

**Supplementary Table S3. The genetic instruments for Mendelian randomization analysis of leukocyte telomere length (exposure) and ARHL(outcome).**

SNP	effect_allele	other_allele	Association with telomere length			Association with ARHL		
			beta	se	p	beta	se	p
rs2302588	C	G	0.048	0.008	2.00E-08	0.083	0.127	0.511
rs2736176	C	G	0.034	0.005	3.00E-10	-0.117	0.068	0.084
rs3219104	C	A	0.042	0.006	9.00E-11	-0.064	0.286	0.823
rs4691895	C	G	0.058	0.006	1.00E-21	0.002	0.078	0.976
rs59294613	A	C	-0.041	0.005	1.00E-13	-0.084	0.073	0.252
rs62053580	G	A	-0.039	0.007	4.00E-08	-0.041	0.095	0.668
rs9419958	C	T	-0.064	0.007	5.00E-19	0.051	0.098	0.599

Notes: beta: effect size estimates; se: standard error; ARHL: age-related hearing loss