

## **Supplemental Material**

**Supplementary Table S1. The relation between baseline hemodynamic parameters and incident COPD stratified according to sex.**

	Sample size (events)	HR per 10 mmHg or bpm	95 % CI	P-value
<b>Men</b>				
ΔSBP	17762 (1023)	1.104	1.007-1.210	0.034
RHR	17709 (1016)	1.079	1.010-1.152	0.023
<b>Women</b>				
ΔSBP	6883 (541)	1.089	0.980-1.211	0.114
RHR	6871 (540)	1.080	0.979-1.190	0.125

ΔSBP defined as orthostatic systolic blood pressure decrease; CAD, coronary artery disease; bpm, beats per minute; HR, hazard ratio.

All analyses adjusted for age, BMI, diabetes, total cholesterol, supine SBP, antihypertensive therapy, FVC in percent of predicted, FEV<sub>1</sub> in percent of predicted.

**Supplementary Table S2. The relation between baseline hemodynamic parameters and incident COPD stratified according to physical inactivity.**

	Sample size (events)	HR per 10 mmHg or bpm	95 % CI	P-value
<b>Physically active</b>				
$\Delta$ SBP	12412 (690)	1.059	0.951-1.179	0.297
RHR	12378 (686)	1.082	0.997-1.175	0.059
<b>Physically inactive</b>				
$\Delta$ SBP	12229 (874)	1.133	1.034-1.242	0.007
RHR	12198 (870)	1.050	0.977-1.128	0.186

$\Delta$ SBP defined as orthostatic systolic blood pressure decrease; CAD, coronary artery disease; bpm, beats per minute; HR, hazard ratio.

All analyses adjusted for age, sex, BMI, diabetes, total cholesterol, supine SBP, antihypertensive therapy, FVC in percent of predicted, FEV<sub>1</sub> in percent of predicted.

## **Supplementary Methods:**

### ***Assessment of physical activity at baseline***

Physical activity in men was assessed by the question “Are you mostly engaged in sedentary activity in your spare time?”. Some questions were changed during the screening period, which is why physical activity in women instead was assessed by, “Are you engaged in physical activity (e.g., swimming, gymnastics, badminton, tennis, folk dance, running, etc.) 1–2 hours per week?” or “Do you usually get to do light physical exercise like walking or cycling (or other activities with similar effort) on a regularly weekly basis?”. All subjects fasted overnight prior to the baseline investigations but were allowed to drink water. All examinations were performed in the morning.

### ***Definition and retrieval of endpoints***

The endpoints were identified through linkage of the 10-digit personal identification number of each Swedish citizen with specific registers. The subjects were followed from the baseline examination until admission to hospital for COPD, death, emigration from Sweden or 31 December 2013, whichever came first.

The Swedish Patient Register was used for case retrieval of COPD, as previously described (1) and the register has been validated for COPD (2). This register has been operating in the south of Sweden during the entire follow-up period, and has covered the whole of Sweden since 1987. Admissions to hospital with COPD were defined as cases with a discharge diagnosis of COPD according to the International Classification of Diseases 9th and 10th Revisions (ICD9 and ICD10) 490–492, 496 (ICD-9) or J40–J44 (ICD-10) as one of the first three listed diagnoses.

CAD was defined as fatal or non-fatal myocardial infarction (MI), death from ischemic heart disease, coronary artery bypass grafting (CABG) or percutaneous coronary intervention (PCI). In addition to the Swedish Patient Register, the Swedish Coronary Angiography and Angioplasty Registry (SCAAR) and the Swedish Cause of Death Register were used. MI was defined on the basis of codes 410 and I21, respectively. Death due to ischemic heart disease was defined on the basis of codes 412 and 414 (ICD9) or I22–I23 and I25 (ICD10) a. CABG was identified from the national Swedish classification registers of surgical procedures: the KKÅ System from 1963 until 1989, and the Op6 System since then. CABG was defined as a procedure code of 3065, 3066, 3068, 3080, 3092, 3105, 3127, 3158 (Op6) or FN (KKÅ97). PCI was defined based on the operation codes FNG05 and FNG02.

We also retrieved data on hospitalizations for OH and syncope, though only available through 31 December 2011. This combined endpoint was based on primary or main secondary discharge diagnoses (OH: ICD-9=458 and ICD-10=I951; syncope: ICD-9=780.2 and ICD-10=R55.9), excluding cases with concurrent CVD diagnoses identified as the primary cause of admission.

**Supplementary references:**

1. Engstrom G, Segelstorm N, Ekberg-Aronsson M, Nilsson PM, Lindgarde F, Lofdahl CG. Plasma markers of inflammation and incidence of hospitalisations for COPD: results from a population-based cohort study. *Thorax* 2009;64:211-5.
2. Inghammar M, Engstrom G, Lofdahl CG, Egesten A. Validation of a COPD diagnosis from the Swedish Inpatient Registry. *Scandinavian journal of public health* 2012;40:773-6.