**Supplementary Table 1**. Specification for full model

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| --- | --- | --- |
| **Variable** (collected at the time of enrollment) | **GARFIELD-AF Definition** | **ORBIT-AF Definition** |
| Age in years | Age at the time of diagnosis | Age at the time of enrollment into the registry |
| Pulse | Pulse (bpm) | Pulse (bpm) |
| Systolic Blood Pressure | Systolic Blood Pressure (mm Hg) | Systolic Blood Pressure (mm Hg) |
| Body Mass Index (kg/m2) | weight (kg)/[height (m)]2 | weight (kg)/[height (m)]2 |
| Vascular disease | Myocardial infarction or unstable angina or peripheral aortic or artery disease | History of coronary artery disease or peripheral vascular disease |
| Diabetes | Medical history of diabetes | Medical history of diabetes |
| Cirrhosis | Medical history of cirrhosis | Medical history of alcohol abuse |
| Peripheral Vascular disease | Medical history of peripheral aortic or artery disease | Medical history of peripheral vascular disease |
| Stroke | Medical history of stroke | Medical history of stroke |
| Bleed | Medical history of bleeding | Medical history of gastrointestinal bleeding |
| Heart Failure | Medical history of heart failure or an ejection fraction < 40. If ejection fraction is not available, use medical history of heart failure only. | Medical history of heart failure or an ejection fraction of < 40. If ejection fraction is not available, use medical history of heart failure only. |
| Chronic kidney disease | Chronic kidney disease levels of III-V. | eGFR < 60 with eGFR estimated using the MDRD method. |
| Sleep Apnea | Sleep apnea | Obstructive sleep apnea |
| Asia | China, India, Japan, Korea, Thailand, Singapore | 0 |
| Other Region | Australia, New Zealand, South Africa | 0 |
| Race Ethnicity =Black/ Mixed/ Other | (Afro-Caribbean, Mixed race, Other) versus (Caucasian, Hispanic/Latino, Asian) | (Black / African-American, American Indian, Native Hawaiian, Other) versus (Caucasian, Asian) |
| Paroxysmal Atrial fibrillation | Type of atrial fibrillation is paroxysmal at the time of enrolment | Type of atrial fibrillation is paroxysmal at the time of enrollment |
| Oral anti-coagulant use | At enrolment, patient is given or already taking a Vitamin K antagonist or Rivaroxaban or Apixaban or Endoxaban or Dibigatran. | At enrolment, patient is given or already taking Wafarin or Rivaroxaban or Apixaban or Endoxaban or Dibigatran. |

The following formulas can be used to predict the one year risk of each event:

* **All-cause mortality** =

1-[0.986906349 exp(0.054469698\*(age-60) + 0.007435872\*(pulse-80) -0.008242105\*(systolic blood pressure -120)

-0.043376577\* (body mass index-35) + 0.275702906\*vascular disease + 0.273433802\*diabetes + 0.958511573\*cirrhosis

+ 0.163472077\*peripheral vascular disease + 0.329901048\*stroke + 0.412632047\* bleed + 0.786437841\*heart failure

+ 0.50730543\*chronic kidney disease + 0.560397093\*sleep apnea -0.457744013\*Asia + 0.41836108\*Other Region

+ 0.31701408\* Black, Mixed, Other Race -0.368534524\*paroxysmal atrial fibrillation -0.443620343\*Oral Anticoagulant)]

* **All-cause mortality reduced model** =

1-[0.984417795 exp(0.060208102\*(age-60) 0.008235567\*(pulse-80) -0.008211021\*(systolic blood pressure -120) + 0.406906988\*vascular disease + 0.512334926\* bleed + 0.780055766\*heart failure + 0.554435057\*chronic kidney -0.422166311\*Oral Anticoagulant)]

* **Ischemic stroke or systemic embolism** =

1-[0.991344397 exp(0.03048226\*(age-60) + 0.952524717\*stroke + 0.432357326\* bleed + 0.319129628\*heart failure + 0.574919171\*chronic kidney disease + 0.654249546\*Other Region + 0.671380382\*Black/ Mixed/ Other race -0.582045773\* Oral Anticoagulant)].

* **Hemorrhagic stroke or major bleed**

= 1-[0.994488926exp(0.0389958\*(age-60) + 0.515013074\*vascular disease + 0.577378429\*chronic kidney disease)]