

Supplement Table 1 Univariate analysis of risk factors for MMSE D-value and MMSE D-value percentage

Grouping	MMSE D-value, mean (SD)	P value	MMSE D-value percentage, mean (SD)	P value
Treatment, n (%)		0.001		0.002
Butylphthalide	0.21 (2.91)		0.01 (0.12)	
Control	1.13 (3.93)		0.04 (0.17)	
Age, y		< 0.001		< 0.001
Age group, n (%)		0.001		0.001
< 60 years	0.12 (2.72)		0.001 (0.11)	
≥ 60 years	1.00 (3.84)		0.04 (0.17)	
Education years, y		0.002		0.001
Educational level, n (%)		0.007		0.002
0 years	2.31 (5.70)		0.11 (0.28)	
1~6 years	0.77 (4.11)		0.03 (0.17)	
> 6 years	0.41 (2.52)		0.01 (0.09)	
Smoking status, n (%)		0.163		0.182
Never	0.76 (3.82)		0.03 (0.17)	
Former	0.34 (3.10)		0.01 (0.13)	
Current	1.02 (3.43)		0.04 (0.14)	
Diabetes, n (%)		0.246		0.283
No	0.55 (3.27)		0.02 (0.14)	
Yes	0.91 (3.89)		0.03 (0.17)	
CHD, n (%)		0.201		0.298
No	0.59 (3.36)		0.02 (0.14)	
Yes	1.15 (4.24)		0.04 ± 0.18	
BMI, mean (SD), kg/m ²		0.247		0.196
BMI category, n (%)		0.393		0.363
Thin	-0.50 (0.71)		-0.02 (0.03)	
Normal	0.64 (3.44)		0.03 (0.14)	
Overweight	0.89 (3.59)		0.03 (0.15)	
Obese	0.36 (3.33)		0.01 (0.14)	
SBP, mean (SD), mmHg		0.116		0.100

FBG, mean (SD), mmol/L	0.316	0.432
TC, mean (SD), mmol/L	0.467	0.458
TG, mean (SD), mmol/L	0.249	0.251
HDL-C, mean (SD), mmol/L	0.009	0.010

Supplement Table 2 Univariate analysis of risk factors of differences in Orientation D-value and D-value percentage

Grouping	D-value	D-value percentage		
	mean (SD)	P value	mean (SD)	P value
Treatment, n (%)		0.010		0.018
Butylphthalide	0.02 (1.56)		-0.01 (0.20)	
Control	0.40 (2.07)		0.03 (0.25)	
Gender, n (%)		0.135		0.319
Men	0.12 (1.61)		0.004 (0.20)	
Women	0.40 (2.27)		0.03 (0.28)	
Age, mean (SD), y		0.002		0.005
Age group, n (%)		0.027		0.058
< 60 years	0.01 (1.46)		-0.01 (0.18)	
≥ 60 years	0.33 (2.03)		0.02 (0.25)	
Education years, mean (SD), y		0.003		0.040
Educational level, n (%)		0.002		0.024
0 years	1.14 (3.60)		0.11 (0.43)	
1~6 years	0.30 (2.14)		0.01 (0.28)	
> 6 years	0.04 (1.20)		-0.001 (0.14)	
Smoking status, n (%)		0.250		0.444
Never	0.36 (2.05)		0.003 (0.22)	
Former	0.08 (1.68)		0.001 (0.21)	
Current	0.15 (1.68)		0.20 (1.12)	
Alcohol use, n (%)		0.301		0.403
Never	0.31 (2.10)		0.02 (0.26)	
Former	0.18 (1.68)		0.01 (0.21)	
Current	-0.02 (1.37)		-0.02 (0.17)	
Hypertension, n (%)		0.258		0.027
No	0.06 (1.60)		-0.01 (0.20)	
Yes	0.25 (1.91)		0.02 (0.24)	
Diabetes, n (%)		0.329		0.025
No	0.16 (1.76)		0.004 (0.23)	
Yes	0.32 (2.00)		0.03 (0.23)	
CHD, n (%)		0.012		0.015
No	0.14 (1.76)		0.003 (0.23)	
Yes	0.72 (2.25)		0.07 (0.24)	
BMI category, n (%)		0.443		0.527

Thin	0.001 (0.001)	0.001 (0.001)
Normal	0.08 (1.69)	-0.001 (0.20)
Overweight	0.34 (1.94)	0.03 (0.23)
Obese	0.10 (1.78)	-0.002 (0.25)
SBP, mean (SD), mmHg	0.023	0.020
TG, mean (SD), mmol/L	0.593	0.454
HDL-C, mean (SD), mmol/L	0.020	0.015
LDL-C, mean (SD), mmol/L	0.582	0.453

Supplement Table 3 Univariate analysis of risk factors of differences in Language D-value and D-value percentage

Grouping	D-value	D-value percentage		
	mean (SD)	P value	mean (SD)	P value
Treatment, n (%)		0.008		0.015
Butylphthalide	0.04 (1.13)		-0.004 (0.16)	
Control	0.31 (1.32)		0.03 (0.19)	
Age, mean (SD), y		0.144		0.179
Age group, n (%)		0.104		0.111
< 60 years	0.07 (1.17)		-0.001 (0.16)	
≥ 60 years	0.24 (1.26)		0.02 (0.18)	
Education years, mean (SD), y		0.458		0.574
Smoking status, n (%)		0.488		0.472
Never	0.15 (1.30)		0.01 (0.19)	
Former	0.13 (1.17)		0.01 (0.16)	
Current	0.28 (1.22)		0.03 (1.17)	
Hypertension, n (%)		0.095		0.123
No	0.32 (1.32)		0.01 (0.17)	
Yes	0.12 (1.20)		0.03 (0.18)	
CHD, n (%)		0.399		0.398
No	0.19 (1.24)		-0.003 (0.18)	
Yes	0.06 (1.16)		0.02 (0.17)	
BMI category, n (%)		0.125		0.094
Thin	0.001 (0.001)		0.001 (0.001)	
Normal	0.18 (1.09)		0.02 (0.16)	
Overweight	0.25 (1.35)		0.02 (0.19)	
Obese	0.06 (1.13)		-0.002 (0.17)	
SBP, mean (SD), mmHg		0.202		0.297
DBP, mean (SD), mmHg		0.069		0.104
FBG, mean (SD), mmol/L		0.401		0.241
TG, mean (SD), mmol/L		0.101		0.112
HDL-C, mean (SD), mmol/L		0.243		0.141
Hcy, mean (SD), mmol/L		0.081		0.121