

SUPPLEMENTARY MATERIAL

Supplementary Table 1. Brain modules in healthy controls and the subtypes of Alzheimer's disease

AD = Alzheimer's disease.

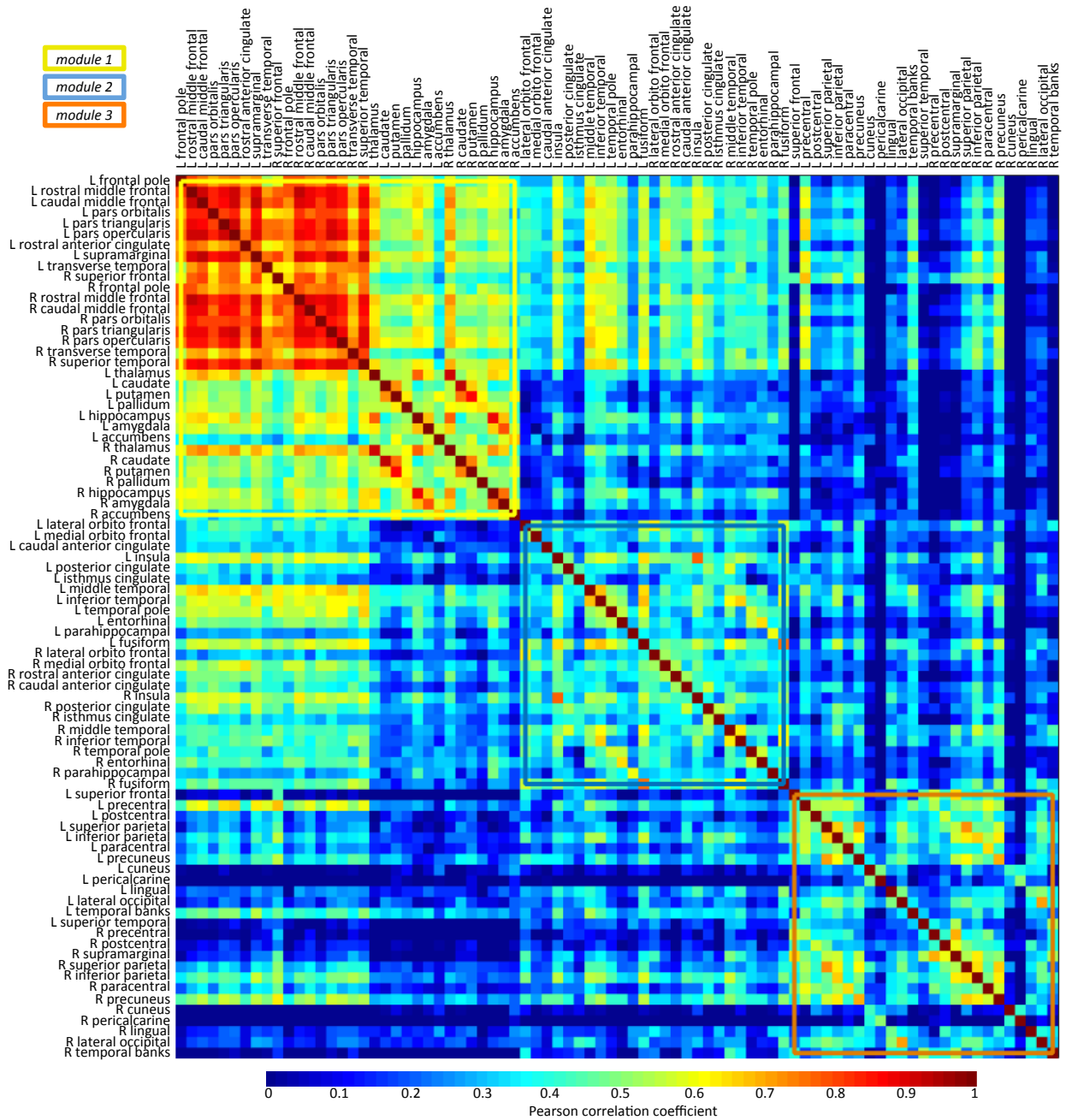
Hemisphere	Brain region	Healthy controls	Typical AD	Limbic-predominant	Hippocampal-sparing	Minimal atrophy AD
Left	Superior frontal	III	I	III	III	III
Left	Frontal pole	I	II	I	I	II
Left	Rostral middle frontal	I	I	I	I	I
Left	Caudal middle frontal	I	I	III	III	III
Left	Pars orbitalis	I	I	I	I	I
Left	Lateral orbito frontal	II	I	II	I	I
Left	Pars triangularis	I	I	I	I	I
Left	Pars opercularis	I	I	I	I	III
Left	Medial orbito frontal	II	I	II	I	I
Left	Rostral anterior cingulate	I	II	II	I	I
Left	Caudal anterior cingulate	II	II	II	I	I
Left	Insula	II	II	I	I	I
Left	Precentral	III	I	III	III	III
Left	Postcentral	III	I	III	III	III
Left	Supramarginal	I	I	III	III	III
Left	Superior parietal	III	I	III	III	III
Left	Inferior parietal	III	I	III	III	III
Left	Paracentral	III	I	II	III	III
Left	Posterior cingulate	II	II	II	I	I
Left	Isthmus cingulate	II	II	II	III	III
Left	Precuneus	III	I	III	III	III
Left	Cuneus	III	II	II	III	III
Left	Pericalcarine	III	II	II	III	III
Left	Lingual	III	II	II	III	III
Left	Lateral occipital	III	I	II	III	III
Left	Transverse temporal	I	I	I	I	III
Left	Temporal banks	III	I	I	I	III
Left	Superior temporal	III	I	I	I	III
Left	Middle temporal	II	I	I	I	III
Left	Inferior temporal	II	I	I	I	II
Left	Temporal pole	II	II	I	I	II
Left	Entorhinal	II	II	I	IV	II
Left	Parahippocampal	II	II	I	IV	II
Left	Fusiform	II	I	I	III	III
Left	Thalamus	I	II	I	I	IV
Left	Caudate	I	II	II	II	II
Left	Putamen	I	II	I	II	II
Left	Pallidum	I	II	I	II	II
Left	Hippocampus	I	II	I	IV	II
Left	Amygdala	I	II	I	IV	II
Left	Accumbens	I	II	I	I	II
Right	Superior frontal	I	I	III	III	I
Right	Frontal pole	I	II	I	I	II
Right	Rostral middle frontal	I	I	II	I	I
Right	Caudal middle frontal	I	I	III	III	III
Right	Pars orbitalis	I	I	II	I	I

Right	Lateral orbito frontal	II	I	II	I	I
Right	Pars triangularis	I	I	III	I	I
Right	Pars opercularis	I	I	II	I	III
Right	Medial orbito frontal	II	II	II	I	I
Right	Rostral anterior cingulate	II	II	I	I	I
Right	Caudal anterior cingulate	II	II	II	I	I
Right	Insula	II	II	III	I	II
Right	Precentral	III	I	III	III	III
Right	Postcentral	III	I	III	III	III
Right	Supramarginal	III	I	III	I	III
Right	Superior parietal	III	I	III	III	III
Right	Inferior parietal	III	I	III	III	III
Right	Paracentral	III	I	III	III	III
Right	Posterior cingulate	II	II	II	I	I
Right	Isthmus cingulate	II	II	II	III	III
Right	Precuneus	III	I	III	III	III
Right	Cuneus	III	II	III	III	III
Right	Pericalcarine	III	II	II	III	III
Right	Lingual	III	II	II	III	III
Right	Lateral occipital	III	I	III	III	III
Right	Transverse temporal	I	I	III	I	III
Right	Temporal banks	III	I	III	II	I
Right	Superior temporal	I	I	III	I	II
Right	Middle temporal	II	I	III	I	I
Right	Inferior temporal	II	I	III	I	II
Right	Temporal pole	II	II	II	I	II
Right	Entorhinal	II	II	III	IV	II
Right	Parahippocampal	II	II	III	IV	II
Right	Fusiform	II	I	III	III	II
Right	Thalamus	I	II	II	II	IV
Right	Caudate	I	II	II	II	II
Right	Putamen	I	II	II	II	II
Right	Pallidum	I	II	I	IV	II
Right	Hippocampus	I	II	III	IV	II
Right	Amygdala	I	II	III	IV	II
Right	Accumbens	I	II	I	II	II

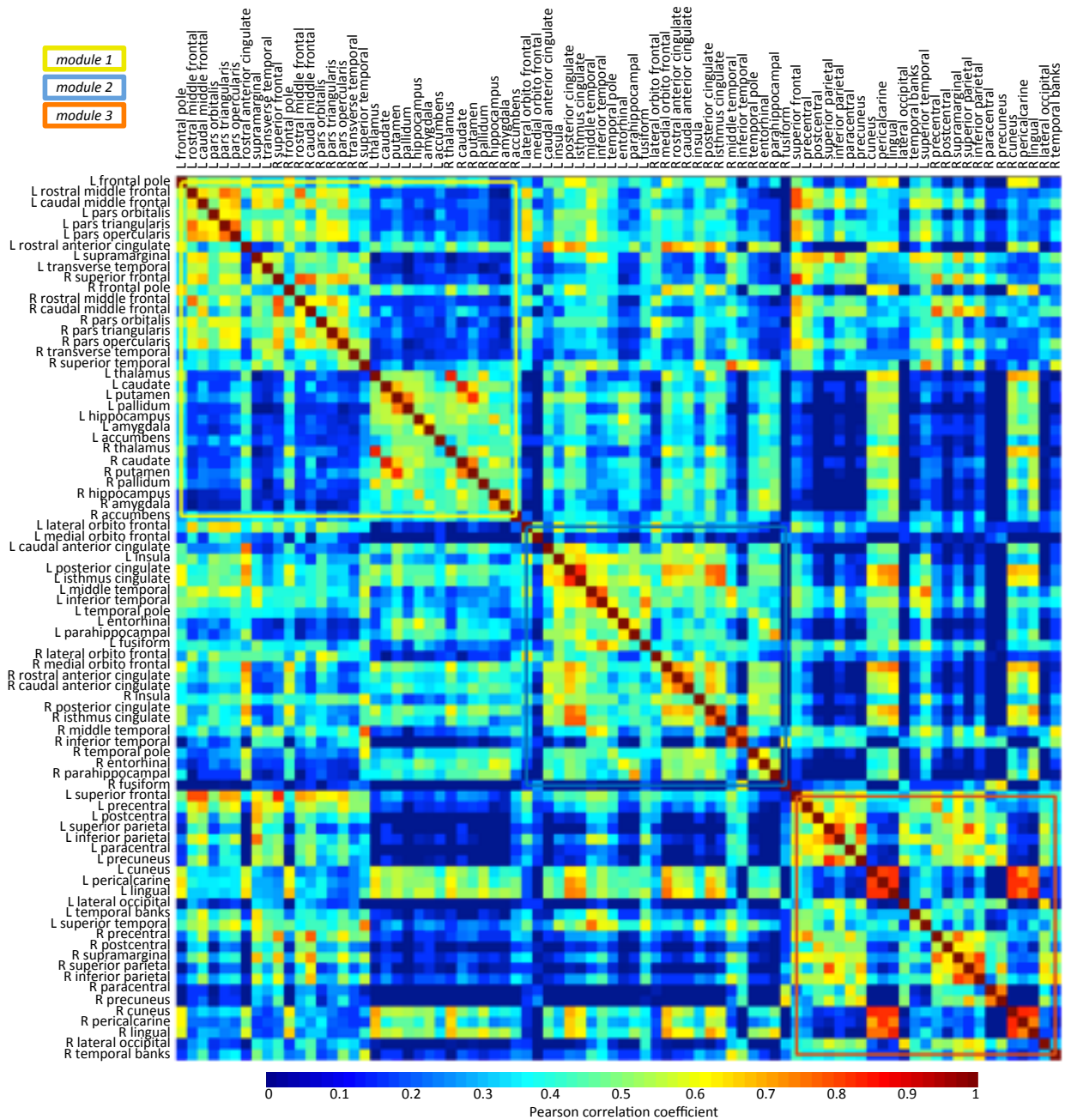
Supplementary Table 2. Results on nodal global efficiency from FDR-corrected one-tailed t-tests

A = auditory network; AD = Alzheimer's disease; DA = dorsal attention network; DMN = default-mode network; EC = executive control; F-P = fronto-parietal network; LV = lateral visual (also known as secondary visual); MV = medial visual (also known as primary visual); S = salience network; S-M = sensory-motor network; VA = ventral attention network.

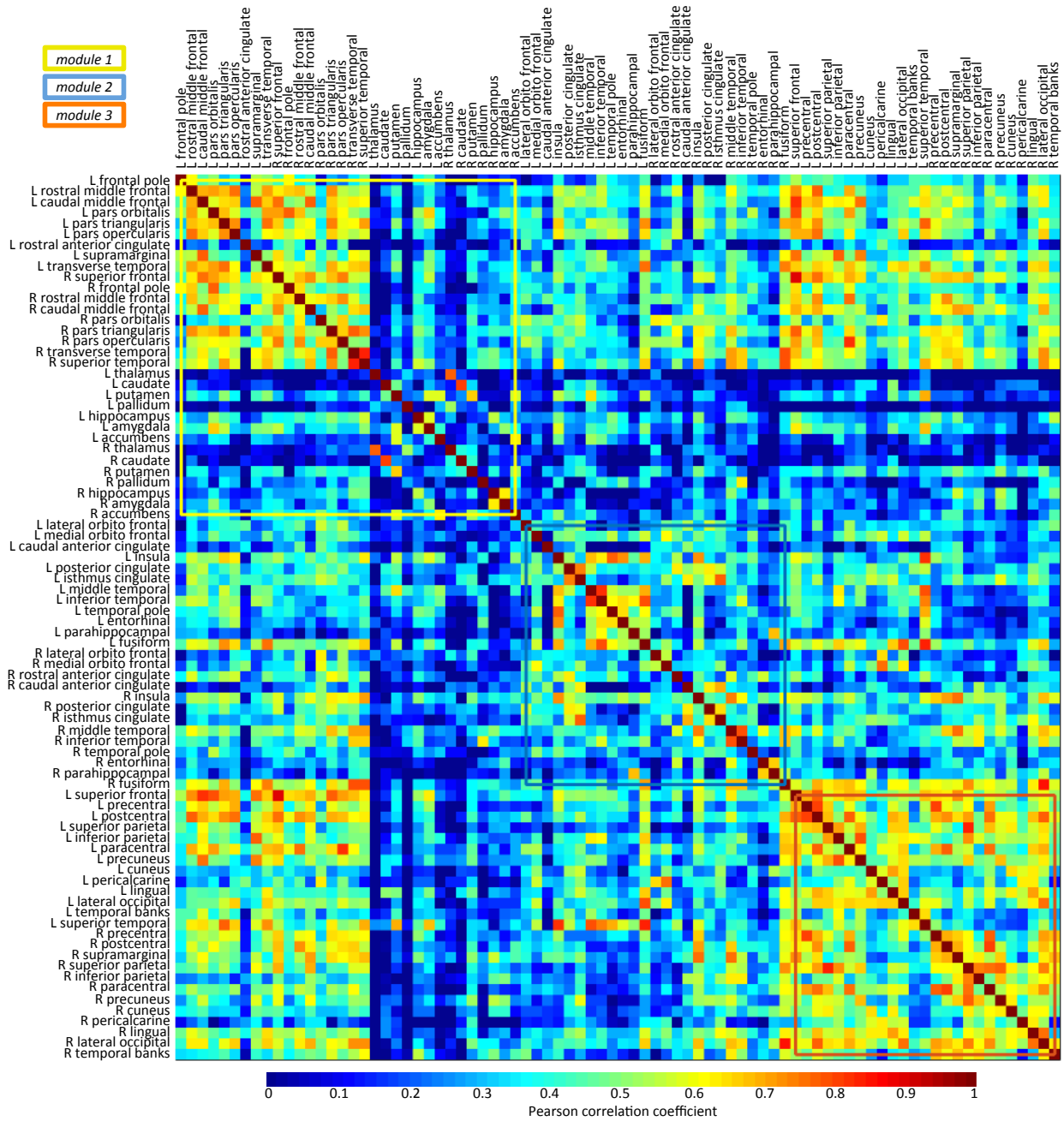
Region	Brain network	Healthy controls	Typical AD	FDR-corrected p-value
Left superior frontal	F-P (also S, DA/VA)	0.345	0.667	0.007
Left cuneus	MV	0.019	0.585	0.007
Left pericalcarine	MV	0.025	0.604	0.007
Left lingual	MV	0.360	0.653	0.007
Left caudal anterior cingulate	DMN (also S, EC, F-P)	0	0.548	0.007
Left caudal middle frontal	DMN (also S, EC, F-P)	0.687	0.578	0.007
Left superior temporal	A	0.211	0.603	0.007
Right rostral middle frontal	F-P (also S, EC, DA/VA)	0.706	0.537	0.007
Right superior temporal	A	0.726	0.607	0.007
Right isthmus cingulate	DMN	0	0.657	0.007
Right cuneus	MV	0	0.604	0.007
Right pericalcarine	MV	0.185	0.526	0.007
Right lingual	MV	0	0.627	0.007
		Healthy controls	Limbic-predominant	
Left superior frontal	F-P (also S, DA/VA)	0.345	0.724	<0.001
Left rostral anterior cingulate	DMN (also S, EC, F-P)	0.610	0	<0.001
Right lateral occipital	LV	0.314	0.702	<0.001
		Healthy controls	Hippocampal-sparing	
Left superior frontal	F-P (also S, DA/VA)	0.345	0.711	<0.001
Left lateral occipital	LV	0.366	0.629	<0.001
Right superior frontal	F-P (also S, DA/VA)	0.625	0.715	<0.001
		Healthy controls	Minimal atrophy AD	
Left superior frontal	F-P (also S, DA/VA)	0.345	0.704	0.003
Left posterior cingulate	DMN (also S)	0.406	0.687	0.003
Left precuneus	DMN	0.443	0.689	0.003
Left superior parietal	F-P (also DA)	0.438	0.663	0.003
Right superior frontal	F-P (also S, DA/VA)	0.625	0.710	0.003
Right lateral occipital	LV	0.314	0.650	0.003
Right paracentral	S-M	0.437	0.673	0.003
Right fusiform	LV	0.530	0.698	0.003
Right superior parietal	F-P (also DA)	0.457	0.654	0.003



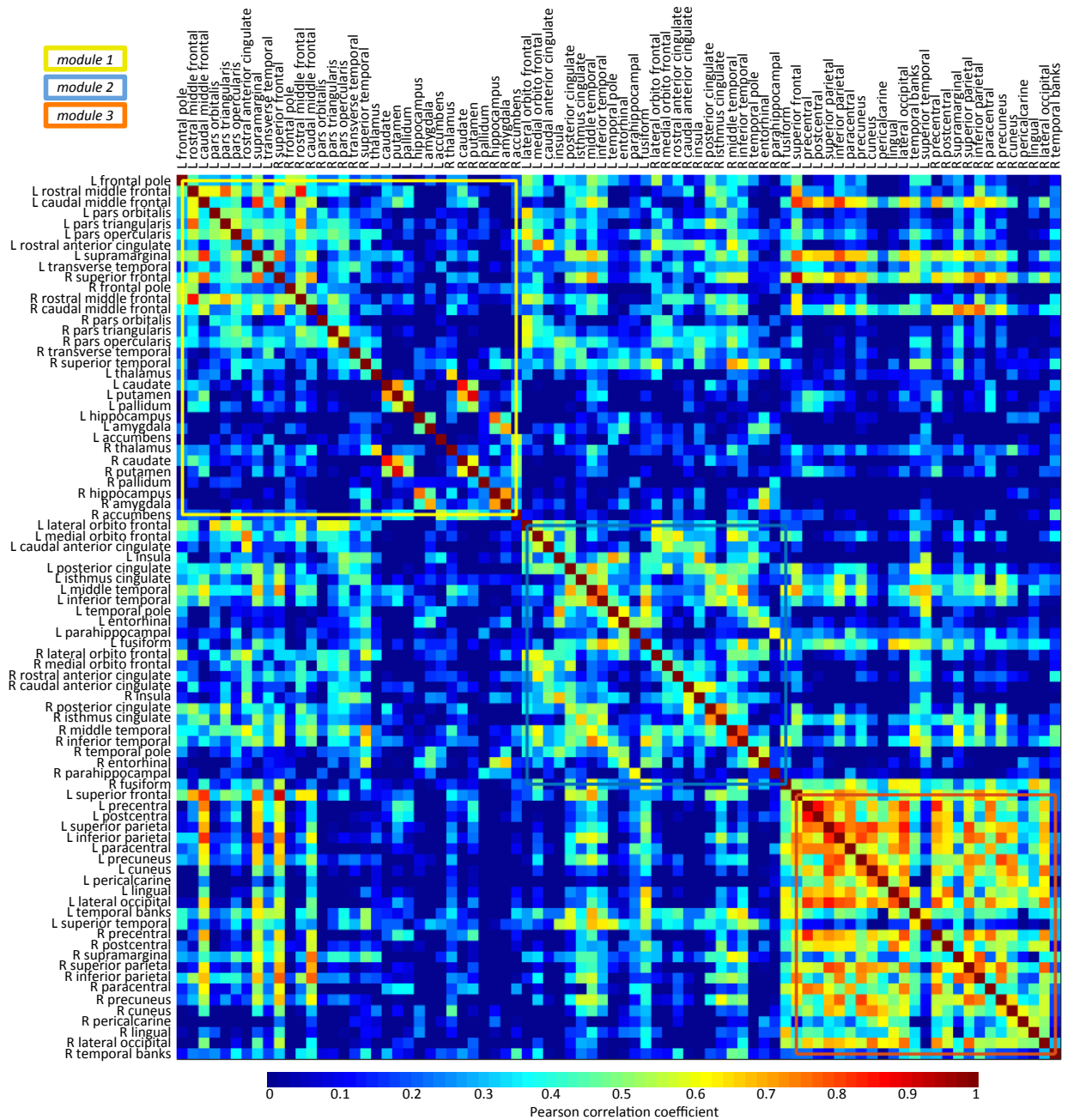
Supplementary Figure 1. Weighted correlation matrix (healthy controls). The brain regions were ordered by the brain modules identified in the healthy controls (Table 2 and Fig. 3 in the main text). The yellow square (upper-left corner) indicates the brain regions belonging to module 1. The blue square (center) indicates the brain regions belonging to module 2. The orange square (bottom-right corner) indicates the brain regions belonging to module 3.



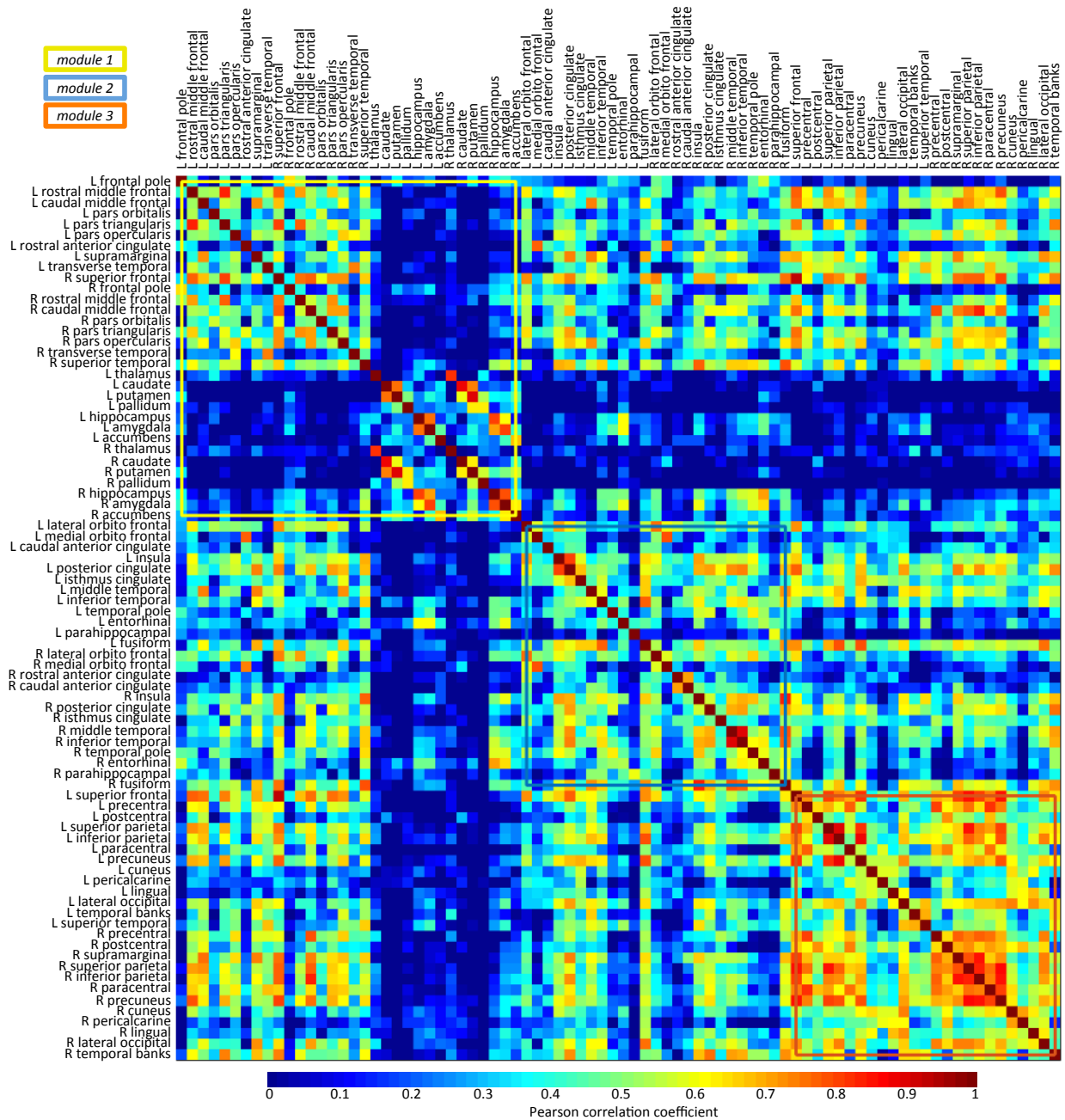
Supplementary Figure 2. Weighted correlation matrix (Typical AD). The brain regions were ordered by the brain modules identified in the healthy controls (Table 2 and Figure 3 in the main text). The yellow square (upper-left corner) indicates the brain regions belonging to module 1. The blue square (center) indicates the brain regions belonging to module 2. The orange square (bottom-right corner) indicates the brain regions belonging to module 3.



Supplementary Figure 3. Weighted correlation matrix (Limbic-predominant AD). The brain regions were ordered by the brain modules identified in the healthy controls (Table 2 and Figure 3 in the main text). The yellow square (upper-left corner) indicates the brain regions belonging to module 1. The blue square (center) indicates the brain regions belonging to module 2. The orange square (bottom-right corner) indicates the brain regions belonging to module 3.



Supplementary Figure 4. Weighted correlation matrix (Hippocampal-sparing AD). The brain regions were ordered by the brain modules identified in the healthy controls (Table 2 and Figure 3 in the main text). The yellow square (upper-left corner) indicates the brain regions belonging to module 1. The blue square (center) indicates the brain regions belonging to module 2. The orange square (bottom-right corner) indicates the brain regions belonging to module 3.



Supplementary Figure 5. Weighted correlation matrix (Minimal atrophy AD).

The brain regions were ordered by the brain modules identified in the healthy controls (Table 2 and Figure 3 in the main text). The yellow square (upper-left corner) indicates the brain regions belonging to module 1. The blue square (center) indicates the brain regions belonging to module 2. The orange square (bottom-right corner) indicates the brain regions belonging to module 3.