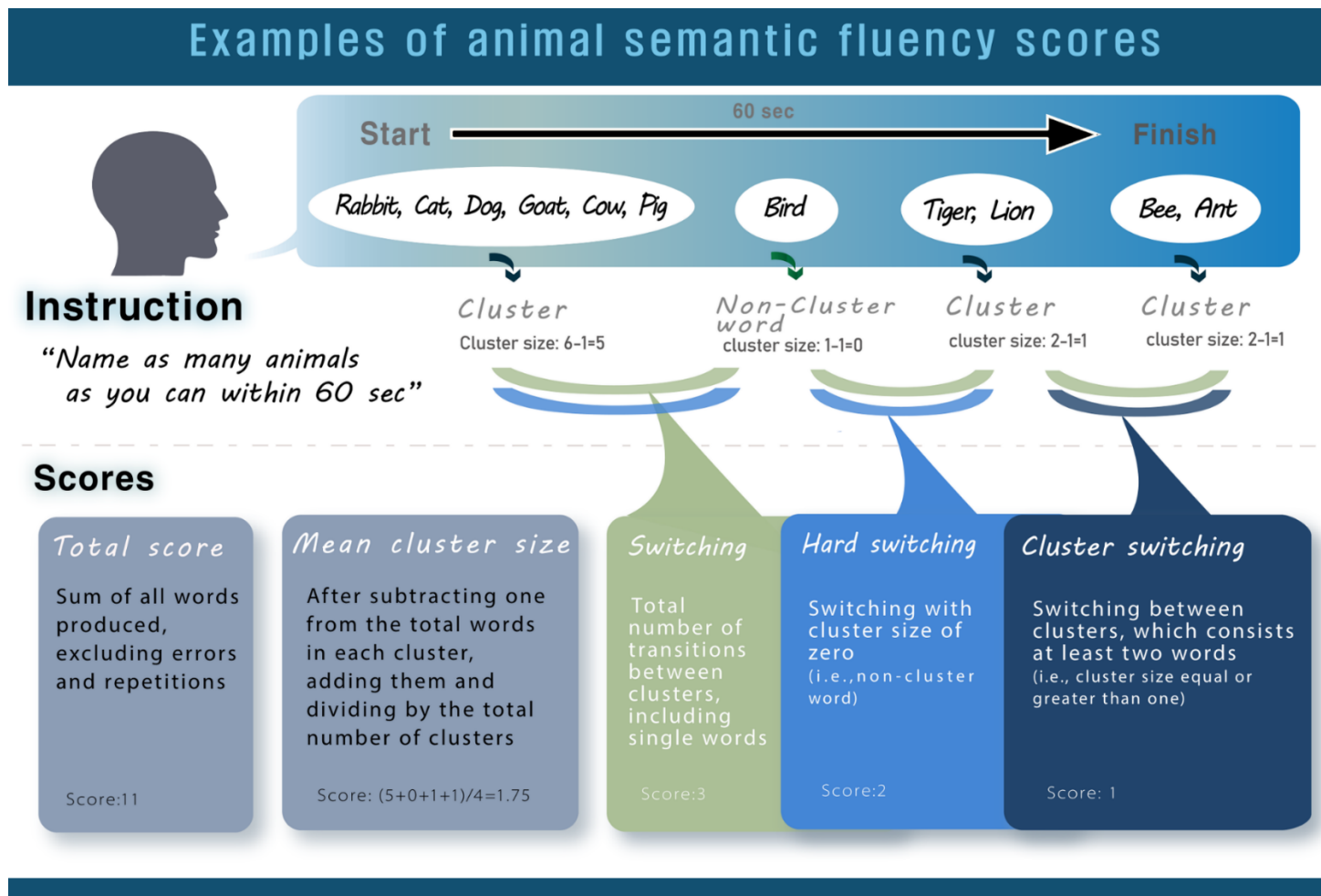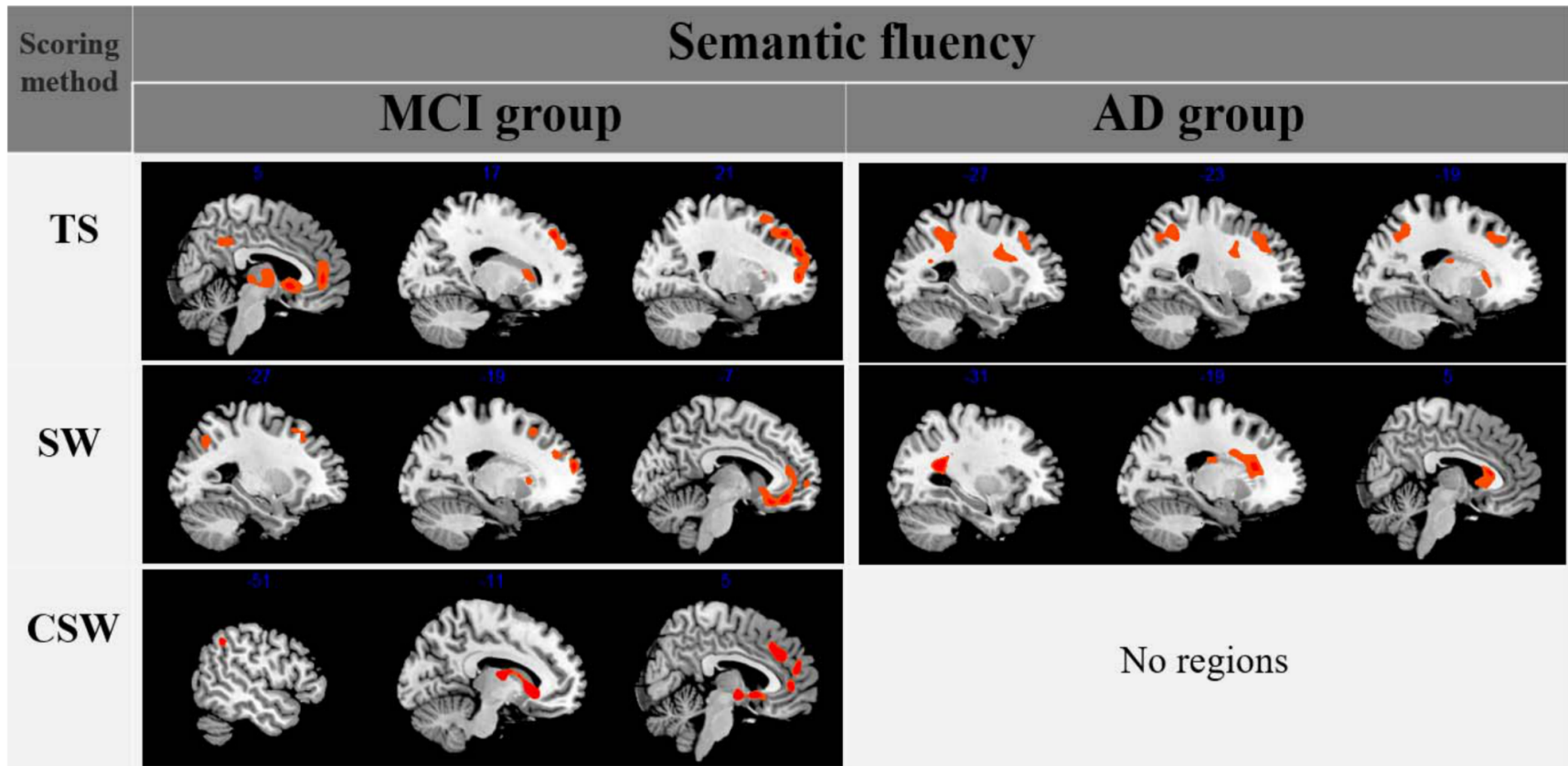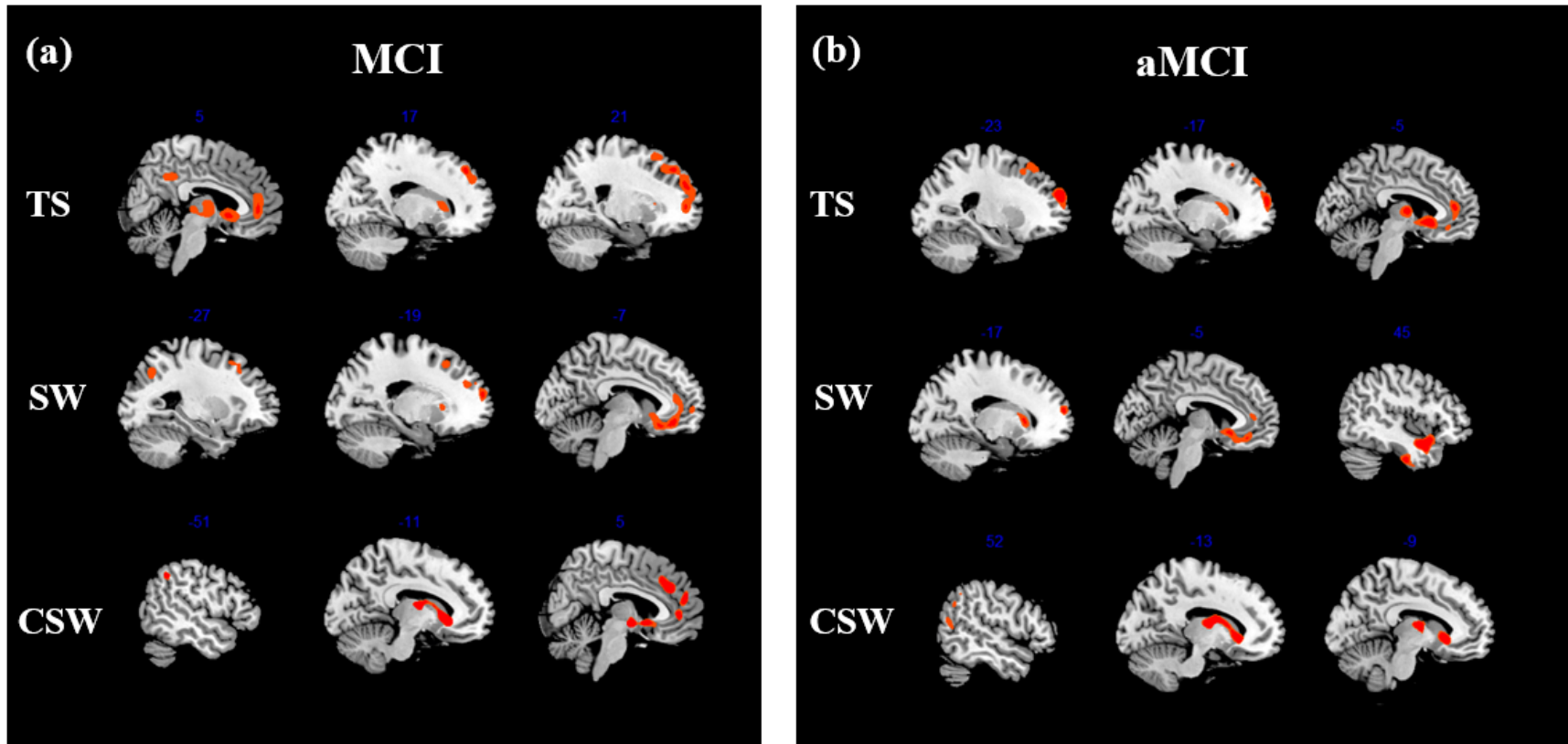# Supplementary Material

Functional Neural Correlates of Semantic Fluency Task Performance in Mild Cognitive Impairment and Alzheimer's Disease: An FDG-PET Study

Supplementary Figure 1. Examples of animal semantic fluency scores.

Supplementary Figure 2. Regions that are positively correlated with each SVFT score in each subgroup. Only significant correlations between each score andregion are represented (p < 0.005 (uncorrected) for voxel height, k > 1,062 for cluster extent). TS, total score; SW, switching; CSW, cluster switching.

Supplementary Figure 3. a) Regions that are positively correlated with each SVFT score in the whole MCI (including aMCI and naMCI) group. b) Regions that are positively correlated with each SVFT score only in the aMCI group. Only significant correlations between each score and region are represented ($p < 0.005$ (uncorrected) for voxel height, k > 1,062 for cluster extent). aMCI, amnestic mild cognitive impairment; TS, total score; SW, switching; CSW, cluster switching.

Supplementary Table 1. Demographic characteristics and neuropsychological test results of the MCI subtypes

Characteristics	aMCI (n=179)	naMCI (n=40)	*p*
Age, y (SD)	72.4 (7.8)	71.3 (7.5)	0.408[a]
Education, y (SD)	9.8 (4.9)	9.2(5.7)	0.487[a]
Sex, n (M/F)	46/133	18/22	<0.05 [b]
MMSE, raw score (SD)	22.8 (3.7)	24.4 (3.7)	<0.05 [a]
CDR sum of boxes (SD)	0.5(0.0)	0.5(0.0)	0.115 [a]
Semantic fluency (SD)			
Total score	10.8 (3.7)	11.7 (4.5)	0.188 [a]
Mean cluster size	1.8 (1.4)	1.5 (0.9)	0.102 [a]
Switching	3.8 (2.3)	4.5 (2.7)	0.109 [a]
Hard switching	2.8 (2.4)	3.5(2.5)	0.097 [a]
Cluster switching	1.0(1.0)	1.0(1.0)	0.859 [a]
Other neuropsychological tests (SD)			
FAB	12.1 (3.3)	13.9 (3.0)	<0.005 [a]
Boston naming test	10.0(2.6)	9.6 (2.7)	0.418 [a]
Word list immediate memory	12.7(3.7)	16.2 (3.6)	0.861 [a]
Word list delayed recall	2.9 (1.8)	5.4 (1.3)	<0.001 [a]
Word list recognition	6.8 (2.5)	9.1 (1.1)	<0.001 [a]
Constructional praxis	9.1 (1.8)	8.9 (2.3)	0.597 [a]
Constructional recall	2.6 (2.6)	5.2 (2.2)	<0.001 [a]
Stroop color	63.7 (17.7)	58.8 (19.0)	0.167 [a]
Stroop word	50.8(13.5)	47.5 (13.9)	0.197 [a]
Stroop color-word	26.4(11.2)	23.7(12.3)	0.233 [a]

aMCI, amnestic mild cognitive impairment; naMCI, non-amnestic mild cognitive impairment; MMSE, Mini-Mental State Examination; FAB, Frontal Assessment Battery; CDR, Clinical Dementia Rating
[a]tested with student t test
[b]tested with chi-square test