

# Correlation of static PET data of the first-minute-frame (FMF) after <sup>18</sup>F-labelled amyloid tracer injection to [<sup>18</sup>F]FDG PET images - Supplementary Materials

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## S1. Supplementary material to section 2. Materials and methods

### S2.1 Supplementary material to section 2.3. Image analysis

**Table S1.** AAL2 brain regions that compose the grouped VOIs.

Grouped VOI	AAL brain region
Frontal	Precentral gyrus
	Superior frontal gyrus, dorsolateral
	Superior frontal gyrus, orbital part
	Middle frontal gyrus
	Middle frontal gyrus, orbital part
	Inferior frontal gyrus, opercular part
	Inferior frontal gyrus, triangular part
	Inferior frontal gyrus, orbital part
	Superior frontal gyrus, medial orbital
	Superior frontal gyrus, medial
Parietal	Gyrus rectus
	Postcentral gyrus
	Superior parietal gyrus
	Inferior parietal gyrus, excluding supramarginal and angular gyri
	Supramarginal gyrus
	Angular gyrus
Occipital	Calcarine fissure and surrounding cortex
	Cuneus
	Lingual gyrus
	Superior occipital gyrus
	Middle occipital gyrus
	Inferior occipital gyrus
Temporal	Hippocampus
	Parahippocampal gyrus
	Amygdala
	Fusiform gyrus
	Heschl's gyrus
	Superior temporal gyrus
	Middle temporal gyrus
	Temporal pole: middle temporal gyrus
	Inferior temporal gyrus
Anterior cingulate cortex	Anterior cingulate cortex
Posterior cingulate cortex	Posterior cingulate cortex
Precuneus	Precuneus
Striatum	Caudate nucleus
	Lenticular nucleus, Putamen

## S2. Supplementary material to section 3. Results

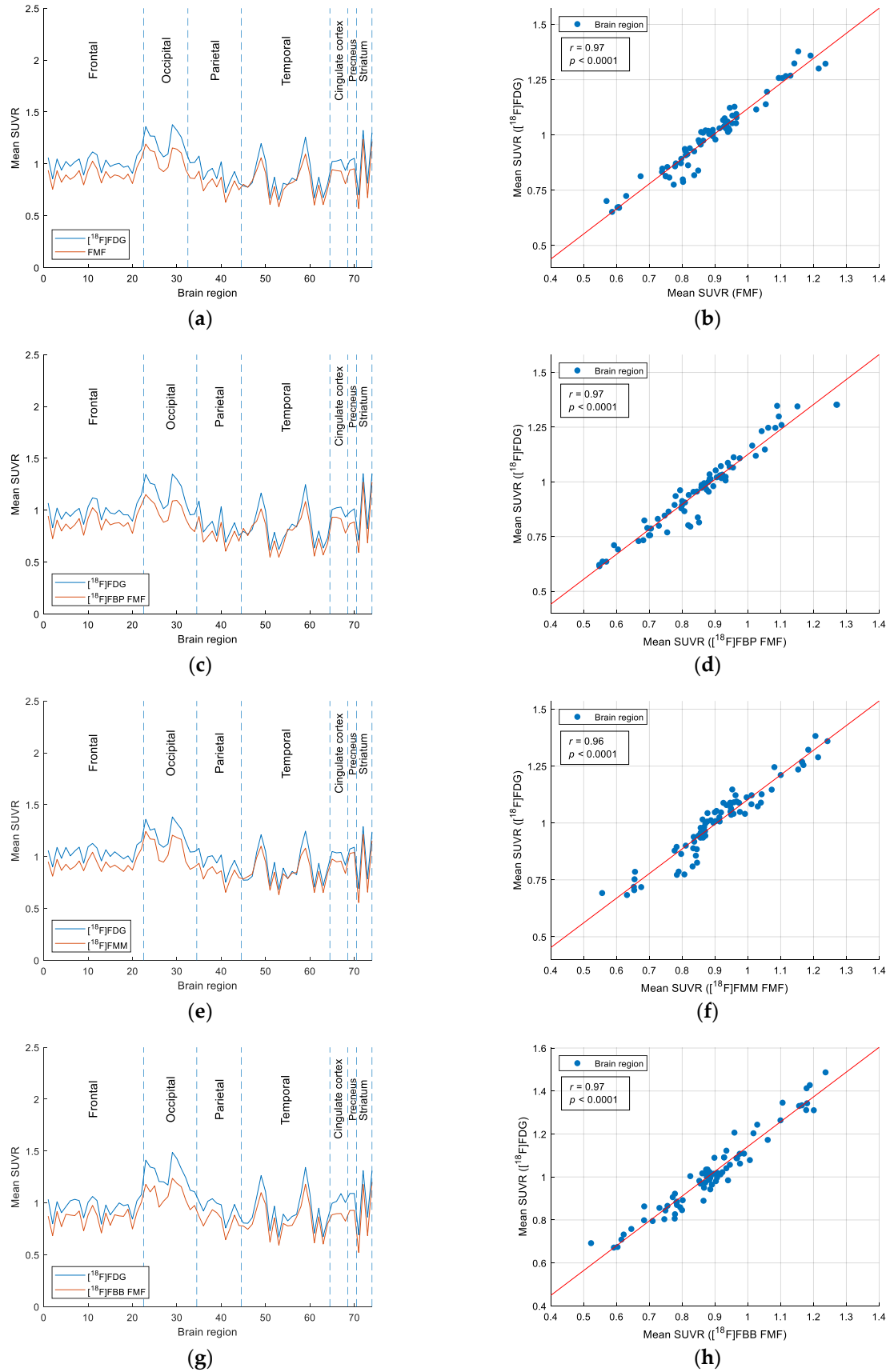
### S2.1 Supplementary material to section 3.2. SUVR analysis

**Table S2.** Regional SUVRs of [ $^{18}\text{F}$ ]FDG PET and FMFs of A $\beta$ + patients.

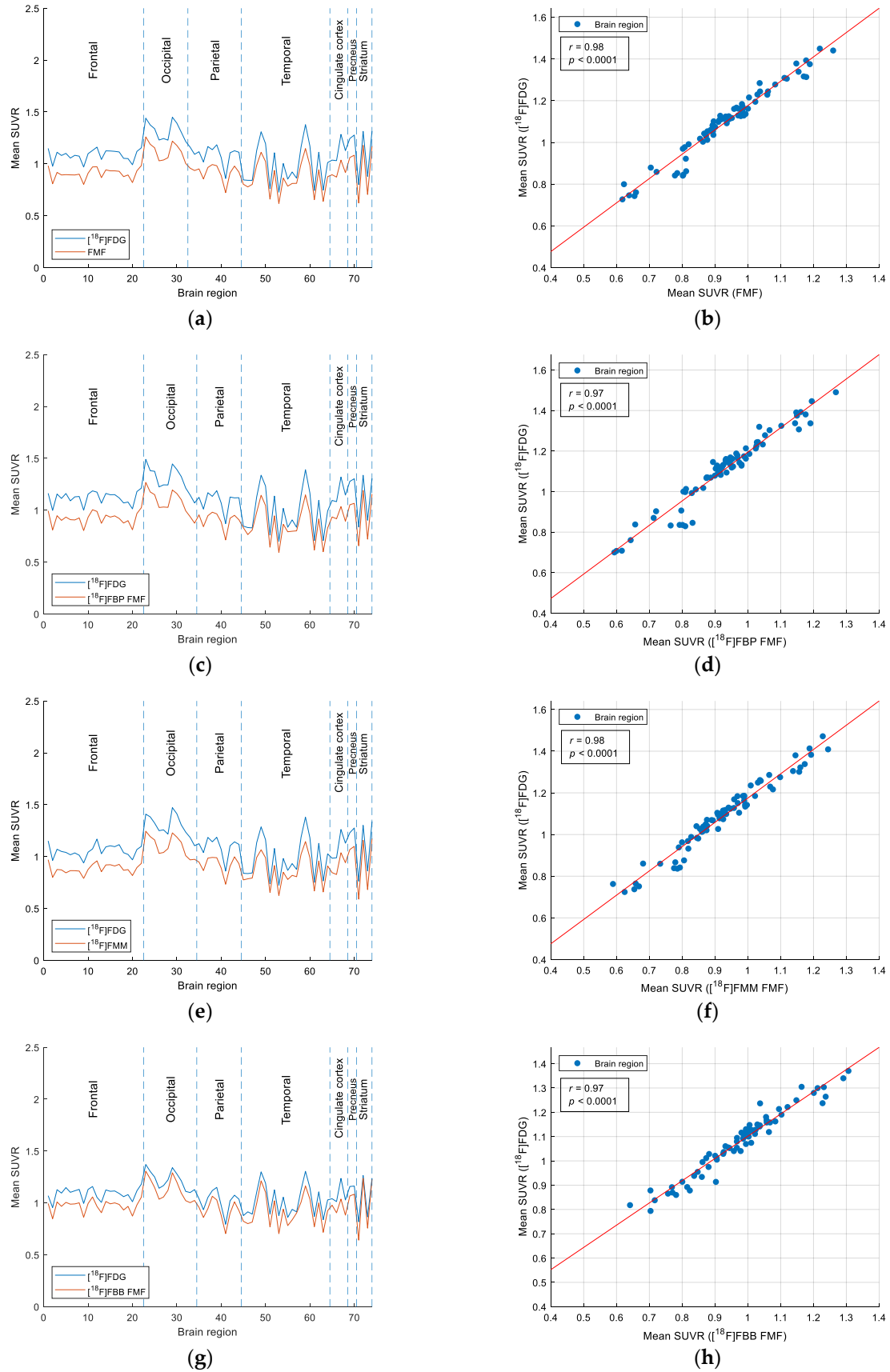
Brain region		SUVR (mean $\pm$ SD)							
		Study cohort		[ $^{18}\text{F}$ ]FBP subcohort		[ $^{18}\text{F}$ ]FMM subcohort		[ $^{18}\text{F}$ ]FBB subcohort	
		[ $^{18}\text{F}$ ]FDG	FMF	[ $^{18}\text{F}$ ]FDG	FMF	[ $^{18}\text{F}$ ]FDG	FMF	[ $^{18}\text{F}$ ]FDG	FMF
Frontal	L	0.98 $\pm$ 0.15	0.86 $\pm$ 0.10	0.95 $\pm$ 0.12	0.84 $\pm$ 0.09	1.01 $\pm$ 0.20	0.90 $\pm$ 0.10	0.94 $\pm$ 0.13	0.82 $\pm$ 0.09
	R	0.99 $\pm$ 0.11	0.88 $\pm$ 0.07	0.98 $\pm$ 0.11	0.87 $\pm$ 0.07	1.01 $\pm$ 0.11	0.90 $\pm$ 0.07	0.93 $\pm$ 0.08	0.83 $\pm$ 0.05
Occipital	L	1.20 $\pm$ 0.16	1.05 $\pm$ 0.11	1.17 $\pm$ 0.15	1.01 $\pm$ 0.11	1.20 $\pm$ 0.15	1.08 $\pm$ 0.08	1.29 $\pm$ 0.23	1.08 $\pm$ 0.15
	R	1.19 $\pm$ 0.12	1.02 $\pm$ 0.11	1.16 $\pm$ 0.14	0.97 $\pm$ 0.13	1.21 $\pm$ 0.07	1.06 $\pm$ 0.08	1.30 $\pm$ 0.10	1.09 $\pm$ 0.04
Parietal	L	0.96 $\pm$ 0.15	0.84 $\pm$ 0.08	0.92 $\pm$ 0.15	0.81 $\pm$ 0.08	1.00 $\pm$ 0.15	0.88 $\pm$ 0.06	1.00 $\pm$ 0.19	0.86 $\pm$ 0.15
	R	0.89 $\pm$ 0.10	0.78 $\pm$ 0.07	0.86 $\pm$ 0.11	0.76 $\pm$ 0.08	0.91 $\pm$ 0.08	0.80 $\pm$ 0.06	0.91 $\pm$ 0.13	0.79 $\pm$ 0.09
Temporal	L	0.87 $\pm$ 0.16	0.80 $\pm$ 0.11	0.81 $\pm$ 0.14	0.74 $\pm$ 0.10	0.92 $\pm$ 0.17	0.85 $\pm$ 0.08	0.84 $\pm$ 0.15	0.84 $\pm$ 0.15
	R	0.88 $\pm$ 0.14	0.81 $\pm$ 0.10	0.83 $\pm$ 0.15	0.76 $\pm$ 0.12	0.92 $\pm$ 0.12	0.86 $\pm$ 0.07	0.93 $\pm$ 0.07	0.84 $\pm$ 0.23
ACC	L	1.02 $\pm$ 0.15	0.94 $\pm$ 0.11	1.01 $\pm$ 0.11	0.93 $\pm$ 0.10	1.05 $\pm$ 0.18	0.98 $\pm$ 0.12	1.00 $\pm$ 0.12	0.89 $\pm$ 0.10
	R	1.03 $\pm$ 0.12	0.93 $\pm$ 0.08	1.02 $\pm$ 0.09	0.93 $\pm$ 0.07	1.04 $\pm$ 0.17	0.95 $\pm$ 0.10	1.02 $\pm$ 0.09	0.90 $\pm$ 0.09
PCC	L	1.04 $\pm$ 0.20	0.93 $\pm$ 0.16	1.03 $\pm$ 0.17	0.91 $\pm$ 0.15	1.04 $\pm$ 0.22	0.96 $\pm$ 0.16	1.09 $\pm$ 0.27	0.90 $\pm$ 0.27
	R	0.94 $\pm$ 0.18	0.81 $\pm$ 0.15	0.94 $\pm$ 0.22	0.78 $\pm$ 0.18	0.92 $\pm$ 0.15	0.84 $\pm$ 0.11	1.00 $\pm$ 0.15	0.82 $\pm$ 0.08
Precuneus	L	1.03 $\pm$ 0.18	0.94 $\pm$ 0.12	0.98 $\pm$ 0.17	0.87 $\pm$ 0.08	1.07 $\pm$ 0.18	1.03 $\pm$ 0.11	1.09 $\pm$ 0.20	0.93 $\pm$ 0.15
	R	1.05 $\pm$ 0.15	0.95 $\pm$ 0.13	1.01 $\pm$ 0.18	0.89 $\pm$ 0.12	1.09 $\pm$ 0.11	1.04 $\pm$ 0.12	1.09 $\pm$ 0.14	0.93 $\pm$ 0.11
Striatum	L	0.70 $\pm$ 0.18	0.57 $\pm$ 0.16	0.71 $\pm$ 0.14	0.59 $\pm$ 0.13	0.69 $\pm$ 0.22	0.56 $\pm$ 0.18	0.69 $\pm$ 0.26	0.82 $\pm$ 0.20
	R	0.81 $\pm$ 0.20	0.67 $\pm$ 0.18	0.82 $\pm$ 0.15	0.68 $\pm$ 0.16	0.79 $\pm$ 0.24	0.66 $\pm$ 0.21	0.86 $\pm$ 0.27	0.68 $\pm$ 0.20

**Table S3.** Regional SUVRs of [ $^{18}\text{F}$ ]FDG PET and FMFs of A $\beta$ - patients.

Brain region		SUVR (mean $\pm$ SD)							
		Study cohort		[ $^{18}\text{F}$ ]FBP subcohort		[ $^{18}\text{F}$ ]FMM subcohort		[ $^{18}\text{F}$ ]FBB subcohort	
		[ $^{18}\text{F}$ ]FDG	FMF	[ $^{18}\text{F}$ ]FDG	FMF	[ $^{18}\text{F}$ ]FDG	FMF	[ $^{18}\text{F}$ ]FDG	FMF
Frontal	L	1.06 $\pm$ 0.16	0.89 $\pm$ 0.12	1.10 $\pm$ 0.13	0.90 $\pm$ 0.08	1.03 $\pm$ 0.18	0.86 $\pm$ 0.15	1.07 $\pm$ 0.12	0.95 $\pm$ 0.11
	R	1.09 $\pm$ 0.14	0.91 $\pm$ 0.09	1.12 $\pm$ 0.11	0.92 $\pm$ 0.08	1.07 $\pm$ 0.16	0.90 $\pm$ 0.10	1.07 $\pm$ 0.12	0.96 $\pm$ 0.12
Occipital	L	1.31 $\pm$ 0.12	1.12 $\pm$ 0.09	1.33 $\pm$ 0.09	1.12 $\pm$ 0.08	1.31 $\pm$ 0.15	1.12 $\pm$ 0.10	1.24 $\pm$ 0.06	1.15 $\pm$ 0.08
	R	1.28 $\pm$ 0.14	1.08 $\pm$ 0.10	1.28 $\pm$ 0.11	1.06 $\pm$ 0.10	1.30 $\pm$ 0.16	1.09 $\pm$ 0.10	1.20 $\pm$ 0.05	1.11 $\pm$ 0.09
Parietal	L	1.12 $\pm$ 0.10	0.94 $\pm$ 0.07	1.12 $\pm$ 0.09	0.94 $\pm$ 0.07	1.13 $\pm$ 0.11	0.95 $\pm$ 0.08	1.04 $\pm$ 0.07	0.96 $\pm$ 0.05
	R	1.05 $\pm$ 0.11	0.88 $\pm$ 0.08	1.05 $\pm$ 0.11	0.87 $\pm$ 0.10	1.05 $\pm$ 0.12	0.89 $\pm$ 0.07	0.97 $\pm$ 0.54	0.88 $\pm$ 0.05
Temporal	L	1.03 $\pm$ 0.12	0.89 $\pm$ 0.11	1.04 $\pm$ 0.09	0.89 $\pm$ 0.08	1.01 $\pm$ 0.14	0.88 $\pm$ 0.14	1.06 $\pm$ 0.09	0.96 $\pm$ 0.09
	R	1.04 $\pm$ 0.13	0.89 $\pm$ 0.11	1.02 $\pm$ 0.15	0.86 $\pm$ 0.12	1.05 $\pm$ 0.12	0.91 $\pm$ 0.10	1.04 $\pm$ 0.11	0.94 $\pm$ 0.12
ACC	L	1.04 $\pm$ 0.20	0.90 $\pm$ 0.18	1.09 $\pm$ 0.13	0.94 $\pm$ 0.11	0.98 $\pm$ 0.24	0.85 $\pm$ 0.22	1.04 $\pm$ 0.12	0.98 $\pm$ 0.18
	R	1.03 $\pm$ 0.17	0.87 $\pm$ 0.15	1.08 $\pm$ 0.10	0.92 $\pm$ 0.08	0.99 $\pm$ 0.20	0.73 $\pm$ 0.18	1.01 $\pm$ 0.11	0.90 $\pm$ 0.14
PCC	L	1.28 $\pm$ 0.17	1.04 $\pm$ 0.10	1.32 $\pm$ 0.18	1.03 $\pm$ 0.09	1.26 $\pm$ 0.16	1.04 $\pm$ 0.12	1.24 $\pm$ 0.24	1.04 $\pm$ 0.12
	R	1.13 $\pm$ 0.17	0.92 $\pm$ 0.13	1.15 $\pm$ 0.16	0.89 $\pm$ 0.12	1.13 $\pm$ 0.18	0.94 $\pm$ 0.14	1.03 $\pm$ 0.22	0.88 $\pm$ 0.13
Precuneus	L	1.24 $\pm$ 0.12	1.06 $\pm$ 0.08	1.28 $\pm$ 0.11	1.05 $\pm$ 0.07	1.23 $\pm$ 0.13	1.07 $\pm$ 0.09	1.16 $\pm$ 0.05	1.07 $\pm$ 0.03
	R	1.28 $\pm$ 0.14	1.08 $\pm$ 0.10	1.30 $\pm$ 0.15	1.07 $\pm$ 0.10	1.28 $\pm$ 0.14	1.10 $\pm$ 0.10	1.16 $\pm$ 0.07	1.08 $\pm$ 0.06
Striatum	L	0.80 $\pm$ 0.23	0.62 $\pm$ 0.20	0.84 $\pm$ 0.20	0.66 $\pm$ 0.14	0.76 $\pm$ 0.26	0.59 $\pm$ 0.25	0.82 $\pm$ 0.11	0.64 $\pm$ 0.08
	R	0.88 $\pm$ 0.20	0.70 $\pm$ 0.17	0.90 $\pm$ 0.19	0.72 $\pm$ 0.16	0.86 $\pm$ 0.22	0.68 $\pm$ 0.19	0.87 $\pm$ 0.10	0.76 $\pm$ 0.09



**Figure S1.** Intensity profiles and correlation charts with least squares line of the mean SUVRs of FMFs and  $[^{18}\text{F}]\text{FDG}$  PET of  $\text{A}\beta^+$  patients. (a), (b) Study cohort; (c), (d)  $[^{18}\text{F}]\text{FBP}$  FMFs; (e), (f)  $[^{18}\text{F}]\text{FMM}$  FMFs; (g), (h)  $[^{18}\text{F}]\text{FBB}$  FMFs. Brain regions are sorted as specified in Table S1 (left hemisphere followed by right hemisphere).



**Figure S2.** Intensity profiles and correlation charts with least squares line of the mean SUVRs of FMFs and  $[^{18}\text{F}]\text{FDG}$  PET of  $\text{A}\beta^+$  patients. (a), (b) Study cohort; (c), (d)  $[^{18}\text{F}]\text{FBP}$  FMFs; (e), (f)  $[^{18}\text{F}]\text{FMM}$  FMFs; (g), (h)  $[^{18}\text{F}]\text{FBB}$  FMFs. Brain regions are sorted as specified in Table S1 (left hemisphere followed by right hemisphere).