	0.13	-0.04	**-0.40****	**-0.45*****
Right lingual	-0.14	-0.04	-0.19	**0.38****	0.12	0.11	-0.19
Right medialorbitofrontal	-0.21	**-0.37****	**-0.27***	0.07	-0.09	**-0.39****	**-0.37****
Right middletemporal	**-0.35****	**-0.27***	**-0.37****	**0.31***	0.13	-0.23	**-0.46*****
Right paracentral	-0.13	-0.11	-0.01	**0.38****	**-0.27***	-0.08	-0.22
Right parahippocampal	-0.22	**-0.25***	**-0.35****	0.15	0.03	-0.18	**-0.27***
Right parsopercularis	**-0.42****	**-0.36***	-0.21	0.27	0.19	**-0.32***	**-0.52*****
Right parsorbitalis	**-0.30***	**-0.42****	**-0.29***	0.12	0.03	**-0.47*****	**-0.46****
Right parstriangularis	**-0.33***	**-0.38****	-0.23	0.12	0.06	**-0.40****	**-0.44****
Right pericalcarine	-0.18	0.03	-0.23	**0.34****	0.08	0.13	-0.17
Right postcentral	-0.19	-0.08	-0.01	**0.40****	**0.26***	-0.03	-0.20

Right posteriorcingulate	**-0.33***	**-0.38****	-0.27	**0.31***	0.19	**-0.45****	**-0.52*****
Right precentral	-0.19	-0.20	-0.06	**0.30***	**0.25***	-0.06	-0.24
Right precuneus	-0.26	-0.16	-0.24	**0.49*****	0.25	-0.11	**-0.40****
Right rostralanteriorcingulate	-0.23	**-0.36****	-0.24	0.08	-0.10	**-0.41****	**-0.37****
Right rostralmiddlefrontal	**-0.39****	**-0.40****	**-0.32***	0.17	0.04	**-0.38***	**-0.48****
Right superiorfrontal	**-0.34***	**-0.43****	**-0.28***	0.20	0.11	**-0.39****	**-0.49*****
Right superiorparietal	-0.22	-0.02	-0.16	**0.52*****	0.24	0.03	**-0.29***
Right superiortemporal	**-0.26***	-0.21	-0.23	**0.32***	0.17	-0.15	**-0.36****
Right supramarginal	**-0.36***	-0.11	-0.15	**0.52*****	**0.31***	-0.12	**-0.38****
Right temporalpole	**-0.25***	**-0.27***	**-0.33****	-0.06	-0.14	-0.17	**-0.28***
Right transversetemporal	-0.04	0.03	0.04	**0.33***	0.21	0.05	-0.11
[^{18}F]flutemetamol							
Left bankssts	-0.08	0.04	-0.20	-0.01	0.13	0.00	0.15
Left caudalanteriorcingulate	-0.09	-0.04	**-0.27**	-0.10	-0.08	-0.11	0.10
Left caudalmiddlefrontal	-0.15	-0.06	**-0.27***	0.07	0.16	-0.09	0.04
Left cuneus	-0.04	0.04	-0.15	0.24	0.23	0.04	-0.08
Left entorhinal	**-0.30***	0.05	-0.24	0.04	-0.13	-0.01	-0.01
Left frontalpole	-0.23	0.04	-0.23	0.05	0.11	-0.06	-0.03
Left fusiform	-0.18	-0.04	**-0.32***	0.10	0.11	-0.06	0.02
Left inferiorparietal	-0.13	0.03	**-0.34****	0.08	0.14	-0.03	0.00
Left inferiortemporal	-0.19	-0.04	**-0.34***	-0.16	0.05	-0.06	0.04
Left insula	**-0.29***	-0.12	**-0.34***	0.02	0.06	-0.10	0.05
Left isthmuscingulate	-0.11	-0.09	**-0.29***	-0.22	0.00	-0.14	0.04
Left lateraloccipital	-0.12	-0.06	-0.19	0.25	0.20	0.08	-0.05
Left lateralorbitofrontal	**-0.28***	-0.08	**-0.29***	0.00	0.10	-0.04	-0.02
Left lingual	-0.09	-0.06	-0.15	0.17	0.19	-0.01	-0.05
Left medialorbitofrontal	-0.19	-0.03	**-0.33***	-0.09	-0.04	-0.06	0.12
Left middletemporal	-0.15	-0.05	**-0.29***	-0.10	0.07	-0.08	0.03
Left paracentral	-0.12	-0.04	-0.22	0.12	0.13	-0.04	0.06
Left parahippocampal	-0.12	0.08	-0.25	0.00	0.02	-0.04	0.09
Left parsopercularis	-0.15	-0.06	**-0.26***	0.02	0.13	-0.12	0.08

Left parsorbitalis	**-0.27***	-0.11	**-0.32***	0.04	0.07	-0.14	-0.02
Left parstriangularis	-0.19	-0.10	**-0.29***	0.02	0.03	-0.20	-0.01
Left pericalcarine	-0.14	-0.08	-0.18	**0.27***	**0.30***	0.00	-0.14
Left postcentral	-0.20	-0.05	-0.21	0.23	0.22	-0.06	-0.04
Left posteriorcingulate	-0.09	-0.08	**-0.30***	-0.05	-0.01	-0.08	0.06
Left precentral	-0.17	-0.03	-0.20	0.17	0.21	-0.08	0.06
Left precuneus	-0.13	-0.08	**-0.33***	0.11	0.06	-0.10	0.00
Left rostralanteriorcingulate	-0.20	-0.14	**-0.40****	-0.13	-0.12	-0.04	0.15
Left rostralmiddlefrontal	-0.20	-0.07	**-0.29***	0.05	0.03	-0.08	0.02
Left superiorfrontal	-0.18	-0.11	**-0.29***	0.05	0.08	-0.10	0.01
Left superiorparietal	-0.18	-0.01	**-0.29***	0.22	0.18	-0.06	-0.06
Left superiortemporal	-0.19	-0.08	**-0.31***	0.03	0.12	-0.11	0.03
Left supramarginal	-0.18	-0.04	**-0.29***	0.02	0.14	-0.09	0.01
Left temporalpole	**-0.30***	-0.10	**-0.36****	0.05	-0.01	-0.10	0.01
Left transversetemporal	**-0.30***	-0.12	**-0.27***	0.19	0.15	-0.12	-0.04
Right bankssts	**-0.31***	-0.11	**-0.37****	0.02	0.12	-0.10	0.04
Right caudalanteriorcingulate	-0.16	-0.09	**-0.26***	-0.01	-0.02	-0.01	0.11
Right caudalmiddlefrontal	-0.25	-0.09	-0.24	0.06	0.15	0.02	-0.00
Right cuneus	-0.10	-0.04	-0.18	0.22	0.22	0.07	-0.10
Right entorhinal	**0.41****	-0.25	**-0.32***	0.08	0.02	-0.17	-0.17
Right frontalpole	-0.21	0.00	-0.14	0.09	-0.01	-0.03	0.02
Right fusiform	**-0.30***	-0.10	**-0.38****	0.13	0.15	-0.02	-0.08
Right inferiorparietal	-0.23	-0.04	**-0.35****	0.11	0.14	-0.04	-0.05
Right inferiortemporal	**-0.31***	-0.12	**-0.41****	0.04	0.09	-0.05	-0.07
Right insula	-0.24	-0.11	**-0.33***	-0.04	0.03	-0.08	0.11
Right isthmuscingulate	-0.09	-0.11	**-0.31***	-0.19	-0.10	-0.12	0.12
Right lateraloccipital	-0.20	-0.01	**-0.32***	**0.34***	0.24	0.14	-0.08
Right lateralorbitofrontal	**-0.29***	-0.07	-0.25	0.05	0.07	-0.05	0.02
Right lingual	-0.17	-0.11	-0.24	0.26	**0.27***	0.07	0.12
Right medialorbitofrontal	-0.19	-0.03	**-0.29***	-0.03	-0.03	-0.03	0.13
Right middletemporal	-0.25	-0.13	**-0.41****	-0.03	0.10	-0.04	0.03

Right paracentral	-0.22	-0.07	-0.19	0.14	0.16	-0.01	0.05
Right parahippocampal	-0.13	-0.02	**-0.27***	-0.04	0.02	0.02	0.05
Right parsopercularis	-0.25	-0.10	-0.26	0.05	0.09	-0.05	0.09
Right parsorbitalis	**-0.30***	-0.08	**-0.27***	0.09	0.05	-0.08	-0.03
Right parstriangularis	-0.22	-0.10	**-0.27***	-0.06	0.02	-0.10	0.10
Right pericalcarine	-0.21	-0.09	**-0.27***	0.26	0.25	0.14	-0.12
Right postcentral	-0.25	0.00	-0.21	0.22	0.23	0.00	0.01
Right posteriorcingulate	-0.20	-0.11	**-0.31***	-0.01	-0.01	-0.08	0.08
Right precentral	-0.23	-0.05	-0.22	0.09	0.18	0.03	0.05
Right precuneus	-0.19	-0.12	**-0.34***	0.10	0.07	-0.05	0.00
Right rostralanteriorcingulate	-0.19	-0.12	**-0.29***	-0.10	-0.13	0.00	0.14
Right rostralmiddlefrontal	-0.23	-0.07	**-0.27***	0.03	-0.01	-0.04	0.03
Right superiorfrontal	-0.21	-0.11	**-0.28***	0.05	0.06	-0.03	0.05
Right superiorparietal	-0.24	-0.06	**-0.31***	0.23	0.13	-0.04	-0.05
Right superiortemporal	-0.28	-0.12	**-0.40****	0.08	0.10	-0.08	0.04
Right supramarginal	-0.26	-0.01	-0.24	0.13	0.19	-0.05	0.04
Right temporalpole	**-0.32***	-0.17	**-0.38****	0.02	-0.06	-0.17	0.03
Right transversetemporal	-0.19	-0.09	**-0.28***	0.15	0.03	-0.08	0.07
Cortical thickness							
Left bankssts	0.23	0.16	**0.26***	**-0.28***	**-0.37****	**0.29***	**0.28***
Left caudalanteriorcingulate	-0.15	-0.06	-0.01	-0.13	0.03	-0.05	-0.07
Left caudalmiddlefrontal	**0.29***	0.19	0.11	0.01	-0.11	0.16	**0.34****
Left cuneus	-0.07	-0.10	0.03	-0.13	-0.17	0.10	0.07
Left entorhinal	**0.39****	0.24	**0.29***	0.08	-0.04	**0.37****	**0.35***
Left frontalpole	0.13	0.09	0.18	-0.15	-0.04	0.15	0.20
Left fusiform	**0.33****	0.19	**0.26***	**-0.32****	**-0.43*****	**0.31****	**0.31****
Left inferiorparietal	0.24	0.03	0.15	**-0.29***	**-0.46*****	0.12	**0.28***
Left inferiortemporal	**0.33****	**0.29***	**0.32****	-0.17	**-0.28***	**0.46*****	**0.32****
Left insula	**0.29***	0.16	0.13	**-0.33***	**-0.25***	**0.35****	**0.34****
Left isthmuscingulate	-0.11	0.05	0.00	-0.09	-0.09	-0.06	0.10
Left lateraloccipital	0.18	-0.04	0.20	**-0.30***	**-0.33****	-0.12	0.04

Left lateralorbitofrontal	0.13	0.19	0.01	0.02	0.05	**0.26***	**0.34****
Left lingual	0.14	-0.08	**0.25***	-0.16	**-0.32****	0.09	0.09
Left medialorbitofrontal	0.01	0.13	-0.02	-0.12	0.02	**0.31***	**0.38****
Left middletemporal	**0.32****	0.14	0.21	-0.22	**-0.32****	**0.44*****	**0.35****
Left paracentral	0.15	0.06	0.14	-0.00	-0.08	0.07	0.23
Left parahippocampal	0.20	**0.28***	**0.25***	-0.17	-0.23	**0.31***	0.20
Left parsopercularis	**0.33****	0.16	0.17	-0.10	-0.12	**0.29***	**0.25***
Left parsorbitalis	**0.24***	**0.33****	0.09	-0.03	0.04	**0.39****	0.26*
Left parstriangularis	0.06	0.02	-0.01	-0.09	-0.11	0.17	0.19
Left pericalcarine	0.07	-0.06	0.03	-0.04	-0.13	**0.25***	0.15
Left postcentral	0.22	0.03	0.10	-0.09	**-0.26***	0.15	0.13
Left posteriorcingulate	-0.04	-0.03	0.01	-0.01	-0.07	0.12	0.01
Left precentral	**0.28***	0.18	0.09	0.00	-0.10	0.22	**0.30***
Left precuneus	0.18	-0.07	0.04	**-0.30***	**-0.47*****	0.12	0.18
Left rostralanteriorcingulate	0.01	0.00	0.11	**-0.27***	-0.12	0.19	0.16
Left rostralmiddlefrontal	0.21	0.07	0.05	0.06	-0.01	0.14	**0.28***
Left superiorfrontal	**0.27***	**0.27***	0.10	0.04	-0.09	0.17	**0.30***
Left superiorparietal	0.15	-0.09	0.02	**-0.29***	**-0.36****	-0.04	0.12
Left superiortemporal	**0.24***	0.17	0.20	-0.15	**-0.28****	**0.43*****	**0.33****
Left supramarginal	**0.34****	0.16	0.14	**-0.32****	**-0.32****	**0.33****	**0.33****
Left temporalpole	0.23	0.17	0.22	-0.07	**-0.27***	**0.31***	**0.33***
Left transversetemporal	0.06	0.08	0.05	0.03	-0.18	0.15	0.09
Right bankssts	**0.32****	0.13	**0.34****	-0.20	**-0.23***	-0.01	0.24
Right caudalanteriorcingulate	0.04	-0.04	0.05	-0.12	-0.01	0.08	0.09
Right caudalmiddlefrontal	**0.27***	0.10	0.16	0.07	-0.16	-0.07	0.23
Right cuneus	0.05	-0.22	0.01	-0.21	**-0.23***	-0.12	0.02
Right entorhinal	0.22	0.06	0.22	0.05	0.02	-0.12	0.20
Right frontalpole	0.14	0.01	0.00	0.04	0.10	0.06	0.22
Right fusiform	0.14	0.00	0.15	**-0.30***	**-0.24***	-0.09	0.20
Right inferiorparietal	**0.30***	0.08	**0.25***	**-0.29***	**-0.30****	-0.12	0.19
Right inferiortemporal	**0.27***	0.04	0.11	**-0.24***	-0.18	-0.05	**0.25***

Right insula	0.23	0.07	0.10	**-0.37****	-0.22	0.12	**0.44*****
Right isthmuscingulate	0.09	-0.01	0.11	**-0.26***	-0.19	-0.07	0.11
Right lateraloccipital	0.13	-0.15	0.10	**-0.39****	**-0.28***	-0.19	0.03
Right lateralorbitofrontal	-0.03	0.00	-0.04	0.07	0.03	-0.03	0.16
Right lingual	0.08	-0.17	0.05	-0.22	-0.22	-0.14	-0.04
Right medialorbitofrontal	0.07	0.18	0.14	-0.11	0.01	0.19	**0.27***
Right middletemporal	0.22	0.03	0.13	-0.16	-0.14	-0.02	**0.27***
Right paracentral	0.15	0.01	-0.01	-0.15	-0.19	0.04	0.20
Right parahippocampal	**0.27***	0.14	0.21	-0.17	-0.18	-0.13	**0.26***
Right parsopercularis	**0.25***	0.04	0.12	**-0.26***	-0.16	0.11	0.22
Right parsorbitalis	0.13	0.13	-0.06	**0.24***	0.09	0.04	0.18
Right parstriangularis	0.13	-0.06	0.14	-0.07	0.00	0.11	0.07
Right pericalcarine	-0.03	-0.09	-0.02	-0.07	**-0.23***	0.03	0.13
Right postcentral	0.16	-0.08	0.11	-0.19	**-0.26***	-0.07	0.15
Right posteriorcingulate	0.06	-0.03	-0.06	-0.20	**-0.24***	-0.02	0.05
Right precentral	0.20	0.06	0.06	0.03	-0.05	0.02	0.22
Right precuneus	0.22	-0.10	0.04	**-0.26***	**-0.32****	-0.08	0.07
Right rostralanteriorcingulate	0.10	0.03	0.21	-0.21	-0.10	0.05	0.15
Right rostralmiddlefrontal	0.14	-0.08	0.00	0.11	-0.04	-0.07	0.21
Right superiorfrontal	0.21	0.12	0.00	-0.02	-0.09	-0.02	**0.28***
Right superiorparietal	0.20	-0.13	0.08	**-0.33****	**-0.39****	-0.15	0.05
Right superiortemporal	0.16	-0.03	0.14	-0.16	-0.21	0.03	**0.32***
Right supramarginal	**0.34****	-0.04	0.16	**-0.30***	**-0.26***	-0.03	0.21
Right temporalpole	0.04	0.03	0.05	0.01	-0.24	-0.11	0.20
Right transversetemporal	0.21	-0.08	0.05	0.11	-0.11	-0.08	0.13

Table 12. Left and right temporoparietal [^{18}F]flortaucipir, [^{18}F]flutemetamol and cortical thickness versus neuropsychological test scores

[^{18}F]flortaucipir	MMSE	ADAS – Immediate recall	ADAS – Delayed recall	TMT-A	AQT	ADAS – Naming	Animal fluency
PRECLINICAL AD							
Left temporoparietal	-0.16	**-0.57*** **	**-0.40***	0.33	0.09	-0.03	-0.15
Right temporoparietal	-0.19	**-0.37***	-0.25	**0.35***	0.08	-0.07	-0.28
PRODROMAL AD + AD DEMENTIA							
Left temporoparietal	**-0.32***	-0.30*	**-0.31***	**0.37****	0.24	**-0.54*****	**-0.45****
Right temporoparietal	**-0.35****	-0.20	**-0.31***	**0.45****	0.20	-0.17	**-0.43****

[^{18}F]flutemetamol	MMSE	ADAS – Immediate recall	ADAS – Delayed recall	TMT-A	AQT	ADAS – Naming	Animal fluency
PRECLINICAL AD							
Left temporoparietal	-0.11	-0.14	0.02	-0.02	0.21	-0.07	-0.01
Right temporoparietal	-0.14	-0.11	0.10	0.08	0.24	0.01	-0.11
PRODROMAL AD + AD DEMENTIA							
Left temporoparietal	-0.17	-0.03	**-0.31***	0.01	0.11	-0.08	0.04
Right temporoparietal	**-0.27***	-0.09	**-0.37****	0.06	0.12	-0.06	0.00

Cortical thickness	MMSE	ADAS – Immediate recall	ADAS – Delayed recall	TMT-A	AQT	ADAS – Naming	Animal fluency
PRECLINICAL AD							
Left temporoparietal	0.23	0.18	0.04	-0.14	0.01	-0.23	-0.01
Right temporoparietal	0.10	0.16	-0.08	-0.16	-0.17	-0.33	0.00
PRODROMAL AD + AD DEMENTIA							
Left temporoparietal	**0.34****	0.20	**0.25***	**-0.27***	**-0.38****	**0.42*****	**0.37****
Right temporoparietal	**0.31****	0.03	0.20	**-0.25***	**-0.24***	-0.04	**0.28***