

Supplementary Table 2. Univariate association of each factor with the presence of hearing loss

	PTA-based HL		WRS-based HL	
	OR (95% CI)	p value	OR (95% CI)	p value
Duration, cognitive dysfunction	0.97 (0.78–1.21)	0.809	0.98 (0.79–1.26)	0.981
Duration, Parkinsonism	1.06 (0.86–1.30)	0.612	1.08 (0.88–1.33)	0.443
Vascular risk factors				
Hypertension	1.12 (0.48–2.63)	0.788	0.95 (0.39–2.32)	0.906
Diabetes mellitus	1.08 (0.45–2.60)	0.864	1.10 (0.44–2.74)	0.838
Dyslipidemia	0.71 (0.26–1.93)	0.502	0.70 (0.24–2.09)	0.525
Smoking	0.39 (0.11–1.42)	0.152	0.20 (0.05–0.79)	0.022*
MRI vascular markers				
Deep WMH	1.09 (0.59–2.01)	0.793	0.96 (0.50–1.85)	0.901
Periventricular WMH	1.84 (1.06–3.21)	0.031*	1.31 (0.74–2.29)	0.353
Lacunes	1.03 (0.93–1.13)	0.601	0.99 (0.90–1.09)	0.856
CMBs	1.09 (0.94–1.26)	0.275	1.04 (0.96–1.13)	0.384
APOE4 allele carriage	0.65 (0.27–1.56)	0.334	0.64 (0.24–1.72)	0.377
Cognitive status, demented	0.84 (0.36–1.93)	0.677	1.22 (0.50–2.98)	0.667
BDI	1.03 (0.98–1.08)	0.198	1.04 (0.99–1.09)	0.097
Comprehension dysfunction	2.72 (0.97–7.66)	0.058	1.44 (0.53–3.89)	0.471
K-MMSE	1.09 (0.99–1.21)	0.076	1.01 (0.91–1.11)	0.896
ADCI diagnosis	0.16 (0.07–0.41)	<0.001*	0.40 (0.17–0.95)	0.038*
LBCI diagnosis	1.44 (0.56–3.69)	0.452	2.29 (0.75–7.05)	0.148
Disease group				
Pure ADCI	0.12 (0.03–0.48)	0.003*	0.25 (0.06–1.07)	0.061
Pure LBCI	Reference		Reference	
Mixed ADCI/LBCI	0.23 (0.08–0.63)	0.004*	0.40 (0.15–1.06)	0.067
Non-ADCI/LBCI	2.19 (0.36–13.19)	0.394	0.54 (0.11–2.64)	0.449

Data are results of logistic regression analyses for the presence of hearing loss using each factor as a predictor after controlling for age, sex, and education. PTA-based HL was defined as PTA₄ >40 (dB HL) and WRS-based HL was defined as WRS <70 (%).

*p<0.05.

ADCI: Alzheimer's disease-related cognitive impairment, APOE4: apolipoprotein E gene E4 variant, BDI: Beck Depression Inventory, CI: confidence interval, CMBs: cerebral microbleeds, HL: hearing loss, K-MMSE: Korean version of Mini-Mental State Examination, LBCI: Lewy-body disease-related cognitive impairment, OR: odds ratio, PTA: pure-tone average, WMHs: white-matter hyperintensities, WRS: word recognition score.