

Table S1. The cut-points for excluding SBP, DBP, BMI, and heart rate.

Biomarkers	Cut-points
Body mass index, kg/m ²	>40
Heart rate, beats/min	>220
Systolic blood pressure, mmHg	>200 or <90
Diastolic blood pressure, mmHg	>110 or <60

Table S2. Baseline characteristics between included and excluded participants.

Characteristics	Included (N=1,519)	Excluded ^b (N=920)	P-value
Age, years, mean±SD	85.6±12.6	85.6± 13.5	0.523
Married ^a , No. (%)	619 (40.8%)	361 (39.2%)	0.461
Han ethnicity, No. (%)	1,357 (89.3%)	836 (90.9%)	0.223
Any education, No. (%)	565 (37.2%)	384 (41.7%)	0.026
Smoking, No. (%)			
Current Smoker	295 (19.5%)	170 (18.7%)	0.460
Past Smoker	125 (8.3%)	88 (9.7%)	
Non-smoker	1,096 (72.3%)	650 (71.6%)	
Exercise, No. (%)	337 (22.5%)	271 (30.2%)	0.000
Hypertension, No. (%)	304 (20.3%)	201 (22.8%)	0.153
Diabetes, No. (%)	25 (1.7%)	19 (2.1%)	0.405
Heart disease, No. (%)	104 (6.9%)	48 (5.4%)	0.138
Stroke, No. (%)	78 (5.2%)	62 (6.9%)	0.077
Pulmonary, No. (%)	123 (8.2%)	73 (8.2%)	0.994
Arthritis, No. (%)	224 (14.9%)	152 (17.1%)	0.145
Cancer, No. (%)	8 (0.5%)	3 (0.3%)	0.341

^aMarried vs. widowed, never married, and divorced.

^bExcluded criteria includes incomplete data on AL biomarkers, no follow-up data, missing data or extreme values of the biomarkers, and aged less than 60 years.

Table S3. Compare participant who lost follow up data and who included in study.

Characteristics	Included (N=1,519)	Loss follow up (N=522)	P-value
Age, years, mean±SD	85.6±12.6	87.3± 13.3	0.98
Married ^a , No. (%)	619 (40.8%)	180 (34.8%)	0.02
Han ethnicity, No. (%)	1,357 (89.3%)	467 (90.2%)	0.60
Any education, No. (%)	565 (37.2%)	202 (39.0%)	0.47
Smoking, No. (%)			
Current Smoker	295 (19.5%)	88 (17.3%)	0.54
Past Smoker	125 (8.3%)	45 (8.8%)	
Non-smoker	1,096 (72.3%)	376 (73.9%)	
Exercise, No. (%)	337 (22.5%)	129 (25.6%)	0.15
Hypertension, No. (%)	304 (20.3%)	109 (21.9%)	0.45
Diabetes, No. (%)	25 (1.7%)	7 (1.4%)	0.68
Heart disease, No. (%)	104 (6.9%)	25 (5.0%)	0.13
Stroke, No. (%)	78 (5.2%)	44 (8.8%)	0.004
Pulmonary, No. (%)	123 (8.2%)	39 (7.7%)	0.77
Arthritis, No. (%)	224 (14.9%)	79 (15.8%)	0.62
Cancer, No. (%)	8 (0.5%)	2 (0.4%)	0.72

^aMarried vs. widowed, never married, and divorced.

Table S4. Sensitivity analysis.

Males (N = 709)				
	Events per 1,000 PYs (95% CI)	Unadjusted	Demographically adjusted ^a	Fully adjusted ^b
		Hazard ratio (95% CI)		
AL (continuously)		1.28 (1.18, 1.38)	1.18 (1.09, 1.28)	1.18 (1.08, 1.27)
AL category				
Low (0-1)	68.1 (53.4, 86.9)	Ref.	Ref.	Ref.
Medium (2-4)	115.4 (100.7, 132.1)	1.70 (1.29, 2.25)	1.45 (1.10, 1.93)	1.41 (1.06, 1.88)
High (5-9)	214.7 (154.8, 297.6)	3.18 (2.11, 4.78)	2.33 (1.54, 3.53)	2.35 (1.55, 3.56)
Females (N = 810)				
	Events per 1,000 PYs (95% CI)	Unadjusted	Demographically adjusted ^a	Fully adjusted ^b
		Hazard ratio (95% CI)		
AL (continuously)		1.22 (1.14, 1.31)	1.10 (1.02, 1.18)	1.09 (1.01, 1.17)
AL category				
Low (0-1)	113.7 (96.2, 134.4)	Ref.	Ref.	Ref.
Medium (2-4)	191.7 (171.8, 213.9)	1.70 (1.39, 2.08)	1.29 (1.05, 1.57)	1.27 (1.03, 1.56)
High (5-9)	267.4 (168.5, 424.5)	2.40 (1.47, 3.93)	1.37 (0.83, 2.25)	1.39 (0.85, 2.29)

Abbreviations: PY, person-year; CI, confidence interval; AL, allostatic load.

^aDemographically adjusted model included age, ethnicity (Han vs. minority), education (any vs. none), and marital status (married vs. others).

^bFully adjusted model included age, ethnicity (Han vs. minority), education (any vs. none), and marital status (married vs. others), smoking (current vs. previous or non-smoke), exercise (yes vs. no), and chronic diseases such as pulmonary disease and arthritis.

