AF Stroke Prevention Through Screening, Intervention and Patient Choice

Dr Matthew Fay

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GP Partner Westcliffe Medical Group
Trustee AF Association
Trustee Thrombosis UK
Declaration of interests

• Funding has be variously given to my practice by: Abbot, Bayer, Boehringer-Ingelheim, Bristol Myers Squibb, Dawn 4S, INRStar, Medtronic, Oberoi Consulting, Pfizer, Roche, Sanofi-Aventis, Servier

• I am an advisor to: Anticoagulation Europe, AF Association, Arrhythmia Alliance, Heart Valve Voice, National Stroke Association, Syncope Trust

• I am a trustee of AF Association and ThrombosisUK
Learning objectives

• Understand the case for screening

• The importance of intervention

• Involving the patient in the decision to treat
Screening
Who is this?
Who is this?

- The Yellow Emperor - First to describe AF
Who is this?

• Mentioned in the Classic of Internal Medicine ‘Huang Ti Nei Ching Su Wen’
Wilson and Jungner Criteria for Screening

UK National Screening Committee:

• Criteria for appraising the viability, effectiveness and appropriateness of a screening programme

• Ideally all the following criteria should be met before screening for a condition is initiated:
The Condition

- The condition should be an important health problem

- The epidemiology and natural history of the condition, including development from latent to declared disease, should be adequately understood and there should be a detectable risk factor, disease marker, latent period or early symptomatic stage.

- All the cost-effective primary prevention interventions should have been implemented as far as practicable.
The Test

- There should be a simple, safe, precise and validated screening test.

- The distribution of test values in the target population should be known and a suitable cut-off level defined and agreed.

- The test should be acceptable to the population.

- There should be an agreed policy on the further diagnostic investigation of individuals with a positive test result and on the choices available to those individuals.
The Treatment

- There should be an effective treatment or intervention for patients identified through early detection, with evidence of early treatment leading to better outcomes than late treatment.

- There should be agreed evidence based policies covering which individuals should be offered treatment and the appropriate treatment to be offered.

- Clinical management of the condition and patient outcomes should be optimised in all health care providers prior to participation in a screening programme.
The Screening Programme

- There should be evidence from high quality Randomised Controlled Trials that the screening programme is effective in reducing mortality or morbidity.
- There should be evidence that the complete screening programme (test, diagnostic procedures, treatment/intervention) is clinically, socially and ethically acceptable to health professionals and the public.
- The benefit from the screening programme should outweigh the physical and psychological harm (caused by the test, diagnostic procedures and treatment).
- The opportunity cost of the screening programme (including testing, diagnosis and treatment, administration, training and quality assurance) should be economically balanced in relation to expenditure on medical care as a whole.
Screening for Atrial Fibrillation

• The Condition
  • Why AF is important

• The Test
  • Find patients with AF
  • Confirm the diagnosis of AF

• The Treatment
  • Assess risk of thromboembolic event
  • Decide on treatment and initiate anticoagulation
Framingham
Who is this?
Who is this?

- Johann Jakob Wepfer
Patients with AF have a five fold increased risk of stroke

12,500 strokes /yr attributable to AF in UK

Attributable risk:
- 1.5% in 50-59yr old
- 23.5% 80-89 yr old
Warfarin reduces incidence of stroke by about 64%
BAFTA
Thromboprophylaxis in the elderly – the BAFTA study

Warfarin versus aspirin for stroke prevention in an elderly community population with atrial fibrillation (the Birmingham Atrial Fibrillation Treatment of the Aged Study, BAFTA): a randomised controlled trial

Mant J, Hobbs FDR, Fletcher K et al
Lancet 2007;370:493-503
SAFE
SAFE

Screening versus routine practice in detection of atrial fibrillation in patients aged 65 or over: cluster randomised controlled trial

Fitzmaurice DA, Hobbs FDR, Jowett et al

BMJ 2007;335;383-9
Enrolment

Practices enrolled (n=50)

Cluster randomisation

Allocation for cluster randomisation

Intervention practices (n=25):
Total eligible population aged ≥65=33 187
(range 90-2726/practice)

Control practices (n=25):
Total eligible population aged ≥65=21 786
(range 149-2496/practice)

Random sampled population
cluster size (82-440)

Individual randomisation

Allocation for individual randomisation

Systematic arm: 4933 patients allocated to total population systematic arm

Excluded by practices (n=500)

Invited for electrocardiography (n=4433)
Electrocardiography performed (n=2357)
Known cases of atrial fibrillation at baseline (n=339)
Case notes unavailable for analysis (n=32)

Opportunistic arm: 4933 patients allocated to opportunistic screening arm

Excluded by practices (n=195)

Notes flagged (n=4738)
Pulses recorded (n=3278)
Electrocardiography performed (n=2338)
Known cases of atrial fibrillation at baseline (n=340)
Case notes unavailable for analysis (n=18)

Control arm:
Cluster size: 136-200, average 197

Patients allocated to control arm (n=4936)

Follow-up

New cases detected (n=74, range 0-8, average 2.96/cluster)

New cases detected (n=75, range 0-8, average 3.0/cluster)

New cases detected (n=47, range 0-5, average 1.88/cluster)

Analysis

Patients' notes unavailable for analysis (n=34)
SAFE: Cost Effectiveness
SAFE study – cost effectiveness

A randomised controlled trial and cost-effectiveness study of systematic screening (targeted and total population screening) versus routine practice for the detection of atrial fibrillation in people aged 65 and over. The SAFE study.

Hobbs FDR, Fitzmaurice DA, Jowett S et al.

Health Technology Assessment

Incremental cost-effectiveness ratio for opportunistic screening of £337 for each additional case detected compared to control
Take the Opportunity

AN IRREGULAR PULSE CAN KILL

DON'T LEAVE IT TO CHANCE

British Heart Foundation
Who is this?
Who is this?

- Alexander Muirhead
Who is this?
Who is this?

• Willem Einthoven
SAFE:
ECG
Confirm the Diagnosis of Atrial Fibrillation
ECG Interpretation – SAFE Study

Accuracy of diagnosing atrial fibrillation on electrocardiogram by primary care practitioners and interpretative diagnostic software: analysis of data from screening for atrial fibrillation in the elderly (SAFE) trial

Mant J, Fitzmaurice DA, Hobbs FDR et al
BMJ 2007 Aug 25; 335-41
ECG Screen - AF Patients at Stroke Risk

prevalence of AF ≥ 65 years 6.7% and incidental in 0.7%

Characteristics of patients with known and incidental AF

<table>
<thead>
<tr>
<th></th>
<th>All patients (n = 2802)</th>
<th>Patients ≥ 65 (n = 1459)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Known AF</td>
<td>incidental</td>
</tr>
<tr>
<td>N (%)</td>
<td>100 (3.6%)</td>
<td>12 (0.4%)</td>
</tr>
<tr>
<td>Age (mean ± SD)</td>
<td>76 ± 9</td>
<td>71 ± 9</td>
</tr>
<tr>
<td>Gender (% male)</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td>Palpitations (%)</td>
<td>25%</td>
<td>17%</td>
</tr>
<tr>
<td>Resting heart rate (mean ± SD)</td>
<td>78 ± 18</td>
<td>84 ± 21</td>
</tr>
<tr>
<td>CHADS2 score (mean ± SD)</td>
<td>2.5 ± 1.2</td>
<td>1.9 ± 1.5</td>
</tr>
<tr>
<td>CHA2DS2VASc score (mean ± SD)</td>
<td>4.2 ± 1.8</td>
<td>3.3 ± 2.2</td>
</tr>
<tr>
<td>CHADS2 ≥ 2 on OAC, n (%)</td>
<td>52 (65%)</td>
<td>0</td>
</tr>
<tr>
<td>CHA2DS2VASc ≥ 2 on OAC, n (%)</td>
<td>53 (65%)</td>
<td>0</td>
</tr>
</tbody>
</table>

CHADS2 score in patients >65

Prevalence of Unknown AF Patients with Risk Factors

- 132 adult patients (76 male; age: $64 \pm 14$, mean $\pm$ SD) without known AF
- Screened in diabetes, hypertension, and dyslipidemia clinics
- 76 outpatients and 56 stroke survivors
- Simple patient-operated, single-channel ECG recorder (Omron hcg-801-e).

% of patients screened

- Hypertension
- 2 risk factors or stroke
- Stroke hypertension and diabetes

AF Detection with Modified BP Monitor

An oscillometric automatic blood pressure monitor (model BP3MQ1-2D; Microlife USA)


<table>
<thead>
<tr>
<th>Device reading</th>
<th>ECG</th>
<th>Sensitivity (%)</th>
<th>Specificity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AF</td>
<td>Non-AF</td>
<td></td>
</tr>
<tr>
<td>Irregular</td>
<td>266</td>
<td>127</td>
<td>95.3</td>
</tr>
<tr>
<td>Regular</td>
<td>13</td>
<td>809</td>
<td>(92.8–97.6)</td>
</tr>
</tbody>
</table>

Comparison of the three-sequential device readings to the ECG rhythm

<table>
<thead>
<tr>
<th>Device reading</th>
<th>ECG</th>
<th>Sensitivity (%)</th>
<th>Specificity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AF</td>
<td>Non-AF</td>
<td></td>
</tr>
<tr>
<td>Irregular</td>
<td>90</td>
<td>35</td>
<td>96.8</td>
</tr>
<tr>
<td>Regular</td>
<td>3</td>
<td>277</td>
<td>(91–99)</td>
</tr>
</tbody>
</table>
### AF Detection on iPhone ECG

<table>
<thead>
<tr>
<th></th>
<th>Sensitivity</th>
<th>Specificity</th>
<th>Accuracy</th>
<th>Kappa</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning set (n = 109)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiologist A</td>
<td>100%</td>
<td>90%</td>
<td>94%</td>
<td>0.87</td>
</tr>
<tr>
<td>Cardiologist B</td>
<td>95%</td>
<td>94%</td>
<td>95%</td>
<td>0.88</td>
</tr>
<tr>
<td>Original algorithm</td>
<td>87%</td>
<td>97%</td>
<td>94%</td>
<td>0.86</td>
</tr>
<tr>
<td>Optimized algorithm</td>
<td>100%</td>
<td>96%</td>
<td>97%</td>
<td>0.94</td>
</tr>
<tr>
<td><strong>Validation set (n = 204)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimized algorithm</td>
<td>98%</td>
<td>97%</td>
<td>97%</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Algorithm was optimized by increasing weighting of absence of P waves

MyDiagnostick

- Acquires a one minute ECG (Lead I)
- Performs ECG analysis and provides diagnostic outcome directly after ECG acquisition
- Diagnostic outcome is simply red (AF) or green (No AF) easy interpreted by physician and patient
- Web-portal for ECG viewing, storage and management

- 573 patients ≥ 65 years old attending flu clinic and 95 patients had an irregular pulse
- 21 had prior AF, 68 were invited for ECG and 39 attended
- 2 new cases of AF were diagnosed

  Rhys GC, et al. Keele University, UK

- 61 pts (age 70.1±5.2 years) of 676 pts (age 74±7.1 years) attending for flu vaccine had AF
- Correct diagnosis in 55 pts (prevalence 8.1%)
- 44 pts (6.5%) were known with AF, but 11 pts (1.6%) were not
- Mean CHA₂DS₂-VASc-score of 3

  Tieleman R et al, Europace 2014 – in press
Action in the Community

Know Your Pulse Campaign

46,000 new cases of atrial fibrillation are diagnosed each year which cause around 12,500 strokes each year. Improving diagnosis and anticoagulation therapy would prevent 4,500 strokes each year and 3,000 deaths.

Together we are calling on the Government to introduce pulse checks to screen for atrial fibrillation in:
- NHS Health Check
- Flu vaccination clinics

This could help prevent 4,500 strokes and 3,000 deaths per year.

Support Our Campaign

Take two minutes to help us introduce pulse checks in the NHS and bring our heart to life.

Email your MP to ask them to support the Know Your Pulse campaign.

To get started, simply enter your postcode:

Enter your postcode

PARTICIPATE

1616 People have downloaded the app so far

Pulse Check App

Download the FREE iPhone App

Go »
Intervention
Warfarin vs Placebo in Stroke Prevention in AF

AFASAK-1
SPAF
BAATAF
CAFA
SPINAF
EAFT
ALL Trials

Warfarin reduces incidence of stroke by about 64%

Bleeding Risk
Stroke Prevention in AF

Balancing the benefits and risks

Stroke risk

Bleeding risk
## Risk factors for stroke and thrombo-embolism in non-valvular AF

### Clinically relevant non-major risk factors

<table>
<thead>
<tr>
<th>Major risk factors</th>
<th>Clinically relevant non-major risk factors</th>
</tr>
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<tr>
<td>Previous stroke</td>
<td>CHF or moderate to severe LV systolic dysfunction [e.g. LV EF ≤40%]</td>
</tr>
<tr>
<td>TIA or systemic embolism</td>
<td>Hypertension</td>
</tr>
<tr>
<td>Age ≥75 years</td>
<td>Diabetes mellitus</td>
</tr>
</tbody>
</table>

### Other risk factors

- Hypertension
- Diabetes mellitus
- Age 65–74 years
- Female sex
- Vascular disease

*European Heart Journal* 2010;31:2369–2429
Risk factors for stroke and thrombo-embolism in non-valvular AF Clinically relevant non-major risk factors

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<tr>
<td>Age ≥75 years</td>
<td>Diabetes mellitus</td>
</tr>
<tr>
<td></td>
<td>Age 65–74 years</td>
</tr>
<tr>
<td></td>
<td>Female sex</td>
</tr>
<tr>
<td></td>
<td>Vascular disease</td>
</tr>
</tbody>
</table>
NICE June 2015—bleeding risk assessment using HAS-BLED

• HAS-BLED score:
  – allows clinicians to make informed assessment of bleeding risk
  – makes clinicians think of the correctable risk factors for bleeding
  – has been validated in several independent cohorts
  – correlates well with ICH risk

• High HAS-BLED score *per se* should not be used to exclude patients from OAC therapy
Clinical characteristics comprising the HAS-BLED bleeding risk score

<table>
<thead>
<tr>
<th>HAS-BLED risk criteria</th>
<th>Points awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension (i.e. Uncontrolled BP)</td>
<td>1</td>
</tr>
<tr>
<td>Abnormal renal and liver function (1 point each)</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Stroke</td>
<td>1</td>
</tr>
<tr>
<td>Bleeding</td>
<td>1</td>
</tr>
<tr>
<td>Labile INRs</td>
<td>1</td>
</tr>
<tr>
<td>Elderly (e.g. age &gt;65 years, frail condition)</td>
<td>1</td>
</tr>
<tr>
<td>Drugs or alcohol (1 point each)</td>
<td>1 or 2</td>
</tr>
</tbody>
</table>

Maximum 9 points
Risk of intracranial bleeding by HASBLED

Risk of major bleeding by HASBLED

OAC only  Aspirin only
Falls as a risk
Choosing Antithrombotic Therapy for Elderly Patients With Atrial Fibrillation Who Are at Risk for Falls

Malcolm Man-Son-Hing, MD, MSc, FRCP; Graham Nichol, MD, MPH, FRCP; Anita Lau, Andreas Lampakis, MD, MSc, FRCP

Objective: To determine whether the risk of falling (with a possible increased chance of subdural hematoma) should influence the choice of antithrombotic therapy in elderly patients with atrial fibrillation.

Design: A Markov decision analytic model was used to determine the preferred treatment strategy (no antithrombotic therapy, long-term aspirin use, or long-term warfarin use) for patients with atrial fibrillation who are ≥65 years of age and older, are at risk for falling, and have no other contraindications to antithrombotic therapy. Input data were obtained by systematic review of MEDLINE. Outcomes were expressed as quality-adjusted life-years.

Results: For patients with average risks of stroke and falling, warfarin therapy was associated with 12.60 quality-adjusted life-years per patient; aspirin therapy, 11.17 quality-adjusted life-years; and no antithrombotic therapy, 10.15 quality-adjusted life-years. Sensitivity analysis demonstrated that, regardless of the patients' age or baseline risk of stroke, the risk of falling was not an important factor in determining their optimal antithrombotic therapy.

Conclusions: For elderly patients with atrial fibrillation, the choice of optimal therapy to prevent stroke depends on many clinical factors, especially their baseline risk of stroke. However, patients' propensity to fall is not an important factor in this decision.

Arch Intern Med. 1999;159:677-685

Approximately 5% of persons 65 years of age and older have atrial fibrillation. Their average yearly risk of stroke is 5%, and this risk is increased in the presence of certain risk factors, including left ventricular dysfunction, hypertension, a history of stroke, and increasing age. Long-term antithrombotic therapy with warfarin or aspirin reduces these patients' chance of stroke by 88% and 21%, respectively. There is no convincing evidence that these relative risk reductions vary according to patients' baseline chance of stroke. Therefore, among all age groups, elderly persons receive the greatest absolute benefit from warfarin or aspirin prophylaxis. In fact, an expert panel recommended that all elderly persons with atrial fibrillation should be considered for long-term warfarin therapy unless a contraindication exists. Balanced against this benefit is the risk of antithrombotic-associated, life-threatening bleeding complications, including subdural hematomas (SDHs) and intracerebral hemorrhages. These complications also increase with age.

Trauma to the head (often due to falls) may also be an etiologic factor in the development of SDHs. For this reason, many studies have evaluated the effectiveness and appropriateness of warfarin therapy in patients with atrial fibrillation who have excluded subjects with a predisposition to falls. Also, other studies have implicated aspirin use as a risk factor for development of SDHs in patients with head trauma. Thus, many physicians are reluctant to prescribe antithrombotic therapy (especially warfarin) for elderly patients with atrial fibrillation whom they deem at risk for falls. The objective of this decision analysis was to compare the benefits and risks of antithrombotic therapy (either warfarin or aspirin) in community-living, elderly persons with atrial fibrillation based on their risk of falls.

RESULTS

Of 190 relevant scientific studies reviewed, 49 met the inclusion criteria. Intracranial hemorrhages (both SDHs and intracerebral hemorrhages) were exceedingly uncommon events in prospective cohort...
Risk of Falls and Major Bleeds in Patients on Oral Anticoagulation Therapy

Jacques Donzé, MD, MSc,1 Carole Clair, MSc, MD,6 Balthasar Hug, MD, MBA, MPH,4 Nicolas Rodondi, MD, MAS,4 Gérard Waerber, MD, * Jacques Cornuz, MDPH,6 Drahomir Aujesky, MD, MSc4

Division of General Internal Medicine, Brigham and Women’s Hospital, Harvard Medical School, Boston, Mass; Department of Ambulatory Care and Community Medicine, University Hospital of Lausanne, Lausanne, Switzerland; Division of General Internal Medicine, University Hospital of Basel, Basel, Switzerland; Division of General Internal Medicine, Bern University Hospital, Bern, Switzerland; Division of General Internal Medicine, University Hospital of Lausanne, Lausanne, Switzerland.

ABSTRACT

BACKGROUND: The risk of falls is the most commonly cited reason for not providing oral anticoagulation, although the risk of bleeding associated with falls on oral anticoagulants is still debated. We aimed to evaluate whether patients on oral anticoagulation with high falls risk have an increased risk of major bleeding.

METHODS: We prospectively studied consecutive adult medical patients who were discharged on oral anticoagulants. The outcome was time to a first major bleed within a 12-month follow-up period adjusted for age, sex, alcohol abuse, number of drugs, concomitant treatment with antiplatelet agents, and history of stroke or transient ischemic attack.

RESULTS: Among the 515 enrolled patients, 35 patients had a first major bleed during follow-up (incidence rate: 7.5 per 100 patient-years). Overall, 308 patients (59.8%) were at high risk of falls, and these patients had a nonsignificantly higher crude incidence rate of major bleeding than patients at low risk of falls (8.0 vs 6.8 per 100 patient-years, P = .64). In multivariate analysis, a high falls risk was not statistically significantly associated with the risk of a major bleed (hazard ratio 1.09; 95% confidence interval, 0.54-2.31). Overall, only 3 major bleeds occurred directly after a fall (incidence rate: 0.6 per 100 patient-years).

CONCLUSIONS: In this prospective cohort, patients on oral anticoagulants at high risk of falls did not have a significantly increased risk of major bleeds. These findings suggest that being at risk of falls is not a valid reason to avoid oral anticoagulants in medical patients.

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KEYWORDS: Accidental falls; Adverse drug events; Anticoagulants; Hemorrhage; Risk factor

Despite their proven efficacy in both prevention and treatment of cardiovascular and cerebrovascular diseases, oral anticoagulants are under-prescribed.1-6 The most commonly cited reason for not providing oral anticoagulants is a risk of falls.5,6 Few prior studies, however, specifically address the question of whether a high falls risk is associated with major bleeds in patients receiving oral anticoagulants; these also are limited by retrospective design, a focus on special subpopulations such as inpatients or those with atrial fibrillation, and are based on falls risks as assessed by physician reports or International Classification of Diseases, 9th Revision, Clinical Modification codes.7,10 Moreover, patients at high risk of falls are themselves often excluded from clinical anticoagulation trials.11 Our aim was to prospectively evaluate whether medical patients on oral anticoagulants who are considered at high risk of falls based on 2 validated questions have an increased risk of major bleeds compared with patients at low risk of falls.
Falls as a risk

• Cost benefit analysis shows the number of falls on average likely to cause greater risk than benefits with warfarin = 295

• Beware fallers with significant injury
  – Major head injury with proven SDH
  – Major bruising resulting in surgery
Dementia as a risk


• No trials identify any specific increased risk of complications

• Suggestions that dementia is more common in people with AF
Frailty as a risk
Frailty as a risk

- 90y woman
- Lives in supervised accommodation
- Assistance with personal care (PADL)
- Assistance with shopping, messages (IADL)
Prospective study of a cohort of 220 acute inpatients aged ≥70 years with AF
Patients followed up at 6 months = 207
Frail = 130; Not Frail = 77

<table>
<thead>
<tr>
<th></th>
<th>Warfarin (n=83)</th>
<th>Antiplatelet (n=98)</th>
<th>None (n=26)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Haem</td>
<td>Stroke</td>
<td>Both</td>
</tr>
<tr>
<td>Frail</td>
<td>30%</td>
<td>7%</td>
<td>37%</td>
</tr>
<tr>
<td>Not Frail</td>
<td>19%</td>
<td>2%</td>
<td>21%</td>
</tr>
<tr>
<td>Total</td>
<td>23%</td>
<td>4%</td>
<td>27%</td>
</tr>
</tbody>
</table>
Patient Choice
<table>
<thead>
<tr>
<th>Reason</th>
<th>Apixaban (%)</th>
<th>Aspirin (%)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment that INR could be maintained in therapeutic range</td>
<td>17</td>
<td>17</td>
<td>X</td>
</tr>
<tr>
<td>Assessment that INR could not or was unlikely to be measured at requested intervals</td>
<td>43</td>
<td>43</td>
<td>X</td>
</tr>
<tr>
<td>Uncertainty about patients' ability to adhere to instructions regarding VKA Therapy</td>
<td>16</td>
<td>15</td>
<td>X</td>
</tr>
<tr>
<td>CHADS\textsubscript{2} score of 1 and VKA therapy not recommended by physician</td>
<td>21</td>
<td>22</td>
<td>X</td>
</tr>
<tr>
<td>Patients refusal to take VKA</td>
<td>38</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Multiple reasons for unsuitability of VKA therapy</td>
<td>51</td>
<td>52</td>
<td>X</td>
</tr>
</tbody>
</table>
AVERROES: Stroke or SEE
5600 patients, 36 countries, 522 centres

ASA 81-324 mg/d
Apixaban 2.5-5 mg bd

Cumulative Risk

RR = 0.46
95% CI = 0.33-0.64
p < 0.001

No. at Risk

<table>
<thead>
<tr>
<th>Months</th>
<th>ASA</th>
<th>Apix</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<td>2809</td>
</tr>
<tr>
<td>3</td>
<td>2720</td>
<td>2761</td>
</tr>
<tr>
<td>6</td>
<td>2541</td>
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<tr>
<td>9</td>
<td>2124</td>
<td>2127</td>
</tr>
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<td>12</td>
<td>1541</td>
<td>1523</td>
</tr>
<tr>
<td>18</td>
<td>626</td>
<td>617</td>
</tr>
<tr>
<td>21</td>
<td>329</td>
<td>353</td>
</tr>
</tbody>
</table>
**AVERROES - Major Bleeding**

RR = 1.14
95% CI = 0.74-1.75
P = 0.56

<table>
<thead>
<tr>
<th>Months</th>
<th>No. at Risk ASA</th>
<th>No. at Risk Apixaban</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2791</td>
<td>2809</td>
</tr>
<tr>
<td>3</td>
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<td>2763</td>
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<tr>
<td>6</td>
<td>2572</td>
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Differences between perspectives of physicians and patients on anticoagulation in patients with atrial fibrillation: observational study

Local Opinion
ROUNDTABLE MEETINGS IN NORTHERN IRELAND: SUMMARY REPORT

MANAGING THE VARIATION IN STROKE PREVENTION IN ATRIAL FIBRILLATION:
IMPLEMENTING NICE GUIDANCE IN NORTHERN IRELAND

Organised and funded by the BMS-Pfizer Alliance with the Stroke Association Northern Ireland acting as a collaborative partner.

Pfizer  Bristol-Myers Squibb  Stroke association

ORGANISED AND FUNDED BY THE BMS-PFIZER ALLIANCE • GVM92 • FEBRUARY 2016

THIS REPORT WAS INITIATED AND FUNDED BY THE BRISTOL-MYERS SQUIBB – PFIZER ALLIANCE. THE ALLIANCE HAD EDITORIAL INPUT TO ENSURE COMPLIANCE WITH THE NICE CODE OF PRACTICE AND THE REPORT WAS SENT TO MEETING ATTENDEES FOR COMMENT AND APPROVAL.
Recommendation 21

Improve the understanding and implementation of NICE Guidance

Improve understanding of NICE Guidance

- All healthcare professionals involved in the detection of AF and the management of AF-related stroke prevention should understand the related NICE guidance and implement it appropriately. NICE Clinical Guideline 188 (CG 188) is a good document which outlines a 'gold standard' of best practice, and attendees agreed that the recommendations should be implemented across Northern Ireland.

- GPs in particular may find it challenging to digest the entire guideline given their workload and the level of detail contained in clinical guidelines like CG188. Attendees agreed that the quick access guides NICE used to produce were very helpful in condensing the information contained within these guidelines for use by healthcare professionals on the ‘front line’ of services in a prescribing role. Re-introducing summary guidance may help to improve the understanding and implementation of the guidance. For example, there may be knowledge gaps, with some healthcare professionals hesitant to anticoagulate frail elderly people who may be appropriate for initiation onto anticoagulation for stroke prevention in AF. This could be due to concerns over potential falls and bleeding. Clear and simple guidelines could be made easier to understand for frontline staff.

Improve the management of patients with AF at risk of stroke through implementing NICE Guidance

- Three key groups of patients with AF who could be receiving sub-optimal management for their individual stroke risk were identified by the attendees:
  1. Patients with undiagnosed AF
  2. Patients with diagnosed AF receiving inappropriate treatment for their individual stroke prevention
  3. Patients with diagnosed AF on anticoagulation for stroke prevention who are poorly controlled and outside of therapeutic range

- It was suggested that improving the management of these groups of patients could be a straightforward task that is aligned with the aims of Northern Ireland’s Transforming Your Care agenda. It could also lead to improved outcomes for patients, carers and their families, as well as cost savings for the local health economies.

- All patients with AF should have access to appropriate treatment for the management of their individual stroke prevention. Where primary care is not taking an active role in diagnosing AF or appropriately managing AF-related stroke prevention, attendees agreed that education programmes could be undertaken.

- The importance of ensuring that patients with AF receiving either no treatment or receiving aspirin solely for stroke prevention are reviewed and initated onto anticoagulation, where appropriate, was discussed. Attendees noted that since NICE changed the assessment tool that is used to measure stroke risk in patients with AF to CHADS2-VASc, more patients will now be deemed eligible for anticoagulation.

- Attendees were concerned that at present, many patients with AF across Northern Ireland are receiving aspirin solely for stroke prevention. The importance of the GP Audit and stroke risk audit tools was discussed by attendees. It was agreed that GP practices could be encouraged to use stroke risk audit tools, such as GRASP-AMI, to assist in identifying these patients and initiating them onto appropriate treatment.

- It was discussed that some patients with AF receiving anticoagulation for stroke prevention remain out of therapeutic range and attendees suggested that they may benefit from being assessed and initiated onto more suitable treatment. Attendees also discussed the need for healthcare professionals to provide patients with appropriate information so that they understand their stroke risk and are sufficiently informed to make decisions on the management of their individual stroke prevention.

- NICE has reviewed the evidence base and made recommendations regarding anticoagulation for stroke prevention in patients with AF (including non-vacular AF). In some areas of the country, the uptake of non-vacular K oral anticoagulants (NOACs) for the prevention of stroke and systemic embolism in appropriate adult patients with non-vacular AF (NVAF) has been slow. Attendees stressed the importance of ensuring patients with AF receive the most clinically appropriate treatment for their individual stroke prevention and are given information on all appropriate treatments. Attendees agreed that if a NOAC is the most appropriate treatment option for a patient with NVAF, the patient should be able to receive it.
Improve the management of patients with AF at risk of stroke through implementing NICE Guidance

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Summary

• Understand the case for screening

• The importance of intervention

• Involving the patient in the decision to treat
Thank you for your attention

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