

Why do clinicians prescribe oral anticoagulation in patients with atrial fibrillation despite a low CHA₂DS₂-VASc score?

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BACKGROUND

- Oral anticoagulation (OAC) is prescribed in ~40% of patients with atrial fibrillation (AF) and low thrombo-embolic risk (i.e., CHA₂DS₂-VASc score 0 [men] or 1 [women]).
- Guidelines recommend against OAC in such patients as the annual thrombo-embolic risk (<1%) is outweighed by the bleeding risk.
- Determinants of the clinical decision to prescribe OAC for patients with low thrombo-embolic risk are poorly understood.

PURPOSE

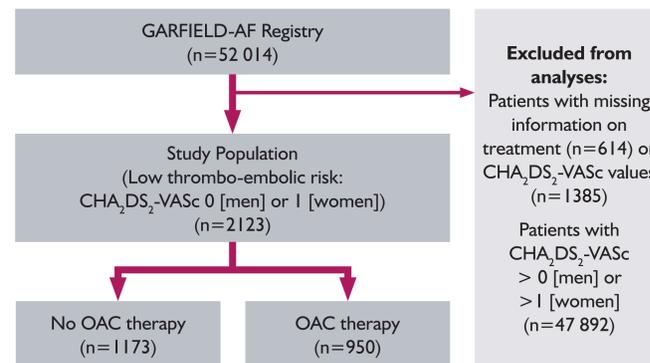
- To identify patient characteristics associated with OAC use in newly diagnosed AF despite a low thrombo-embolic risk.
- To gain insight in prescription decisions for OAC therapy in AF despite a low thrombo-embolic risk.

METHODS

- Global Anticoagulant Registry in the FIELD–Atrial Fibrillation (GARFIELD-AF)
 - Prospective international registry of recently (<6 weeks) diagnosed AF with at least one risk factor for stroke according to treating physician
 - Patients were enrolled between March, 2010 and August, 2016
 - Subgroup analysis was conducted in patients with low thrombo-embolic risk
 - Men with CHA₂DS₂-VASc = 0
 - Women with CHA₂DS₂-VASc = 1
 - Predictors of OAC prescribing was evaluated by logistic regression. Variables applied were: age, body mass index (BMI), gender, world region, type of AF, antiplatelet therapy, year of enrollment, smoking status, hypercholesterolemia, race, and alcohol use
 - The following outcomes are calculated as event rates per 100 person years with 95% confidence (CI) intervals. P values are calculated with a log-rank test
 - All-cause mortality
 - Ischaemic stroke or systemic embolism
 - Major bleeding
- An anonymous, web-based survey was conducted in clinicians caring for AF patients in the UK, France, Belgium, Portugal and Canada
 - Includes items not included in CHA₂DS₂-VASc score influencing decision of OAC prescription, developed from literature search and input from experts, piloted among 40 physicians and revised
 - Examines tendency towards OAC prescription (5-point Likert scale)
 - Percentage of respondents reporting some or strong preference towards OAC prescription despite low thrombo-embolic risk

RESULTS

Figure 1. Patient population from the GARFIELD-AF registry



OAC=oral anticoagulation

Table 1. Patient characteristics associated with OAC use (GARFIELD-AF registry)

Patient Characteristic	OR (95% CI)
Permanent versus new AF	2.32 (1.52 – 3.56)
Persistent versus new AF	3.08 (2.17 – 4.38)
Increasing age for <65 y/o patients*	1.34 (1.20 – 1.50)
Heavy vesus no alcohol use	1.97 (1.13 – 3.43)
Concomitant antiplatelet therapy	0.08 (0.07 – 0.11)
Gender, women	0.71 (0.56 – 0.91)

CI=Confidence Interval, OR=Odds Ratio.
*Odds ratio per 10-year increments.

Figure 2. Clinical outcomes according to OAC use (GARFIELD-AF registry)

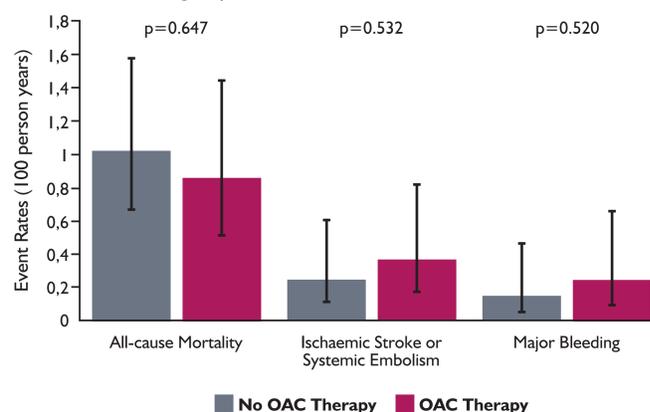
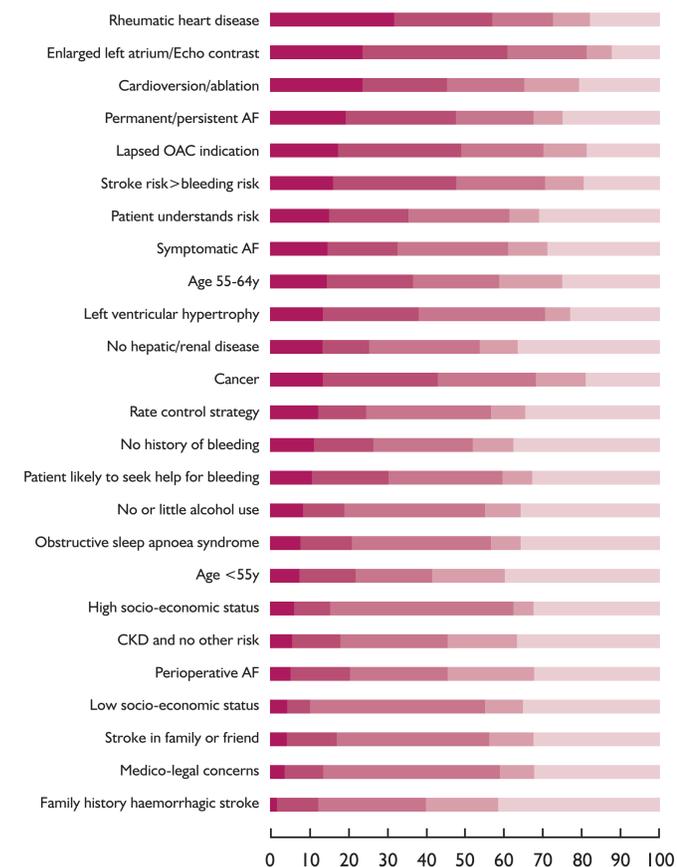


Figure 3. Reasons to treat patients at low thrombo-embolic risk with OAC therapy (Physician survey results; n = 229)



■ Strong preference to prescribe anticoagulant
■ Some preference to prescribe anticoagulation
■ Neutral
■ Some preference to withhold anticoagulant
■ Strong preference to withhold anticoagulation

Table 2. Percentage of respondents reporting some or strong preference towards OAC prescription despite low thrombo-embolic risk (Physician survey results; n = 229)

Risk Factor Combinations	Reach, n (%)
Enlarged left atrium or spontaneous echo contrast	137 (59.8)
Previous + cardioversion or ablation procedures	165 (72.1)
Previous + rheumatic heart disease	183 (79.9)
Previous + subjective fear of stroke by the patient	192 (83.8)

CONCLUSIONS

- Persistent or permanent AF, older age among those <65 years, and heavy alcohol use are associated with OAC use in AF despite low thrombo-embolic risk.
- In patients at low thrombo-embolic risk, female gender and concomitant antiplatelet therapy are inversely associated with OAC use.
- Rates of ischaemic stroke or systemic embolism and major bleeding are very low in men/women with CHA₂DS₂-VASc = 0/1, irrespectively of OAC use.
- Among reasons listed in the web-based survey, physicians frequently report risk factors for stroke not included in the CHA₂DS₂-VASc score as the reason to prescribe OAC therapy despite low thrombo-embolic risk.

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DECLARATION OF INTEREST

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