

## SUPPLEMENTARY TABLES

**Supplementary Table 1. Framingham general cardiovascular risk score (FGCRS) calculating for women.**

Points	Age (years)	HDL-C (mg/dl)	TC (mg/dl)	SBP not treated (mm Hg)	SBP treated (mm Hg)	Smoker	Diabetic
-3				<120			
-2		60+					
-1		50-59			<120		
0	30-34	45-49	<160	120-129		No	No
1		35-44	160-199	130-139			
2	35-39	<35		140-149	120-129		
3			200-239		130-139	Yes	
4	40-44		240-279	150-159			Yes
5	45-49		280+	160+	140-149		
6					150-159		
7	50-54				160+		
8	55-59						
9	60-64						
10	65-69						
11	70-74						
12	75+						
Points allotted							Total

Abbreviations: HDL-C, High-density lipoprotein cholesterol, SBP, Systolic blood pressure, TC, Total cholesterol.

**Supplementary Table 2. Framingham general cardiovascular risk score (FGCRS) calculating for men.**

Points	Age (years)	HDL-C (mg/dl)	TC (mg/dl)	SBP not treated (mm Hg)	SBP treated (mm Hg)	Smoker	Diabetic
-2		60+		<120			
-1		50-59					
0	30-34	45-49	<160	120-129	<120	No	No
1		35-44	160-199	130-139			
2	35-39	<35	200-239	140-159	120-129		
3			240-279	160+	130-139		Yes
4			280+		140-159	Yes	
5	40-44				160+		
6	45-49						
7							
8	50-54						
9							
10	55-59						
11	60-64						
12	65-69						
13							
14	70-74						
15	75+						
Points allotted							Total

Abbreviations: HDL-C, High-density lipoprotein cholesterol, SBP, Systolic blood pressure, TC, Total cholesterol.

**Supplementary Table 3. Association of the covariates with the changes of pulmonary function.**

Variables	Pulmonary function	FEV1	FVC	PEF
	$\beta$ (95% CI)*	$\beta$ (95% CI)*	$\beta$ (95% CI)*	$\beta$ (95% CI)*
Age	-0.49 (-0.57, -0.42) <sup>†</sup>	-0.54 (-0.63, -0.46) <sup>†</sup>	-0.52 (-0.60, -0.44) <sup>†</sup>	-0.50 (-0.56, -0.40) <sup>†</sup>
Sex	1.15 (1.07, 1.24) <sup>†</sup>	1.20 (1.10, 1.30) <sup>†</sup>	1.22 (1.12, 1.31) <sup>†</sup>	1.15 (1.05, 1.24) <sup>†</sup>
Education	0.02 (0.01, 0.03) <sup>†</sup>	0.02 (0.00, 0.03) <sup>†</sup>	0.02 (0.01, 0.03) <sup>†</sup>	0.03 (0.02, 0.04) <sup>†</sup>
Body mass index	-0.01 (-0.01, 0.00)	-0.01 (-0.02, 0.00)	-0.01 (-0.02, 0.00)	0.00 (-0.01, 0.01)
Alcohol consumption	0.00 (-0.01, 0.01)	0.00 (-0.01, 0.01)	0.00 (-0.01, 0.01)	0.00 (-0.00, 0.00)
Physical activity	0.17 (0.10, 0.24) <sup>†</sup>	0.19 (0.11, 0.27) <sup>†</sup>	0.19 (0.11, 0.27) <sup>†</sup>	0.15 (0.07, 0.23) <sup>†</sup>
Social activity	0.10 (0.03, 0.17) <sup>†</sup>	0.10 (0.02, 0.19) <sup>†</sup>	0.07 (-0.01, 0.15)	0.14 (0.06, 0.22) <sup>†</sup>
Depression	-0.06 (-0.15, 0.03)	-0.06 (-0.16, 0.05)	-0.02 (-0.13, 0.08)	-0.11 (-0.21, -0.01) <sup>†</sup>
Stroke	-0.10 (-0.23, 0.03)	-0.09 (-0.23, 0.06)	-0.10 (-0.24, 0.04)	-0.13 (-0.27, 0.01)
Congestive heart failure	-0.33 (-0.50, -0.15) <sup>†</sup>	-0.40 (-0.59, -0.20) <sup>†</sup>	-0.38 (-0.58, -0.19) <sup>†</sup>	-0.22 (-0.42, -0.03) <sup>†</sup>
Heart diseases	-0.08 (-0.20, 0.04)	-0.10 (-0.24, 0.04)	-0.04 (-0.18, 0.10)	-0.11 (-0.25, 0.03)

\*Model adjusted for sex, age, education, body mass index, alcohol consumption, physical activity, social activity, depression, stroke, congestive heart failure, and heart diseases.

$P < 0.05$ .

Abbreviations: FVC, Forced vital capacity; FEV1, Forced expiratory volume in one second; PEF, Peak expiratory flow.

**Supplementary Table 4. Joint effect of high Framingham general cardiovascular risk score (FGCRS) and smoking status in relation to the decline on pulmonary function.**

Joint exposure		No. of subjects	Pulmonary function <sup>a</sup>
FGCRS	Smoking status		$\beta$ (95% CI)
Low	Non-smokers	308	Reference
Low	Smokers <sup>b</sup>	227	-0.009 (-0.022 to 0.004)
High	Non-smokers	550	-0.016 <sup>c</sup> (-0.027 to -0.006)
High	Smokers <sup>b</sup>	357	-0.015 <sup>c</sup> (-0.026 to -0.004)

<sup>a</sup>Model adjusted for sex, age, education, body mass index, alcohol consumption, depression, physical activity, social activity, and CVD.

$P$ -interaction  $> 0.05$ .

<sup>b</sup>Smokers including former and current smokers.

Abbreviation: CI, confidence interval.

<sup>c</sup> $P < 0.05$ .

**Supplementary Table 5. Association of the Framingham general cardiovascular risk score (FGCRS) with the changes of pulmonary function after excluding pulmonary function at baseline and within first 2 year during the follow-up (N=1,007).**

FGCRS	Pulmonary function	FEV1	FVC	PEF
	$\beta$ (95% CI) <sup>a</sup>	$\beta$ (95% CI) <sup>a</sup>	$\beta$ (95% CI) <sup>a</sup>	$\beta$ (95% CI) <sup>a</sup>
Baseline				
Continuous FGCRS	-0.018 <sup>b</sup> (-0.030 to -0.006)	-0.019 <sup>b</sup> (-0.035 to -0.003)	-0.018 <sup>b</sup> (-0.017 to -0.002)	-0.022 <sup>b</sup> (-0.039 to -0.005)
Categories FGCRS				
Lowest	Reference	Reference	Reference	Reference
Middle	-0.014 (-0.131 to 0.102)	-0.003 (-0.137 to 0.132)	-0.007 (-0.143 to 0.130)	-0.014 (-0.159 to 0.131)
Highest	-0.081 (-0.204 to 0.041)	-0.072 (-0.213 to 0.068)	-0.070 (-0.212 to 0.073)	-0.132 (-0.282 to 0.018)
Longitudinal				
Continuous FGCRS $\times$ time	-0.001 <sup>b</sup> (-0.002 to -0.000)	-0.001 <sup>b</sup> (-0.003 to -0.000)	-0.001 <sup>b</sup> (-0.003 to -0.000)	-0.001 (-0.003 to 0.000)
Categories FGCRS $\times$ time				
Lowest	Reference	Reference	Reference	Reference
Middle	-0.011 <sup>b</sup> (-0.020 to -0.002)	-0.010 (-0.021 to 0.000)	-0.011 (-0.023 to 0.001)	-0.014 (-0.031 to 0.004)
Highest	-0.013 <sup>b</sup> (-0.023 to -0.004)	-0.015 <sup>b</sup> (-0.025 to -0.004)	-0.013 <sup>b</sup> (-0.025 to -0.001)	-0.010 (-0.028 to 0.007)

<sup>a</sup>Model adjusted for sex, age, education, body mass index, alcohol consumption, physical activity, social activity, depression, stroke, congestive heart failure, and heart diseases.

<sup>b</sup>P < 0.05.