

Supplementary Tables

Table 1S. Association between hearing loss despite of hearing aid* and prevalent cognitive impairment at baseline.

Hearing loss	Prevalence of cognition decline	OR (95% CI)		
		Model 1	Model 2	Model 3
Yes (<i>n</i> = 358)	179 (50.0%)	1.32 (1.00–1.75)	1.31 (0.99–1.75)	1.31 (0.98–1.74)
No (<i>n</i> = 886)	349 (39.4%)	Reference		

*Hearing loss was defined by the criteria not including the use of hearing aid. Model 1: adjusted for hearing aid age, sex, race, and education. Model 2: adjusted for variables in Model 1 plus diabetes, hypertension, and stroke. Model 3: adjusted for variables in Model 2 plus anticoagulation. CI: confidence interval; OR: odds ratio.

Table 2S. Association between hearing loss despite of hearing aid* and incident cognitive impairment at one year.

Hearing loss	Prevalence of cognition decline	OR (95% CI)		
		Model 1	Model 2	Model 3
Yes (<i>n</i> = 166)	36 (21.7%)	1.64 (1.03–2.61)	1.63 (1.02–2.60)	1.63 (1.02–2.60)
No (<i>n</i> = 496)	70 (14.1%)	Reference		

*Hearing loss was defined by the criteria not including the use of hearing aid. Model 1: adjusted for hearing aid age, sex, race, and education. Model 2: adjusted for variables in Model 1 plus diabetes, hypertension, and stroke. Model 3: adjusted for variables in Model 2 plus anticoagulation. CI: confidence interval; OR: odds ratio.

Table 3S. Association between hearing loss and prevalent cognitive impairment by Montreal Cognitive Assessment Battery auditory scoring*.

Hearing loss	Prevalence of cognition impairment	OR (95% CI)			
		Unadjusted	Model 1	Model 2	Model 3
Yes (<i>n</i> = 451)	210 (47%)	1.40 (1.11–1.77)	1.15 (0.88–1.50)	1.14 (0.87–1.49)	1.13 (0.87–1.48)
No (<i>n</i> = 793)	304 (38%)	Reference			

*Auditory scoring: three Montreal Cognitive Assessment Battery items rely heavily on hearing: language repetition (2 points), attention to letters (1 point), and digit span (2 points). All three are removed, with the maximum score becoming 25, and the revised cutoff score for a “normal” score becoming 23*25/30 = 19.2, (need 20 to pass)^[17,18]. Model 1: adjusted for age, sex, race, and education. Model 2: adjusted for variables in Model 1 plus diabetes, hypertension, and stroke. Model 3: adjusted for variables in Model 2 plus anticoagulation. CI: confidence interval; OR: odds ratio.

Table 4S. Association between hearing loss and incident cognitive impairment by Montreal Cognitive Assessment Battery auditory scoring*.

Hearing loss	Incidence of cognition impairment	OR (95% CI)			
		Unadjusted	Model 1	Model 2	Model 3
Yes (<i>n</i> = 187)	41 (22%)	1.50 (0.97–2.32)	1.50 (0.95–2.35)	1.53 (0.97–2.40)	1.53 (0.97–2.40)
No (<i>n</i> = 425)	67 (16%)	Reference			

*Auditory scoring: three Montreal Cognitive Assessment Battery items rely heavily on hearing: language repetition (2 points), attention to letters (1 point), and digit span (2 points). All three are removed, with the maximum score becoming 25, and the revised cutoff score for a “normal” score becoming 23*25/30 = 19.2, (need 20 to pass)^[17,18]. Model 1: adjusted for age, sex, race, and education. Model 2: adjusted for variables in Model 1 plus diabetes, hypertension, and stroke. Model 3: adjusted for variables in Model 2 plus anticoagulation. CI: confidence interval; OR: odds ratio.