

SUPPLEMENTAL TABLE 1

Mean (SD) unadjusted and glucose-adjusted FDG meta-ROI ratio by type 2 diabetes

Region	Type 2 diabetes	No diabetes	p	Type 2 diabetes	No diabetes	p
	n = 154	n = 595		n = 154	n = 595	
	Unadjusted mean	Unadjusted mean		Adjusted mean	Adjusted mean	
AD signature FDG ^a	1.34 (0.17)	1.39 (0.15)	0.0001	1.37 (0.01)	1.38 (0.01)	0.33
Posterior cingulate	1.66 (0.19)	1.72 (0.18)	<0.0001	1.70 (0.02)	1.71 (0.01)	0.73
Temporal gyrus	1.11 (0.18)	1.14 (0.17)	0.0497	1.13 (0.02)	1.13 (0.01)	0.87
Angular gyrus	1.41 (0.20)	1.48 (0.18)	<0.0001	1.44 (0.02)	1.47 (0.01)	0.08
Primary sensorimotor ^b	1.40 (0.13)	1.43 (0.11)	0.002	1.42 (0.01)	1.42 (0.005)	0.72
Precentral gyrus	1.42 (0.13)	1.44 (0.11)	0.004	1.44 (0.01)	1.43 (0.005)	0.38
Paracentral gyrus	1.48 (0.16)	1.49 (0.14)	0.30	1.51 (0.01)	1.48 (0.01)	0.08
Postcentral gyrus	1.36 (0.14)	1.39 (0.12)	0.0005	1.38 (0.01)	1.39 (0.005)	0.65
Whole brain	1.39 (0.11)	1.43 (0.10)	<0.0001	1.41 (0.01)	1.42 (0.004)	0.52

Estimates are unadjusted means (standard deviations) and linear regression glucose-adjusted means (standard error of the mean).
^aAD signature FDG meta-ROI ratio was assessed over voxels in the bilateral angular gyri, posterior cingulate/precuneus, and inferior temporal regions of interest.
^bComparison group consisting of a composite measure for uptake over voxels in the precentral, paracentral, and postcentral primary sensorimotor cortices.

SUPPLEMENTAL TABLE 2

Associations of type 2 diabetes with global whole brain and sensorimotor cortex FDG-PET ratio

	Beta estimate (SE): column headings represent covariates included in each model				
	Age and Sex	Education	APOE ε4	Glucose	Full model ^a
Whole brain					
Total sample					
Beta (standard error)	-0.034 (0.01)	-0.034 (0.01)	-0.034 (0.01)	-0.004 (0.01)	-0.005 (0.01)
P value	0.0001	0.0001	0.0001	0.65	0.58
Cognitively normal					
Beta (standard error)	-0.031 (0.01)	-0.031 (0.01)	-0.031 (0.01)	0.005 (0.01)	0.005 (0.01)
P value	0.002	0.002	0.002	0.66	0.66
MCI					
Beta (standard error)	-0.036 (0.02)	-0.038 (0.02)	-0.039 (0.02)	-0.022 (0.02)	-0.028 (0.02)
P value	0.06	0.04	0.045	0.27	0.17
Sensorimotor cortex					
Total sample					
Beta (standard error)	-0.027 (0.01)	-0.027 (0.01)	-0.027 (0.01)	0.005 (0.01)	0.005 (0.01)
P value	0.008	0.007	0.008	0.64	0.64
Cognitively normal					
Beta (standard error)	-0.027 (0.01)	-0.027 (0.01)	-0.027 (0.01)	0.012 (0.01)	0.011 (0.01)
P value	0.02	0.02	0.02	0.35	0.35
MCI					
Beta (standard error)	-0.028 (0.02)	-0.029 (0.02)	-0.026 (0.02)	-0.013 (0.02)	-0.012 (0.02)
P value	0.20	0.19	0.24	0.56	0.63

SE, standard error; FDG, ¹⁸F fluorodeoxyglucose; PET, positron emission tomography.

^aAll models include adjustment for age and sex; each column shows the variable added separately, to a model with age and sex. The full model is adjusted for age, sex, education, APOE ε4 allele, and glucose level.

SUPPLEMENTAL TABLE 3

Associations of type 2 diabetes with AD signature FDG-PET meta-ROI ratio across strata of key covariates

Characteristic	Stratification Variable							
	Age		APOE ε4		Sex		Blood glucose	
	70 - 79	80+	ε4 negative	ε4 positive	Men	Women	< 126 mg/dl	≥ 126 mg/dl
Diabetes/no diabetes ^a	74/336	80/259	114/434	40/160	96/327	58/268	105/576	49/19
AD signature FDG meta-ROI ratio								
Odds ratio	3.02	1.60	2.62	1.47	2.42	1.96	1.72	2.03
(95% CI) ^b	(1.75, 5.20)	(0.97, 2.65)	(1.68, 4.09)	(0.71, 3.05)	(1.50, 3.90)	(1.05, 3.65)	(1.11, 2.69)	(0.63, 6.60)
P value	<0.001	0.07	<0.001	0.30	0.0003	0.03	0.02	0.24
P value for interaction	0.08		0.18		0.57		0.79	

Abbreviations: AD = Alzheimer's disease.

^aNumber with vs. without diabetes in each strata; based on total sample.

^b95% confidence interval. Models include age, sex, and education where applicable.