

Supplemental Table 1: Correlation analyses between [<sup>11</sup>C]PiB uptake in anatomically defined ROIs and CSF-A $\beta$ 42

ROI	r	p value (uncor)	p <0.05 (uncor)	ROI	r	p value (uncor)	p <0.05 (uncor)
Precentral_R	-0,361	0,050		Cuneus_L	-0,249	0,184	
Precentral_L	-0,296	0,112		Lingual_R	-0,289	0,122	
Frontal_Sup_R	-0,280	0,133		Lingual_L	-0,421	0,020	*
Frontal_Sup_L	-0,331	0,074		Occipital_Sup_R	-0,140	0,461	
Frontal_Sup_Orb_R	-0,350	0,058		Occipital_Sup_L	-0,321	0,083	
Frontal_Sup_Orb_L	-0,386	0,035	*	Occipital_Mid_R	-0,231	0,220	
Frontal_Mid_R	-0,358	0,052		Occipital_Mid_L	-0,348	0,060	
Frontal_Mid_L	-0,388	0,034	*	Occipital_Inf_R	-0,210	0,266	
Frontal_Mid_Orb_lat_R	-0,364	0,048	*	Occipital_Inf_L	-0,363	0,048	*
Frontal_Mid_Orb_lat_L	-0,406	0,026	*	Fusiform_R	-0,377	0,040	*
Frontal_Inf_Oper_R	-0,338	0,068		Fusiform_L	-0,489	0,006	*
Frontal_Inf_Oper_L	-0,260	0,165		Postcentral_R	-0,344	0,063	
Frontal_Inf_Tri_R	-0,386	0,035	*	Postcentral_L	-0,245	0,192	
Frontal_Inf_Tri_L	-0,393	0,032	*	Parietal_Sup_R	-0,298	0,110	
Frontal_Inf_Orb_R	-0,360	0,051		Parietal_Sup_L	-0,247	0,188	
Frontal_Inf_Orb_L	-0,354	0,055		Parietal_Inf_R	-0,400	0,029	*
Rolandic_Oper_R	-0,342	0,064		Parietal_Inf_L	-0,337	0,069	
Rolandic_Oper_L	-0,342	0,064		SupraMarginal_R	-0,364	0,048	*
Supp_Motor_Area_R	-0,303	0,104		SupraMarginal_L	-0,366	0,047	*
Supp_Motor_Area_L	-0,364	0,048	*	Angular_R	-0,386	0,035	*
Olfactory_R	-0,390	0,033	*	Angular_L	-0,319	0,086	
Olfactory_L	-0,482	0,007	*	Precuneus_R	-0,400	0,029	*
Frontal_Sup_Medial_R	-0,341	0,065		Precuneus_L	-0,444	0,014	*
Frontal_Sup_Medial_L	-0,336	0,069		Paracentral_Lobule_R	-0,128	0,501	
Frontal_Mid_Orb_mes_R	-0,380	0,038	*	Paracentral_Lobule_L	-0,227	0,228	

Frontal_Mid_Orb_mes_L	-0,407	0,026	*	Caudate_R	-0,455	0,011	*
Rectus_R	-0,347	0,061		Caudate_L	-0,459	0,011	*
Rectus_L	-0,425	0,019	*	Putamen_R	-0,300	0,107	
Insula_R	-0,353	0,055		Putamen_L	-0,323	0,081	
Insula_L	-0,408	0,025	*	Pallidum_R	-0,307	0,099	
Cingulum_Ant_R	-0,421	0,021	*	Pallidum_L	-0,075	0,692	
Cingulum_Ant_L	-0,381	0,038	*	Thalamus_R	-0,460	0,011	*
Cingulum_Mid_R	-0,378	0,039	*	Thalamus_L	-0,508	0,004	*
Cingulum_Mid_L	-0,436	0,016	*	Heschl_R	-0,398	0,029	*
Cingulum_Post_R	-0,495	0,005	*	Heschl_L	-0,376	0,041	*
Cingulum_Post_L	-0,569	0,001	*	Temporal_Sup_R	-0,421	0,021	*
Hippocampus_R	-0,392	0,032	*	Temporal_Sup_L	-0,399	0,029	*
Hippocampus_L	-0,398	0,030	*	Temporal_Pole_Sup_R	-0,410	0,024	*
ParaHippocampal_R	-0,503	0,005	*	Temporal_Pole_Sup_L	-0,356	0,054	
ParaHippocampal_L	-0,526	0,003	*	Temporal_Mid_R	-0,324	0,081	
Amygdala_R	-0,309	0,097		Temporal_Mid_L	-0,382	0,037	*
Amygdala_L	-0,269	0,150		Temporal_Pole_Mid_R	-0,347	0,060	
Calcarine_R	-0,236	0,209		Temporal_Pole_Mid_L	-0,309	0,096	
Calcarine_L	-0,376	0,041	*	Temporal_Inf_R	-0,328	0,077	
Cuneus_R	-0,207	0,272		Temporal_Inf_L	-0,411	0,024	*

Legend Supplemental Table 1: r: correlation coefficient (Pearson); \*: p<0,05 (uncorr);

ROI: region of interest; CSF: cerebrospinal fluid; A $\beta$ 42: Beta amyloid 1-42, L: left; R:

right

Supplemental Table 2: Local maxima: voxel based regression analysis between [<sup>11</sup>C]PiB uptake and CSF-A $\beta$ 42

x	y	z	Left/ Right	Cortical lobe	Region	BA	z-score	p-value
-6.75	-35.97	7.96	Left	Sub-lobar	Thalamus	*	4.48	<0.001
-19.55	-38.41	-5.1	Left	Limbic Lobe	Parahippocampal Gyrus	30	3.88	<0.001
2.33	-39.1	20.43	Right	Limbic Lobe	Posterior Cingulate	29	3.69	<0.001
39.96	9.08	-12.2	Right	Temporal Lobe	Superior Temporal Gyrus	38	3.08	0.001
34.49	7.94	-19.61	Right	Temporal Lobe	Superior Temporal Gyrus	38	2.9	0.002
43.56	-0.78	-7.67	Right	Temporal Lobe	Middle Temporal Gyrus	21	2.84	0.002
-17.29	59.68	-8.38	Left	Frontal Lobe	Middle Frontal Gyrus	10	3.04	0.001
22.62	15.12	42.13	Right	Frontal Lobe	Superior Frontal Gyrus	8	2.76	0.003
-47.37	30.79	19.01	Left	Frontal Lobe	Middle Frontal Gyrus	46	2.73	0.003
-39.81	44.67	11.44	Left	Frontal Lobe	Middle Frontal Gyrus	10	2.68	0.004
-28.83	41.87	20.37	Left	Frontal Lobe	Middle Frontal Gyrus	10	2.52	0.006
31.73	-6.12	47.47	Right	Frontal Lobe	Middle Frontal Gyrus	6	2.72	0.003
42.79	-13.8	48.74	Right	Frontal Lobe	Precentral Gyrus	4	2.66	0.004
35.43	-31.7	39.71	Right	Parietal Lobe	Inferior Parietal Lobule	40	2.59	0.005
52.32	-4.48	29.96	Right	Frontal Lobe	Precentral Gyrus	6	2.53	0.006
43.07	-2.57	29.99	Right	Frontal Lobe	Precentral Gyrus	6	2.39	0.008
-27.66	-58.16	43.34	Left	Parietal Lobe	Superior Parietal Lobule	7	2.49	0.006
-41.88	-30.03	6.13	Left	Temporal Lobe	Superior Temporal Gyrus	41	2.44	0.007
27.21	-0.29	-31.32	Right	Limbic Lobe	Uncus	36	2.42	0.008
20.98	34.98	31.37	Right	Frontal Lobe	Medial Frontal Gyrus	9	2.4	0.008
30.33	33.77	24.2	Right	Frontal Lobe	Middle Frontal Gyrus	9	2.37	0.009
-51.4	-24.62	28.1	Left	Parietal Lobe	Postcentral Gyrus	2	2.38	0.009
-29.37	3.16	50.92	Left	Frontal Lobe	Middle Frontal Gyrus	6	2.38	0.009

55.97	-45.15	22.57	Right	Parietal Lobe	Inferior Parietal Lobule	40	2.35	0.009
-5.07	24.93	38.98	Left	Limbic Lobe	Cingulate Gyrus	32	2.33	0.010
51.08	42.04	-3.49	Right	Frontal Lobe	Inferior Frontal Gyrus	10	2.33	0.010
5.73	-21.24	49.21	Right	Frontal Lobe	Medial Frontal Gyrus	6	2.33	0.010

Legend Supplemental Table 2: x/y/z: Talairach coordinates, BA: Brodmann Area

Supplemental Table 3: Local maxima: partial volume effect (PVE) corrected voxel based regression analysis between [<sup>11</sup>C]PiB uptake and CSF-A $\beta$ 42

x	y	z	Left/ Right	Cortical lobe	Region	BA	z- score	p-value
-60.65	-42.85	22.61	Left	Parietal Lobe	Inferior Parietal Lobule	40	3.39	<0.001
-49.69	-69.52	25.68	Left	Temporal Lobe	Middle Temporal Gyrus	39	3.28	0.001
-55.24	-60.35	28.25	Left	Temporal Lobe	Superior Temporal Gyrus	39	3.28	0.001
-34.5	42.9	29.38	Left	Frontal Lobe	Middle Frontal Gyrus	9	2.95	0.002
-26.81	54.09	10.75	Left	Frontal Lobe	Superior Frontal Gyrus	10	2.70	0.003
-38.36	27.14	36.83	Left	Frontal Lobe	Middle Frontal Gyrus	9	2.64	0.004
-10.4	-24.6	7.18	Left	Sub-lobar	Thalamus	*	2.93	0.002
38.19	-10.36	-24.89	Right	Temporal Lobe	Fusiform Gyrus	20	2.90	0.002
40.16	-2.22	-31.29	Right	Temporal Lobe	Middle Temporal Gyrus	21	2.64	0.004
29.0	-4.37	-28.08	Right	Limbic Lobe	Uncus	36	2.42	0.008
15.3	-59.14	13.35	Right	Limbic Lobe	Posterior Cingulate	30	2.90	0.002
11.68	-54.87	8.28	Right	Limbic Lobe	Posterior Cingulate	30	2.84	0.002
-9.05	-30.13	44.51	Left	Limbic Lobe	Cingulate Gyrus	31	2.82	0.002
-21.3	-33.98	-11.91	Left	Limbic Lobe	Parahippocampal Gyrus	36	2.75	0.003
-26.82	-28.19	-13.26	Left	Limbic Lobe	Parahippocampal Gyrus	35	2.75	0.003
-24.69	-9.69	-29.49	Left	Limbic Lobe	Uncus	28	2.74	0.003
4.68	55.96	9.66	Right	Frontal Lobe	Medial Frontal Gyrus	10	2.63	0.004
2.92	54.81	2.31	Right	Frontal Lobe	Medial Frontal Gyrus	10	2.58	0.005
6.31	52.52	25.58	Right	Frontal Lobe	Superior Frontal Gyrus	9	2.52	0.006
46.85	-44.05	11.71	Right	Temporal Lobe	Superior Temporal Gyrus	22	2.62	0.004
43.13	-53.35	10.76	Right	Temporal Lobe	Superior Temporal Gyrus	39	2.52	0.006
-39.51	5.77	21.71	Left	Sub-lobar	Insula	13	2.44	0.007
-36.36	13.62	21.17	Left	Frontal Lobe	Inferior Frontal Gyrus	48	2.39	0.008
29.82	-55.89	37.32	Right	Parietal Lobe	Angular Gyrus	39	2.43	0.008
21.38	56.23	6.36	Right	Frontal Lobe	Superior Frontal Gyrus	10	2.37	0.009
30.54	-26.8	-10.36	Right	Temporal Lobe	Hippocampus	*	2.35	0.009
-47.05	4.91	10.94	Left	Frontal Lobe	Precentral Gyrus	44	2.34	0.010

Legend Supplemental Table 3: x/y/z: Talairach coordinates, BA: Brodmann Area