

A Simple Clinical Risk Score (C₂HES_T) for Predicting Incident Atrial Fibrillation in Asian Subjects

Derivation in 471,446 Chinese Subjects, With Internal Validation and External Application in 451,199 Korean Subjects

Yan-Guang Li, MD, PhD; Daniele Pastori, MD, PhD; Alessio Farcomeni, PhD; Pil-Sung Yang, MD; Eunsun Jang, MD; Boyoung Joung, MD, PhD; Yu-Tang Wang, MD, PhD; Yu-Tao Guo, MD, PhD; and Gregory Y. H. Lip, MD

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e-Appendix 1.

AF was diagnosed upon an ECG or Holter recording (ICD-9 codes: 427.31 or ICD10 codes: I48). Rheumatic valvular disease (ICD-9 codes: 393-398; ICD-10 codes: I05, I06, I07, I09.9), dilated cardiomyopathy (ICD-9 codes: 425.4; ICD-10 codes: I42.0), HF (ICD-9 codes: 428; ICD-10 codes: I42, I50, I110, I819), CAD (ICD-9 codes: 410-414; ICD-10 codes: I20-I25), hyperthyroidism (ICD-9 codes: 242; ICD-10 codes: E05), hypothyroidism (ICD-9 codes: 244; ICD-10 codes: E03), COPD (ICD-9 codes: 490-496; ICD-10 codes: J42, J44.0-9), hypertension (ICD-9 codes: 401-405; ICD-10 codes: I10-I15), renal dysfunction (ICD-9 codes: 585, 586; ICD-10 codes: M1A.3), IS (ICD-9 codes: 436; ICD-10 codes: I63), hyperlipidemia (ICD-9 codes: 272.4; ICD-10 codes: E78.0-3, E78.5), myocardial infarction (ICD-9 codes: 410; ICD-10 codes: I21, I22), peripheral vascular disease (ICD-9 codes: 440.2; ICD-10 codes: I65, I70-74), diabetes mellitus (ICD-9 codes: 249-250; ICD-10 codes: E10-E14).

e-Table 1. Baseline characteristics of subjects in the validation cohort

Characteristics	Total subjects (n=451,199)	Subjects without AF (n=439,056)	Subjects with incident AF (n=12,143)	P value
Age, mean (SD), y	56.1 (9.3)	55.9 (9.3)	62.3 (9.9)	<0.001
Male sex, No. (%)	243,503 (54.0)	236220 (53.8)	7283 (60.0)	<0.001
Comorbidities				
Hypertension	143,168 (31.7)	136586 (31.1)	6582 (54.2)	<0.001
Diabetes mellitus	37,372 (8.3)	35752 (8.1)	1620 (13.3)	<0.001
Coronary artery disease	9,946 (2.2)	9029 (2.1)	917 (7.6)	<0.001
Hyperlipidemia	45,012 (10.0)	43234 (9.8)	1778 (14.6)	<0.001
Vascular disease	13,656 (3.0)	12837 (2.9)	819 (6.7)	<0.001
COPD	44,470 (9.9)	42120 (9.6)	2350 (19.4)	<0.001
Previous ischemic stroke	14,980 (3.3)	14072 (3.2)	908 (7.5)	<0.001
Renal dysfunction	3,461 (0.8)	3267 (0.7)	194 (1.6)	<0.001
Systolic heart failure	5,515 (1.2)	5082 (1.2)	433 (3.6)	<0.001
Thyroid disease	2,477 (0.6)	2382 (0.5)	95 (0.8)	<0.001
CHA₂DS₂-VASc score, median (IQR)	0 (0-1)	0 (0-1)	1 (0-2)	<0.001