

Figure 1. Cumulative incidence of ESRD amongst participants with non-AF, prevalent AF and incident AF.

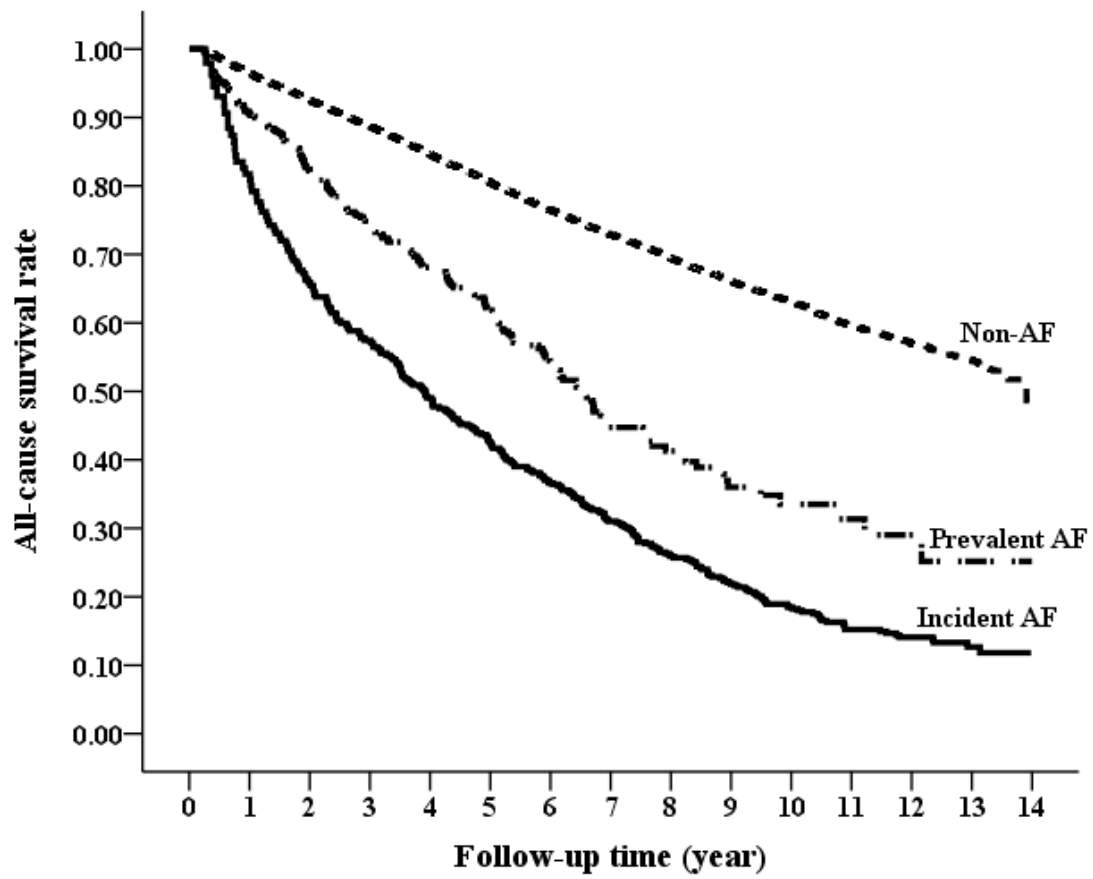


Figure S2: Cumulative survival curves amongst participants with non-AF, prevalent AF and incident AF.

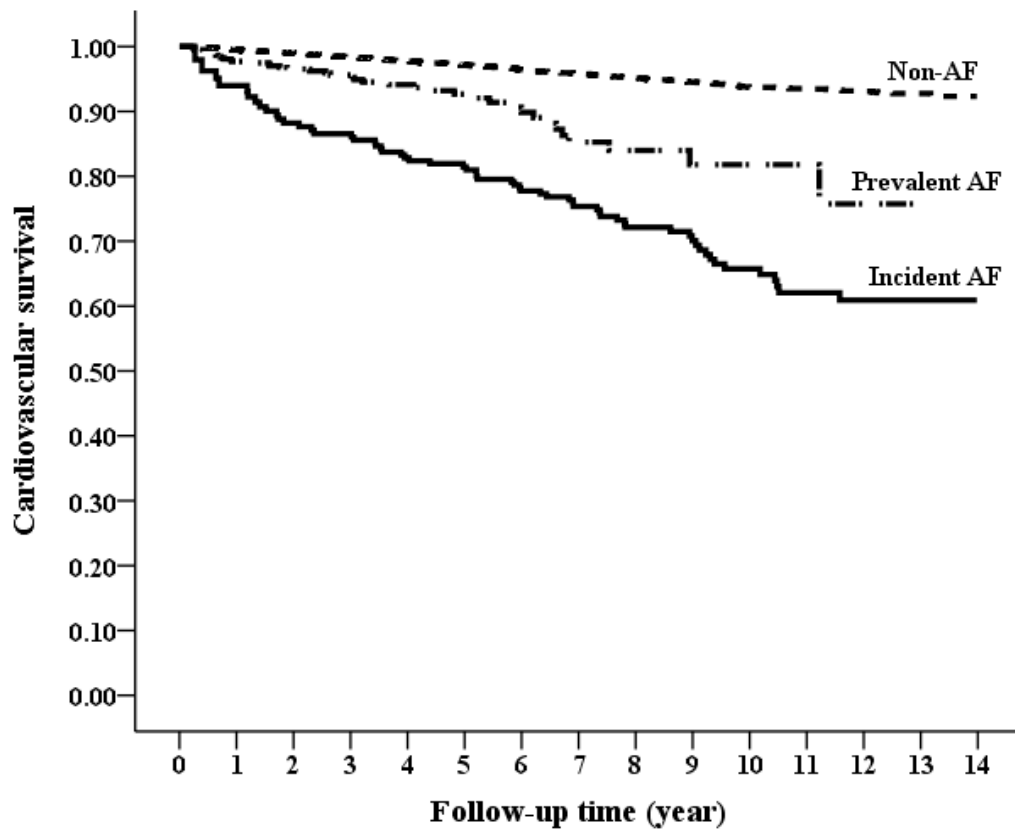


Figure S3: Cumulative survival curves free of cardiovascular death amongst participants with non-AF, prevalent AF and incident AF.

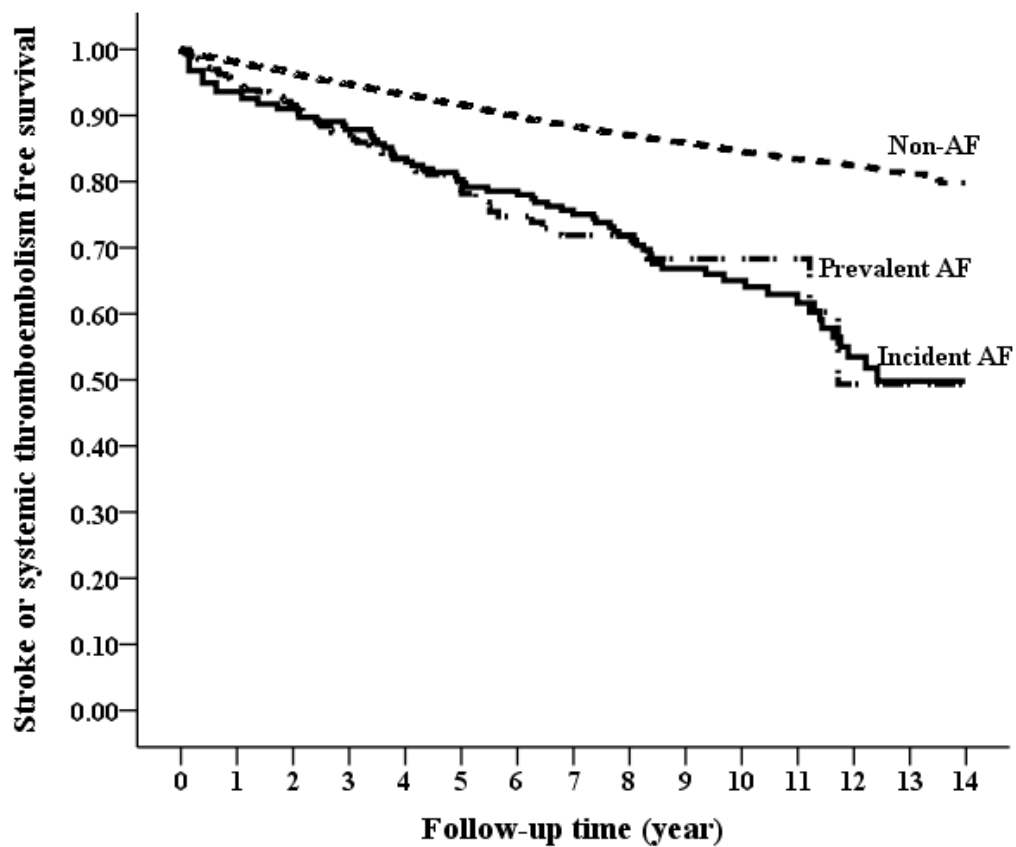


Figure S4: Cumulative survival curves free of stroke of systemic thromboembolism amongst participants with non-AF, prevalent AF and incident AF.

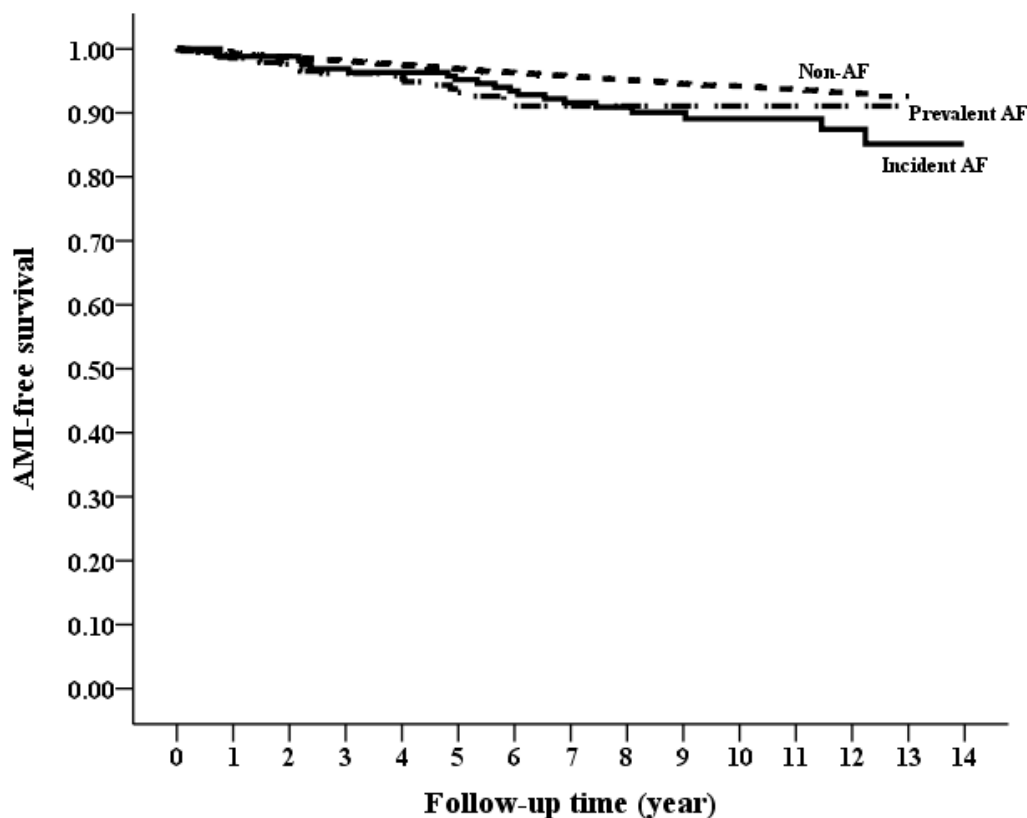


Figure S5: Cumulative survival curves free of acute myocardial infarction amongst participants with non-AF, prevalent AF and incident AF.

Supplementary Table 1. ICD-9-CM codes used to identify chronic kidney disease, atrial fibrillation, comorbidities and the cause of death.

| Diseases | Corresponding ICD-9-CM codes |
|-----------------------------|------------------------------------|
| Chronic kidney disease | 585.x |
| Atrial fibrillation | 427.31 |
| Acute myocardial infarction | 410, 429.5, 429.6, 429.71, 429.79 |
| Co-morbid diseases | |
| Coronary artery disease | 410.x–414.x |
| COPD | 491.x, 492.x, 496.x |
| Cancer | 140-165, 170-172, 174-195, 200-208 |
| Cirrhosis | 571 |
| Dementia | 290 |
| Rheumatoid disease | 446.5, 710, 714, 725 |
| Peptic ulcer disease | 531-534 |

CHA2DS2-VASc

| | |
|-----------------------------|---|
| Heart failure | 428.x |
| Hypertension | 401.x–405.x |
| Diabetes mellitus | 250.x |
| Ischemic stroke | 433, 434 |
| Transient ischemic attack | 435.9, 435.2, 435.8 |
| Peripheral artery embolism | 444 |
| Pulmonary embolism | 415.0, 415.9 |
| Acute myocardial infarction | 410, 429.5, 429.6, 429.71, 429.79 |
| Aortic plaque | 440.0, 440.2, 440.30, 440.31, 440.32, 440.71, 440.8, 440.9, 441, 443.9, 443.91 |

Causes of Death

| | |
|----------------------|--|
| Cardiovascular death | 390.x – 398.x, 410.x – 414.x, 4151, 41511, 41519, 420.x, 422.x – 429.x, 431.x, 433.x – 436.x, 518.4, 785.51 |
|----------------------|--|

Abbreviation: COPD, chronic obstructive pulmonary disease; ICD-9-CM, International Classification of Disease, 9th Revision, Clinical Modification.

Supplementary Table 2. Risks for ESRD, stroke or systemic thromboembolism, acute myocardial infarction and mortality among patients with CKD by AF status after re-classification of incident AF as prevalent AF (non-AF as the reference)

| | Within 30 days | | Within 90 days | | Within 180 days | |
|------------------------------------|-----------------|---------|-----------------|---------|-----------------|---------|
| | aHR (95% CI) | P-value | aHR (95% CI) | P-value | aHR (95% CI) | P-value |
| ESRD | | | | | | |
| Non-AF | 1 | | 1 | | 1 | |
| Prevalent AF | 1.47(1.39,1.55) | <.0001 | 1.41(1.34,1.50) | <.0001 | 1.62(1.53,1.71) | <.0001 |
| Incident AF | 3.27(3.08,3.48) | <.0001 | 3.73(3.50,3.97) | <.0001 | 3.24(3.03,3.47) | <.0001 |
| Stroke | | | | | | |
| Non-AF | 1 | | 1 | | 1 | |
| Prevalent AF | 1.75(1.63,1.88) | <.0001 | 1.77(1.65,1.90) | <.0001 | 1.76(1.64,1.89) | <.0001 |
| Incident AF | 1.49(1.37,1.62) | <.0001 | 1.46(1.34,1.59) | <.0001 | 1.61(1.47,1.76) | <.0001 |
| Acute myocardial infarction | | | | | | |
| Non-AF | 1 | | 1 | | 1 | |
| Prevalent AF | 1.08(0.95,1.23) | 0.260 | 1.01(0.89,1.15) | 0.8473 | 1.01(0.89,1.15) | 0.892 |
| Incident AF | 1.75(1.54,2.00) | <.0001 | 1.95(1.70,2.23) | <.0001 | 2.16(1.88,2.48) | <.0001 |
| All-cause mortality | | | | | | |
| Non-AF | 1 | | 1 | | 1 | |
| Prevalent AF | 1.70(1.62,1.79) | <.0001 | 1.78(1.70,1.87) | <.0001 | 1.77(1.69,1.86) | <.0001 |
| Incident AF | 2.29(2.17,2.41) | <.0001 | 2.22(2.10,2.34) | <.0001 | 2.30(2.17,2.43) | <.0001 |
| CV mortality | | | | | | |
| Non-AF | 1 | | 1 | | 1 | |
| Prevalent AF | 3.22(2.85,3.63) | <.0001 | 3.46(3.08,3.89) | <.0001 | 3.38(3.01,3.79) | <.0001 |

| | | | | | | |
|-------------|-----------------|--------|-----------------|--------|-----------------|--------|
| Incident AF | 4.81(4.25,5.43) | <.0001 | 4.75(4.19,5.39) | <.0001 | 4.98(4.38,5.67) | <.0001 |
|-------------|-----------------|--------|-----------------|--------|-----------------|--------|

CI, confidence interval; HR, hazard ratio; CKD, chronic kidney disease; AF, atrial fibrillation.

aHR was calculated from adjustment for all variables in Table 1 with medications (aspirin / clopidogrel and warfarin) treated as time-dependent variables