

Supplementary Table 1. Longitudinal change in the blood concentrations of resveratrol and its metabolites

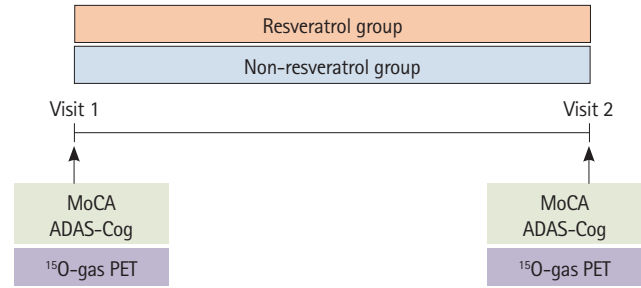
	Non-resveratrol group (n=42)	Resveratrol group (n=36)	P
Visit 1			
Resveratrol	0.00±0.00	0.00±0.00	>0.999
Resveratrol 3-O-glucuronide	0.63±4.11	0.00±0.00	0.358
Resveratrol 4-O-glucuronide	0.00±0.00	0.00±0.00	>0.999
Resveratrol 3-O-sulfate	0.12±0.77	0.00±0.00	0.358
Visit 2			
Resveratrol	0.00±0.00	0.21±0.49	0.018
Resveratrol 3-O-glucuronide	0.00±0.00	75.07±73.23	<0.001
Resveratrol 4-O-glucuronide	0.00±0.00	46.79±47.93	<0.001
Resveratrol 3-O-sulfate	0.00±0.00	206.52±223.57	<0.001

The units for all items are ng/mL. The variables were expressed as mean±standard deviations.

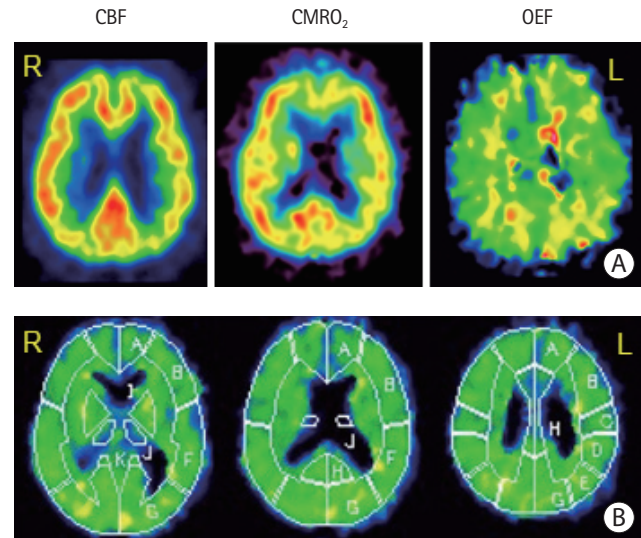
Supplementary Table 2. Mean increase rate of relative cerebral blood flow in the resveratrol group

Region of interest	Increase rate (%)
Frontal lobe	
Right	2.67±4.64
Left	1.93±4.54
Callosomarginal artery	
Right	2.57±4.87
Left	2.51±6.05
Precentral artery	
Right	2.89±4.66
Left	1.39±3.99
Central artery	
Right	2.61±6.31
Left	2.00±6.31
Lenticular nucleus	
Right	2.35±6.50
Left	3.91±6.76
Thalamus	
Right	6.18±12.39
Left	7.23±14.24

Values are presented as mean±standard deviation.



Supplementary Figure 1. Schedule of the study. Resveratrol group started to orally take resveratrol 30 mg/day with control of metabolic and vascular risk factors after the neuropsychological assessments and ¹⁵O-gas positron emission tomography (PET) at Visit 1. Non-resveratrol group received only control of metabolic and vascular risk factors. Second neuropsychological tests and ¹⁵O-gas PET were performed at Visit 2. MoCA, Montreal Cognitive Assessment; ADAS-Cog, Alzheimer’s Disease Assessment Scale-Cognitive Subscale 13.



Supplementary Figure 2. Representative images of ¹⁵O-gas positron emission tomography (PET) and a three-dimensional stereotaxic region-of-interest template software. (A) Representative images displaying cerebral blood flow (CBF), cerebral metabolic rate of oxygen (CMRO₂), and oxygen extraction fraction (OEF) assessed using ¹⁵O-gas PET in a patient with asymptomatic left carotid artery stenosis. (B) Region-of-interest segments in the three-dimensional stereotaxic region-of-interest template software are displayed as follows: A, callosomarginal artery area; B, precentral artery area; C, central artery area; D, parietal artery area; E, angular artery area; F, temporal lobe; G, occipital lobe; H, pericallosal artery area; I, lenticular nucleus; J, thalamus; K, hippocampus. R, right; L, left.