

# **SUPPLEMENTAL MATERIAL**

**Table S1. Risk factors for incident AF recommended by the 2020 ESC guideline for AF.**

<b>Demographic factors</b>	Age	<b>Health factors and other risk factors</b>	Hypertension
	Male sex		Systolic blood pressure
<b>Health behaviors</b>	Smoking/tobacco use		Diastolic blood pressure
	Alcohol intake		Diabetes mellitus
<b>Cardiovascular conditions/diseases</b>	HF		Renal dysfunction/CKD
	Valvular disease		Obesity
	CAD		Body mass index
<b>Disorders of heart rhythm</b>	PR interval prolongation		Height
	Sick sinus syndrome		Weight
<b>LA remodeling</b>	Left atrial dimension		COPD

AF indicates atrial fibrillation; CAD, coronary artery disease; CKD, chronic kidney disease; COPD, chronic obstructive pulmonary disease; HF, heart failure; LA, left atrium.

**Table S2. Baseline characteristics of entire patient groups for other biomarkers.**

Variable	Male				Female			
	Total (n=605)	non-SCAF (n=482)	SCAF (n=123)	P- value	Total (n=619)	non-SCAF (n=517)	SCAF (n=102)	P- value
WBC, $\times 10^9/L$	6.4 (5.3-7.4)	6.4 (5.3-7.5)	6.3 (5.2-7.4)	0.903	6.0 (5.0-7.3)	6.0 (5.0-7.4)	5.8 (4.9-7.2)	0.29
Neutrophil, $\times 10^9/L$	3.8 (3.0-4.9)	3.8 (3.0-4.9)	3.9 (3.1-5.0)	0.839	3.5 (2.7-4.6)	3.5 (2.7-4.6)	3.3 (2.5-4.6)	0.202
NLR	2.2 (1.7-3.1)	2.2 (1.7-3.1)	2.2 (1.7-3.0)	0.779	1.9 (1.4-2.6)	1.9 (1.4-2.6)	1.8 (1.3-2.7)	0.723
TG, mmol/L	1.2 (0.8-1.5)	1.2 (0.8-1.5)	1.2 (0.9-1.7)	0.646	1.3 (0.9-1.7)	1.3 (0.9-1.7)	1.2 (0.9-1.5)	0.064
TC, mmol/L	4.4 (3.7-5.0)	4.4 (3.7-5.0)	4.4 (3.5-5.1)	0.961	4.9 (4.2-5.6)	4.9 (4.2-5.6)	4.6 (4.0-5.4)	0.085
LDL, mmol/L	2.4 (1.9-2.9)	2.4 (1.9-2.9)	2.4 (1.9-2.9)	0.824	2.7 (2.2-3.2)	2.7 (2.2-3.2)	2.7 (2.2-3.2)	0.328
HDL, mmol/L	1.1 (0.9-1.3)	1.1 (0.9-1.3)	1.1 (1.0-1.3)	0.442	1.2 (1.0-1.4)	1.2 (1.0-1.5)	1.2 (1.0-1.4)	0.195
LP(a), mg/L	5.3 (4.8-6.3)	5.3 (4.8-6.3)	5.3 (4.7-6.3)	0.996	5.2 (4.7-6.0)	5.2 (4.7-6.1)	5.0 (4.7-5.7)	0.571
FBG, mmol/L	5.3 (4.8-6.3)	5.3 (4.8-6.3)	5.3 (4.7-6.3)	0.459	5.2 (4.7-6.0)	5.2 (4.7-6.1)	5.0 (4.7-5.7)	0.206
BNP, $\mu\text{mol/L}$	116 (56-326)	115 (54-304)	116 (65-416)	0.325	118 (58-301)	116 (58-288)	133 (63-309)	0.518

Values are reported as median values (interquartile range).

BNP indicates brain natriuretic peptide; FPG, fasting plasma glucose; HDL, high-density lipoprotein;

LDL, low-density lipoprotein; LP(a), lipoprotein (a); NLR, neutrophil/lymphocyte ratio; TC, total cholesterol and, TG, triglyceride; WBC, white cell count.

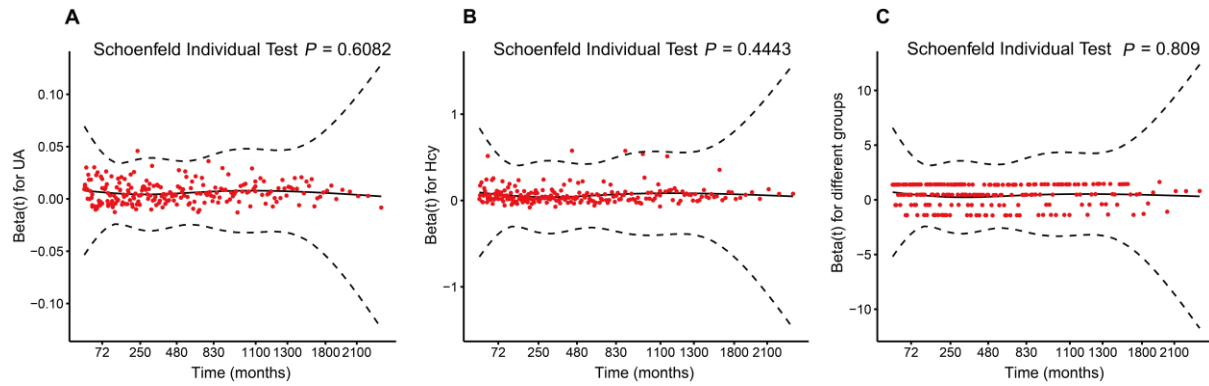
**Table S3. Hazard ratios for the association between Homocysteine and Uric acid with SCAF.**

		per 1-SD increase			High level group vs. Low level		
		Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Male	UA	1.62 (1.36, 1.93)***	1.64 (1.37, 1.97)***	1.69 (1.37, 2.08)***	1.93 (1.35, 2.77)***	1.99 (1.39, 2.85)***	2.00 (1.36, 2.95)***
	Hcy	1.34 (1.18, 1.51)***	1.38 (1.18, 1.51)***	1.27 (1.11, 1.44)***	1.98 (1.33, 2.94)***	1.98 (1.32, 2.96)**	1.92 (1.26, 2.92)**
Female	UA	1.77 (1.51, 2.08)***	1.79 (1.52, 2.11)***	1.93 (1.57, 2.36)***	2.30 (1.54, 3.43)***	2.29 (1.53, 3.44)***	2.22 (1.44, 3.43)***
	Hcy	1.39 (1.25, 1.53)***	1.38 (1.25, 1.53)***	1.39 (1.25, 1.54)***	2.00 (1.31, 3.04)**	1.99 (1.30, 3.04)**	1.92 (1.25, 2.95)**

\*:  $p \leq 0.05$ ; \*\*:  $p \leq 0.01$ ; \*\*\*:  $p \leq 0.001$ .

Model 1, crude; model 2, adjustment for age; model 3, full-adjustment model (adjustment for age, BMI, systolic blood pressure, diastolic blood pressure, estimated glomerular filtration rate, congestive heart failure, diabetes, coronary artery disease, chronic obstructive pulmonary disease, smoking, drinking, left atrial diameter, left ventricular ejection fraction).

**Figure S1. Analysis of the residuals of Schoenfeld residuals to assess the proportionality assumption.**



Figures represent plots of beta-coefficient estimates (log hazard ratios) for uric acid(A), homocysteine(B) and four categories of these two variables(C) against follow-up (time) in months. The black solid line represents a smoothed curve of scaled Schoenfeld residuals with 95% confidence intervals (black dotted lines). (A) uric acid; (B) homocysteine; (C) four categories of predictor: Group 1: patients with both low-level Hcy and UA; Group 2: patients with high-level UA and low-level Hcy; Group 3: patients with high-level Hcy and low-level of UA; Group 4: patients with both high-level of Hcy and UA.