

## SUPPLEMENTS

**Supplementary table 1.** Baseline characteristics and exercise test data for the sample and in men and women, respectively.

	Full cohort N=6329	Men n=3501	Women n=2828
Women	44.7 %	0 %	100 %
Age, years	56.1 ± 13.7	54.4 ± 14.3	58.2 ± 12.7
BMI, kg/m <sup>2</sup>	26.8 ± 4.0	27.0 ± 3.7	26.5 ± 4.4
<b>Prevalent disease or risk factors at baseline</b>			
IHD	12.7 %	13.8 %	11.4 %
Hypertension	26.8 %	26.8 %	26.7 %
Heart failure	0.6 %	0.7 %	0.4 %
Valvulopathy	2.1 %	2.2 %	2.0 %
Diabetes mellitus	6.1 %	7.3 %	4.6 %
Hyperlipidemia	15.3 %	17.4 %	12.6 %
Atrial fibrillation	2.9 %	3.4 %	2.2 %
COPD	0.7 %	0.6 %	0.9 %
<b>Cardiac medication at baseline</b>			
Antihypertensive†	25.3 %	25.1 %	25.5 %
Beta-blocker	18.6 %	17.6 %	19.9 %
Loop diuretics	2.1 %	1.9 %	2.4 %
<b>Exercise test data</b>			
SBP <sub>rest</sub> , mmHg	136.0 ± 17.7	135.9 ± 16.7	136.1 ± 18.9
DBP <sub>rest</sub> , mmHg	78.7 ± 9.6	79.3 ± 9.9	78.0 ± 9.3
SBP <sub>peak</sub> , mmHg	196.6 ± 25.3	201.9 ± 24.9	190.1 ± 24.3
SBP/Watt-slope	0.37 ± 0.16	0.33 ± 0.12	0.43 ± 0.18
HR <sub>peak</sub> , 1/min	154.9 ± 20.9	156.9 ± 21.5	152.3 ± 20.0
Watt <sub>peak</sub>	173.5 ± 53.9	208.4 ± 44.7	130.1 ± 24.9
Watt <sub>peak</sub> , % of predicted	93.4 ± 14.4	92.0 ± 14.3	95.2 ± 14.3
W <sub>max</sub>			
<b>Events during follow-up, n (%)</b>			
Deaths, all-cause, n (%)	6.4 %	7.1 %	5.4 %

Continuous data presented as mean ± standard deviation.

† Angiotensin converting enzyme inhibitors, angiotensin receptor blockers, thiazide diuretics and calcium channel blockers were included as anti-hypertensive drugs.

BMI, body mass index; IHD, ischemic heart disease; COPD, chronic obstructive pulmonary disease; DBP, diastolic blood pressure; SBP, systolic blood pressure; HR, heart rate

**Supplementary table 2.** SBP response by the end of exercise and association to all-cause mortality and incident CV disease.

SBP response by the end of exercise	Model 1 unadjusted	Model 2 adjusted	Model 3 adjusted
	HR (95% CI)	HR (95% CI)	HR (95% CI)
<b>All-cause mortality</b>			
Per 1 mmHg SBP/1 W increase	1.47 (1.19 – 1.82)	1.22 (0.98 – 1.51)	1.06 (0.85 – 1.32)
Per Z score increase	1.17 (1.07 – 1.28)	1.08 (0.99 – 1.19)	1.03 (0.94 – 1.12)
<b>Incident CV disease</b>			
Per 1 mmHg SBP/1 W increase	1.23 (1.04 – 1.45)	0.99 (0.83 – 1.18)	0.88 (0.74 – 1.05)
Per Z score increase	1.09 (1.02 – 1.17)	0.99 (0.92 – 1.07)	0.95 (0.88 – 1.02)

The SBP response was based on the two last SBP measurements during exercise and indexed to the increase in work rate (W) between the same time points. Risk for all-cause mortality was analysed in the full sample (N=6329), while risk for incident CV disease was analysed in the subgroup of patients with no cardiac disease at baseline (n=5394). Model 2 was adjusted for age, sex, BMI, hypertension, diabetes, medication with betablockers, and history of CV disease (in the analysis of all-cause mortality only). Model 3 was additionally adjusted for exercise capacity (Wpeak).

SBP, systolic blood pressure. CV, cardiovascular. W, Watt. BMI, body mass index.

**Supplementary table 3.** SBP response by the end of exercise and association to all-cause mortality and incident CV disease in patients with a prescription of betablockers.

SBP response by the end of exercise	Model 1 unadjusted	Model 2 adjusted	Model 3 adjusted
	HR (95% CI)	HR (95% CI)	HR (95% CI)
<b>All-cause mortality</b>			
Per 1 mmHg SBP/1 W increase	1.17 (0.78 – 1.76)	1.15 (0.77 – 1.71)	1.06 (0.71 – 1.59)
Per Z score increase	1.07 (0.90 – 1.26)	1.06 (0.90 – 1.25)	1.03 (0.87 – 1.21)
<b>Incident CV disease</b>			
Per 1 mmHg SBP/1 W increase	0.82 (0.57 – 1.18)	0.78 (0.55 – 1.12)	0.88 (0.74 – 1.05)
Per Z score increase	0.92 (0.79 – 1.07)	0.90 (0.78 – 1.05)	0.87 (0.74 – 1.01)

The SBP response was based on the two last SBP measurements during exercise and indexed to the increase in work rate (W) between the same time points. Risk for all-cause mortality was analysed in 1179 patients on betablocker treatment, while risk for incident CV disease was analysed in the subgroup of patients with no cardiac disease at baseline (n=739). Model 2 was adjusted for age, sex, BMI, hypertension, diabetes, and history of CV disease (in the analysis of all-cause mortality only). Model 3 was additionally adjusted for exercise capacity (Wpeak).

SBP, systolic blood pressure. CV, cardiovascular. W, Watt. BMI, body mass index.