

SUPPLEMENTAL MATERIAL

Supplementary Table I: Association between autonomic balance indices and risk of Alzheimer's disease

		Model 1		Model 2		Model 3	
		Events/ N	HR (95% CI)	Events/ N	HR (95% CI)	Events/ N	HR (95% CI)
RHR	Per 10 bpm	94/1579	1.12 (0.92, 1.36)	91/1530	1.05 (0.86, 1.28)	90/1498	1.01 (0.82, 1.24)
SDNN	Per SD	52/815	0.77 (0.55, 1.07)	51/784	0.81 (0.58, 1.14)	50/767	0.84 (0.60, 1.21)
RMSSD	Per SD	52/815	0.85 (0.60, 1.21)	51/784	0.86 (0.60, 1.23)	50/767	0.87 (0.61, 1.25)

RHR=Resting Heart Rate; SDNN= SD of normal-to-normal intervals; RMSSD= root mean square of successive differences

Model 1 is adjusted for age, sex, education and apoe4

Model 2 is additionally adjusted for smoking status, diabetes, SBP, antihypertensives, antiarrhythmics and cardiac glycosides

Model 3 is additionally adjusted for physical activity

Results were similar after controlling for interim CHF and interim AF and after excluding stroke cases at exam 3

Bold values denote statistical significance at the $p \leq 0.05$ level

Supplementary Table II: Association between autonomic balance indices and Alzheimer's disease risk stratified by age and sex

	model		Events/N	HR (95% CI) [‡]	p for interaction
SDNN	1	Age < 60y*	30/653	0.98 (0.66, 1.46)	
		Age ≥ 60y*	22/162	0.49 (0.27, 0.90)	0.089
	2	Age < 60y*	29/630	1.04 (0.69, 1.57)	
		Age ≥ 60y*	22/154	0.57 (0.31, 1.04)	0.158
	3	Age < 60y*	29/616	1.03 (0.68, 1.56)	
		Age ≥ 60y*	21/151	0.65 (0.36, 1.18)	0.319
RMSSD	1	Age < 60y*	30/653	1.26 (0.83, 1.89)	
		Age ≥ 60y*	22/162	0.32 (0.12, 0.84)	0.017
	2	Age < 60y*	29/630	1.31 (0.85, 2.02)	
		Age ≥ 60y*	22/154	0.30 (0.12, 0.80)	0.011
	3	Age < 60y*	29/616	1.30 (0.84, 2.02)	
		Age ≥ 60y*	21/151	0.37 (0.14, 0.95)	0.029
RHR	1	Females	66/845	1.18 (0.93, 1.50)	
		Males	28/734	1.02 (0.72, 1.44)	0.487
	2	Females	64/809	1.09 (0.86, 1.39)	
		Males	27/721	1.01 (0.70, 1.45)	0.724
	3	Females	63/790	1.02 (0.80, 1.31)	
		Males	27/708	1.03 (0.71, 1.51)	0.979

RHR=Resting Heart Rate; SDNN= SD of normal-to-normal intervals; RMSSD= root mean square of successive differences

Model 1 is adjusted for age, sex, education and apoe4

Model 2 is additionally adjusted for smoking status, diabetes, SBP, antihypertensives, antiarrhythmics and cardiac glycosides

Model 3 is additionally adjusted for physical activity

*At time of ECG (exam 3)

[‡]values are per 10 bpm for RHR and 1SD for SDNN and RMSSD

Bold values denote statistical significance at the $p \leq 0.05$ level