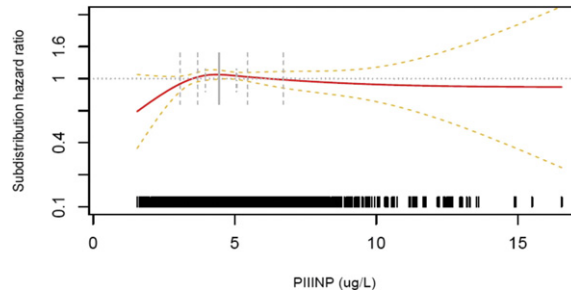


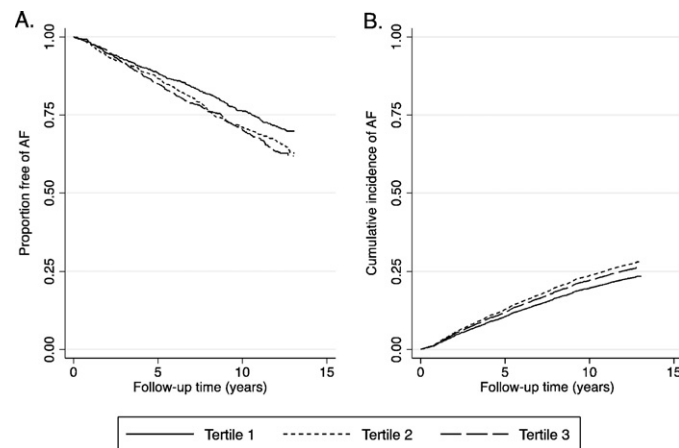
Appendix

Supplementary Figure 1



Sub-HRs and 95% CIs for incident AF according to PIIINP. Model adjusted for age, sex, race, clinic, systolic blood pressure, hypertensive medication, BMI, BMI-squared, height, smoking status, and prevalent CHF, MI, or diabetes. Fit using the Fine-Gray model relating PIIINP to AF in the presence of competing risk of death. Modeled using natural spline with $df=3$. The solid vertical line represents the median; the dashed vertical lines represent the location of the knots for the spline (the 33.3rd and 66.6th quantiles of PIIINP; 3.96 and 5.06 $\mu\text{g/L}$, respectively). The orange dashed lines represent the 95% CI of the estimated HR.

Supplementary Figure 2



A, Unadjusted Kaplan-Meier survival curves. **B**, Cumulative incidence curves (based on the Fine and Gray method), according to tertiles of PIIINP. Tertile 1: 0.54-3.96 $\mu\text{g/L}$; tertile 2: 3.96-5.06 $\mu\text{g/L}$; tertile 3: 5.06-17.50 $\mu\text{g/L}$. Cumulative incidence curves based on competing risks analysis (see [Methods](#) for details), with adjustment for age, sex, race, clinic, systolic blood pressure, hypertensive medication, BMI, BMI-squared, height, smoking status, and prevalent CHF, MI, or diabetes. Fit using the Fine-Gray model relating PIIINP to AF in the presence of competing risk of death.

Supplementary Table I. Demographic, clinical, and biological characteristics of CHS participants who were free of prevalent AF and participated in the 1996 to 1997 examination and have data available (n = 873) but are missing both PIIINP and TGF- β 1 values

	n	
Demographics		
Age (y)	873	80.1 \pm 5.6
Male sex	873	30.7%
African American race	873	19.1%
Current smoking	633	8.8%
Medical history		
Treated HTN	678	57.4%
CHF	873	10.8%
MI	873	14.0%
Stroke	873	11.9%

Values for age are shown as mean \pm SD.

Supplementary Table II. Demographic, clinical, and biological characteristics of CHS participants free of prevalent AF at the 1996 to 1997 examination

	PIIINP	TGF- β 1
Demographics		
n	2935	1538
Age (y)	77.9 \pm 4.7	77.8 \pm 4.6
Male sex, n (%)	1116 (38.0%)	583 (37.9)
African American race, n (%)	494 (16.8)	354 (23.0)
Current smoking, n (%)	227 (7.7)	141 (9.2)
Height (cm)	163.3 \pm 9.4	163.3 \pm 9.5
Medical history		
Treated HTN, n (%)	1639 (55.8)	866 (56.3)
Diabetes, n (%)	535 (18.3)	288 (18.8)
CHF, n (%)	207 (7.1)	95 (6.2)
MI, n (%)	282 (9.6)	145 (9.4)
Stroke, n (%)	165 (5.6)	74 (4.8)
ECG		
Heart rate (beats/min)	63.5 \pm 10.3	63.3 \pm 10.3
PR interval (ms)	172.9 \pm 30.8	172.2 \pm 31.4
QRS interval (ms)	94.4 \pm 18.7	93.8 \pm 18.2
Cardiac		
Normal LVEF, n (%)	2421 (87.4)	1312 (89.9)
Biomarkers		
Log ₂ BNP (pg/mL)	6.8 \pm 1.4	6.7 \pm 1.4
Log ₂ CRP (mg/L)	1.3 \pm 1.6	1.3 \pm 1.6
Cystatin C (mg/L)	1.1 \pm 0.4	1.1 \pm 0.3
GFR-cystatin (mL/min per 1.73 m ²)	71.2 \pm 19.4	72.2 \pm 19.4

Values are shown as mean \pm SD, unless otherwise specified.

Abbreviations: HTN, Hypertension; LA, left atrial; LVEF, left ventricular ejection fraction; BNP, brain natriuretic peptide; CRP, C-reactive protein; GFR-cystatin, GFR estimate using cystatin C.

Supplementary Table III. HRs and 95% CIs for incident AF according to PIIINP level, including adjustment for class of antihypertensive

PIIINP	HR (95% CI)
10% (3.07 μ g/L)	0.84 (0.72-0.99)
25% (3.69 μ g/L)	0.92 (0.87-0.98)
50% (4.45 μ g/L)	1.0 (referent)
75% (5.45 μ g/L)	1.07 (0.98-1.18)
90% (6.72 μ g/L)	1.13 (0.95-1.34)

Adjusted for age, sex, race, clinic site, systolic blood pressure, β -blockers, angiotensin-converting enzyme inhibitors, diuretics, BMI, BMI-squared, height, smoking status, history of CHF, MI, or prevalent diabetes. Modeled using natural cubic spline with $df=3$ and 2 knots at 33.3rd and 66.6th quantiles of PIIINP (3.96 and 5.06 μ g/L, respectively). Each estimate is the HR for an individual with that value of PIIINP compared with the median value (predicted from model).