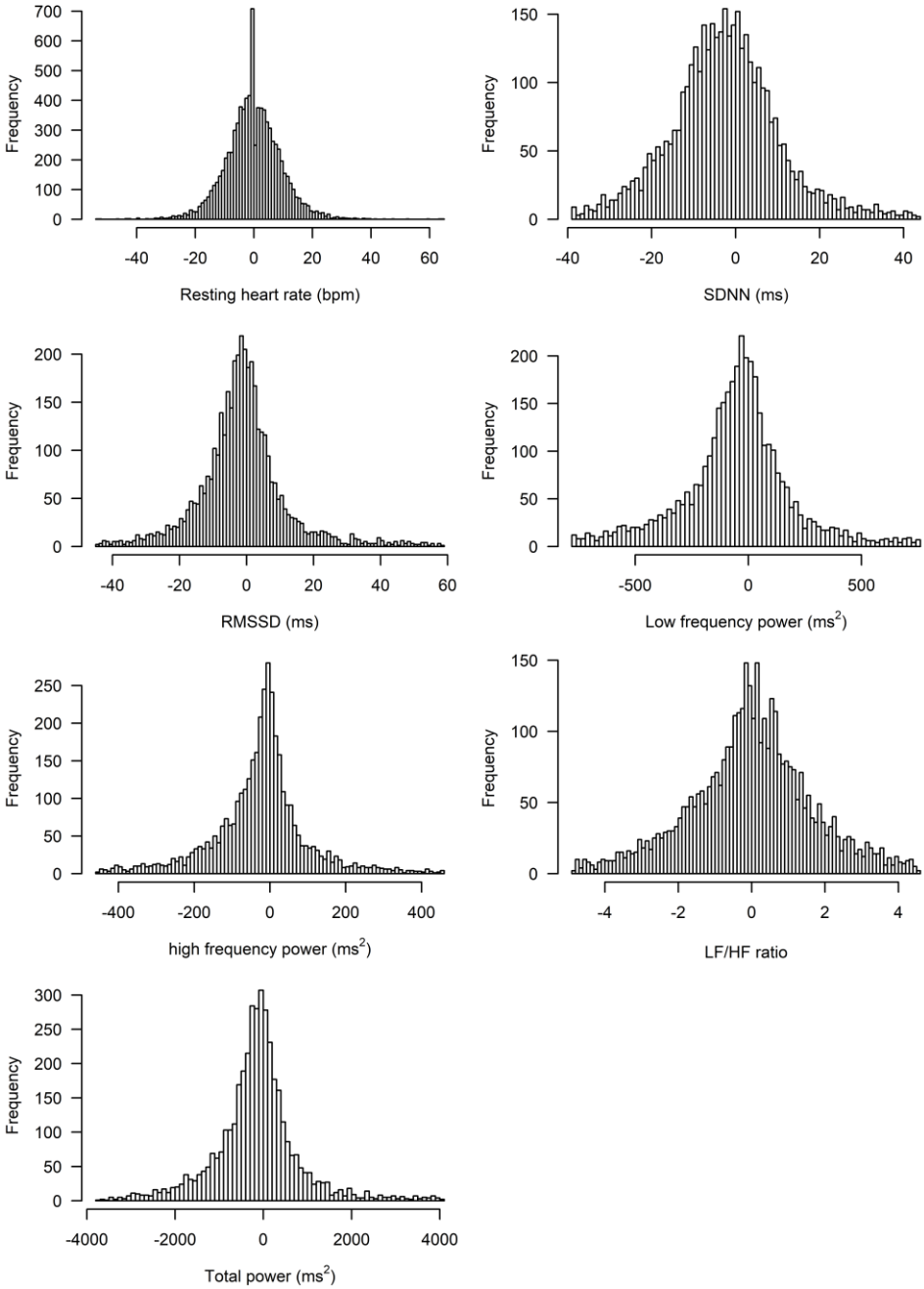


# Supplementary material

## Supplementary Figure 1



Supplementary Figure 1: 5-year change in heart rate and heart rate variability

**Supplementary Table 1** Rate ratios (RR) with 95% CI of a standard deviation difference in 5-years change in heart rate or HRV on the incidence of cardiovascular disease (CVD), all-cause mortality or the composite of the two

Baseline difference	Model	CVD		All-cause mortality		Composite	
		RR	P	RR	P	RR	P
Resting heart rate (9.4bpm)*	1	1.02 (0.84;1.25)	0.841	0.94 (0.77;1.15)	0.578	0.96 (0.83;1.11)	0.581
	2	1.03 (0.84;1.25)	0.797	0.94 (0.78;1.15)	0.559	0.96 (0.83;1.11)	0.623
SDNN (32.9 ms)	1	0.88 (0.77;1.00)	0.058	0.91 (0.76;1.07)	0.250	<b>0.89 (0.80;1.00)</b>	<b>0.046</b>
	2	0.89 (0.77;1.01)	0.076	0.90 (0.77;1.06)	0.224	0.90 (0.80;1.00)	0.053
RMSSD (47.6 ms)	1	0.90 (0.79;1.02)	0.103	0.94 (0.78;1.14)	0.511	0.91 (0.81;1.02)	0.106
	2	0.90 (0.79;1.04)	0.150	0.94 (0.78;1.14)	0.538	0.92 (0.82;1.03)	0.155
Low frequency power (5151 ms <sup>2</sup> )	1	0.94 (0.83;1.06)	0.301	0.93 (0.81;1.07)	0.294	0.93 (0.85;1.02)	0.123
	2	0.94 (0.83;1.07)	0.371	0.94 (0.82;1.07)	0.342	0.94 (0.85;1.03)	0.172
High frequency power (3889 ms <sup>2</sup> )	1	0.95 (0.81;1.12)	0.559	0.93 (0.79;1.08)	0.316	0.94 (0.84;1.05)	0.259
	2	0.95 (0.80;1.14)	0.604	0.92 (0.78;1.08)	0.289	0.93 (0.83;1.06)	0.272
LF/HF ratio (2.2 units)	1	1.00 (0.80;1.25)	0.997	1.01 (0.81;1.26)	0.913	0.99 (0.85;1.16)	0.941
	2	0.99 (0.80;1.23)	0.924	1.00 (0.81;1.24)	0.968	0.99 (0.85;1.15)	0.882
Total power (18707 ms <sup>2</sup> )	1	0.93 (0.79;1.10)	0.424	0.92 (0.76;1.12)	0.420	0.93 (0.81;1.05)	0.240
	2	0.94 (0.79;1.12)	0.487	0.93 (0.76;1.13)	0.475	0.93 (0.82;1.06)	0.298

P: p-value for the test of the rate ratio being equal to unity (i.e. no effect)

\*For the subset with HRV data

**Supplementary Table 2** Rate ratios (RR) with 95% CI of 10-unit difference in heart rate or a doubling in HRV indices at baseline on the incidence of cardiovascular disease (CVD), all-cause mortality or the composite of the two.

Baseline difference	Model	CVD		All-cause mortality		Composite	
		RR	P	RR	P	RR	P
Resting heart rate (10 bpm)*	1	0.94 (0.85;1.04)	0.230	1.09 (1.00;1.2)	0.058	1.01 (0.95;1.09)	0.690
	2	0.91 (0.82;1.01)	0.077	<b>1.11 (1.00;1.22)</b>	<b>0.040</b>	1.00 (0.93;1.08)	0.925
SDNN (doubling)	1	1.02 (0.78;1.34)	0.871	0.99 (0.76;1.30)	0.953	1.01 (0.82;1.23)	0.947
	2	1.04 (0.79;1.38)	0.772	1.05 (0.80;1.38)	0.745	1.04 (0.85;1.28)	0.682
RMSSD (doubling)	1	1.09 (0.90;1.31)	0.384	0.99 (0.82;1.21)	0.934	1.03 (0.89;1.18)	0.701
	2	1.08 (0.90;1.31)	0.398	1.00 (0.83;1.22)	0.970	1.04 (0.90;1.19)	0.629
Low frequency power (doubling)	1	1.00 (0.89;1.13)	0.986	0.96 (0.85;1.07)	0.448	0.98 (0.90;1.07)	0.608
	2	1.02 (0.90;1.15)	0.787	0.99 (0.88;1.11)	0.819	1.00 (0.91;1.09)	0.990
High frequency power (doubling)	1	1.02 (0.91;1.13)	0.763	0.98 (0.88;1.10)	0.751	0.99 (0.91;1.07)	0.776
	2	1.02 (0.92;1.14)	0.677	1.00 (0.89;1.11)	0.929	1.00 (0.92;1.08)	0.982
LF/HF ratio (doubling)	1	0.96 (0.80;1.14)	0.632	0.95 (0.79;1.13)	0.539	0.98 (0.86;1.12)	0.762
	2	0.97 (0.81;1.17)	0.777	0.98 (0.82;1.18)	0.844	1.00 (0.88;1.14)	0.985
Total power (doubling)	1	1.01 (0.88;1.16)	0.910	1.01 (0.88;1.15)	0.928	1.00 (0.91;1.11)	0.929
	2	1.02 (0.89;1.17)	0.785	1.04 (0.90;1.19)	0.599	1.03 (0.93;1.14)	0.633

P: p-value for the test of the rate ratio being equal to unity (i.e. no effect). \*For the subset with HRV data

**Supplementary Table 3** Rate ratios (RR) with 95% CI of 10-unit difference in 5-years changes in heart rate or HRV on the incidence of cardiovascular disease (CVD), all-cause mortality or the composite of the two – **for the subset not on beta blockers!**

5-year change in	Model	CVD		All-cause mortality		Composite	
		RR	P	RR	P	RR	P
Resting heart rate (10 bpm)	1	1.10 (0.96;1.26)	0.188	1.02 (0.89;1.16)	0.815	1.03 (0.93;1.13)	0.610
	2	1.11 (0.97;1.28)	0.133	1.01 (0.89;1.15)	0.821	1.03 (0.93;1.14)	0.558
SDNN (10 ms)	1	0.98 (0.91;1.05)	0.518	0.97 (0.91;1.04)	0.383	0.97 (0.92;1.02)	0.266
	2	0.99 (0.92;1.06)	0.694	0.97 (0.91;1.04)	0.411	0.98 (0.93;1.03)	0.399
RMSSD (10 ms)	1	0.99 (0.94;1.05)	0.745	0.98 (0.94;1.03)	0.497	0.98 (0.95;1.02)	0.404
	2	1.00 (0.94;1.06)	0.965	0.99 (0.94;1.04)	0.580	0.99 (0.95;1.03)	0.637
Low frequency power (10 ms <sup>2</sup> )	1	1.00 (1.00;1.00)	0.620	1.00 (1.00;1.00)	0.067	1.00 (1.00;1.00)	0.252
	2	1.00 (1.00;1.00)	0.598	1.00 (1.00;1.00)	0.129	1.00 (1.00;1.00)	0.534
High frequency power (10 ms <sup>2</sup> )	1	1.00 (1.00;1.00)	0.836	1.00 (1.00;1.00)	0.213	1.00 (1.00;1.00)	0.396
	2	1.00 (1.00;1.00)	0.696	1.00 (1.00;1.00)	0.212	1.00 (1.00;1.00)	0.559
LF/HF ratio (10 units)	1	1.02 (0.36;2.85)	0.971	1.10 (0.39;3.10)	0.854	1.07 (0.51;2.27)	0.853
	2	1.01 (0.36;2.81)	0.986	1.16 (0.42;3.19)	0.768	1.09 (0.52;2.28)	0.814
Total power (10 ms <sup>2</sup> )	1	1.00 (1.00;1.00)	0.739	1.00 (1.00;1.00)	0.104	1.00 (1.00;1.00)	0.278
	2	1.00 (1.00;1.00)	0.630	1.00 (1.00;1.00)	0.169	1.00 (1.00;1.00)	0.548

P: p-value for the test of the rate ratio being equal to unity (i.e. no effect).