

Non-Vitamin K Oral Anticoagulants (NOAC's) for the Prevention of Stroke and Systemic Embolism in Atrial Fibrillation Clinical Guideline

V6.1

July 2025

Summary

For guidance on anticoagulation in 'valvular' AF including mechanical heart valves – see 'Special Consideration' on page 3.

Decision-making Guide for Anticoagulation in Non-valvular Atrial Fibrillation

Person with AF (paroxysmal, persistent or permanent)

CHA2DS2-VASc Stroke risk score

C Congestive Heart Failure	1
H Hypertension	1
A Age >75 years	2
D Diabetes Mellitus	1
S Stroke/Tia/Previous embolism	2
V Vascular disease (MI, PVD)	1
A Age 65-74 years	1
S Sex category female	1

Moderate-high risk of stroke:
Aged over 65 **or** Aged under 65 with CHA2DS2-VASc score >1

YES

NO

Assess risk of bleeding

Assess relative contraindications and cautions with anticoagulation using ORBIT score

ORBIT 0-2 (low bleeding risk)

Still address any factors for bleeding .e.g. alcohol and/or BP reduction, concomitant medication, etc.

ORBIT 3 (immediate risk)

Address/optimize modifiable risk factors

ORBIT >4 (high risk)

Reduce bleeding risk by addressing any modifiable factors e.g. alcohol and/or BP reduction, concomitant medications etc.

Consider

Recommended anticoagulation

See 'choosing the most appropriate anticoagulant'

(page 3)

Unmodifiable high bleeding risk: No antithrombotic treatment

For some patients who could safely take aspirin long-term, referral for a Left Atrial Appendage Occlusion device is appropriate. Referral is through Acquired Cardiac Disease/PFO MDT

'Truly low risk':

No Antithrombotic treatment

Review this decision annually and at age 65

Absolute contraindication to anticoagulation: No antithrombotic treatment

For some patients who could safely take aspirin long-term, referral for a Left Atrial Appendage Occlusion device is appropriate. Referral is through Acquired Cardiac Disease/PFO MDT

ORBIT Score

Haemoglobin*	2
Age ≥75	1
Bleeding history (incl. GI bleeding, intracranial haemorrhage)	2
Insufficient renal function (eGFR <60 mL/min/1.73m ²)	2
Treatment with antiplatelet agents	1

*Hb <13 in men, <12 in women, or HCT <40% in men, 36% in women, or history of anaemia

Offer anticoagulation with a direct acting oral anticoagulant to people with atrial fibrillation and a **CHA2DS2 VASc score of above**, Taking into account the risk of bleeding. Apixaban, dabigatran, edoxaban and rivaroxaban are all recommended as options – see page 3.

Consider anticoagulation with a direct acting oral anticoagulant for **men** with atrial fibrillation and **CHA2DS2 VASc score of 1** taking into account the risk of bleeding.

Discuss the risk: benefit of anticoagulation with patient, and the choice of anticoagulant

-see page 3

Choosing the most appropriate anticoagulant;

	DOAC	Dose
First line	Apixaban	5mg twice daily. Reduce dose to 2.5mg twice daily if at least two of the following characteristics: <ul style="list-style-type: none"> • age ≥ 80. • body weight ≤ 60 kg. • serum creatinine >133 micromole/L (≥ 1.5 mg/dL).
Second line	Edoxaban	60mg once daily Reduce dose to 30mg once daily if body weight <60 kg, or CrCl 15-49 ml/min, or co-prescribed ciclosporin, dronedarone, erythromycin, or ketocanazole. Note SPC recommends caution in setting of high Creatinine clearance – see ‘Special circumstances’ below.
	Rivaroxaban	20mg once daily Reduce dose to 15mg once daily if CrCl 15-49 ml/min.
	Dabigatran	150mg twice daily. Reduce dose to 110mg once daily if age ≥ 80 , body weight <50 kg and CrCl 30-49ml/min. Do not use if CrCl <30 ml/min.

Factors that may determine choice of anticoagulant:

- Renal function* (see section on ‘Special Circumstances’ below).
- Once or twice daily preference.
- Whether tablet can be crushed (all direct oral anticoagulants can be crushed except Dabigatran).
- Significant bleeding risk and ability to reverse (availability of Andexanet alfa for Apixaban and Rivaroxaban; Idarucizumab for dabigatran).

Special circumstances		Recommendation
Cardiac	Mechanical heart valves (includes TAVI, tMVR or MV repair within 3 months).	Warfarin / consider specialist advice from Cardiology.
	Moderate-to-severe mitral stenosis.	Warfarin.
	Post-coronary event / intervention.	Follow Cardiology plan on duration of antiplatelet treatment. Consider discussion with Cardiology.
Renal	Severe renal impairment [CrCl <15 ml/min].	Warfarin.
	High CrCl >95 ml/min.	Apixaban, Rivaroxaban or Dabigatran.
Other	Antiphospholipid syndrome.	Warfarin / specialist advice from Haematology.
	On anti-epileptic medication.	Consider specialist advice from Neurology.
	Extremes of body weight <50kg and >120kg.	Rivaroxaban or apixaban preferred.
	Pregnancy/breast feeding.	LMWH preferred/ consider specialist advice from Haematology.
	Active malignancy / chemotherapy.	Consider specialist advice from treating Oncologist/Haematologist.
	HIV antiretrovirals and hepatitis antivirals.	Consider specialist advice from GU or Gastroenterology.
	Menorrhagia.	Consider specialist advice from Gynaecology or Haematology.

1. Aim/Purpose of this Guideline

- 1.1. The aim of this document to guide clinicians on use of anticoagulants for prevention of stroke and TIA (transient ischaemic attack) prevention in patients with AF (atrial fibrillation) in Cornwall.
- 1.2. This version supersedes any previous versions of this document.

Data Protection Act 2018 (UK General Data Protection Regulation – GDPR) Legislation.

The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team.

Royal Cornwall Hospital Trust rch-tr.infogov@nhs.net

2. The Guidance

- 2.1. The decision about whether to start treatment with a NOAC should be made after an informed discussion between the clinician and the person about the risks and benefits of the various anticoagulant options. The guidance is based on NICE AF guidelines May 2021.
<https://www.nice.org.uk/guidance/ng196/chapter/Recommendations#stroke-prevention>
- 2.2. **Each drug should be used according to the EMC Electronic medicines compendium for Dabigatran, Rivaroxaban, Apixaban, Edoxaban and Warfarin.**
- 2.3. Assessment and hospital management of major bleeding (cerebral or GI).

[See Anticoagulation Related Bleeding - Guideline Summary \(cornwall.nhs.uk\)](http://cornwall.nhs.uk)
- 2.4. **Prior to emergency surgery**

If possible, wait 12 hours (dabigatran) or 24 hours (rivaroxaban, apixaban and edoxaban) after the last dose.

2.5. In the event of thrombosis

Wait 12 hours (dabigatran, apixaban) or 24 hours (rivaroxaban, edoxaban) after the last dose before switching to a parenteral anticoagulant.

3. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	Appropriate use of anticoagulation therapy in patients with AF (atrial fibrillation) following TIA (transient ischaemic attack) or stroke.
Lead	Stroke Team.
Tool	Sentinel Stroke National Audit Programme (SSNAP).
Frequency	Daily.
Reporting arrangements	Monthly review at Stroke Operational Group Meeting.
Acting on recommendations and Lead(s)	Stroke Operational Group Meeting held weekly, led by Directorate Manager – Older People's Service.
Change in practice and lessons to be shared	At Stroke Operational Group Meetings led by Directorate Manager - Older People's Service.

4. Equality and Diversity

- 4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the ['Equality, Inclusion and Human Rights Policy'](#) or the [Equality and Diversity website](#).
- 4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Non-Vitamin K Oral Anticoagulants (NOACs) for the Prevention of Stroke and Systemic Embolism in Atrial Fibrillation Clinical Guideline V6.1
This document replaces (exact title of previous version):	Non-Vitamin K Oral Anticoagulants ('NOAC's) for the Prevention of Stroke and Systemic Embolism in Atrial Fibrillation Clinical Guideline V6.0
Date Issued/Approved:	February 2025
Date Valid From:	July 2025
Date Valid To:	April 2028
Directorate / Department responsible (author/owner):	Dr Mohana Maddula, Clinical Lead, Stroke (Eldercare).
Contact details:	01872 252084
Brief summary of contents:	Guidance on use of anticoagulants inpatients with AF and stroke or TIA.
Suggested Keywords:	Cardiovascular diseases - Arrhythmia - Atrial fibrillation - vascular diseases - Transient ischaemic attack - Stroke - Anti coagulant agents.
Target Audience:	RCHT: Yes CFT: No CIOS ICB: No
Executive Director responsible for Policy:	Chief Medical Officer
Approval route for consultation and ratification:	Eldercare Governance
General Manager confirming approval processes:	Johanna Floyd
Name of Governance Lead confirming approval by specialty and care group management meetings:	Paul Evangelista
Links to key external standards:	None Required
Related Documents:	Advanced Stroke Management Pathway,

Non-Vitamin K Oral Anticoagulants (NOAC's) for the Prevention of Stroke and Systemic Embolism in Atrial Fibrillation Clinical Guideline V6.1

Information Category	Detailed Information
	StrokeThrombolysis, Secondary Prevention Guidelines Stroke and TIA, Stroke and TIA Care pathway, Peninsula Referral Guidelines for Early Decompressive. Surgery in Acute Ischaemic Stroke. Anticoagulation Related Bleeding Guideline.
Training Need Identified?	No
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet
Document Library Folder/Sub Folder:	Clinical / Stroke

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
2014	V1.0	Initial Issue - Novel Anticoagulants for Stroke and TIA.	Dr Katja Adie, Consultant Eldercare Department Nash, medical student
2015	V2.0	Update - Peninsula Network Guidance on Novel Anticoagulants For Stroke and TIA.	Dr Katja Adie, Consultant Eldercare Department
June 2018	V3.0	Update (SW Strategical Cardiac Network Guidance).	Dr Katja Adie, Consultant Eldercare Department
December 2021	V4.0	Update with NICE AF guidance.	Dr Katja Adie, Consultant Eldercare Department
January 2023	V5.0	Full Update - Updated follow NHS England Commissioning Procurement over use of Edoxaban as first line anticoagulant.	Dr Katja Adie, Consultant Eldercare Department and Dr Mohana Maddula, Consultant Stroke Physician
April 2025	V6.0	Updated prescribe not Edoxaban but Apxiabab as the latter is now the first line direct oral anticoagulant of choice.	Dr Mohana Maddula, Consultant Stroke Physician

Date	Version Number	Summary of Changes	Changes Made by
July 2025	V6.1	Corrected error in table on page 3 in relation to reduced dose of apixaban (should be 2.5mg twice daily).	Dr Mohana Maddula, Consultant Stroke Physician

All or part of this document can be released under the Freedom of Information Act 2000.

All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus 6 years.

This document is only valid on the day of printing.

Controlled Document.

This document has been created following the Royal Cornwall Hospitals NHS Trust [The Policy on Policies \(Development and Management of Knowledge Procedural and Web Documents Policy\)](#). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity and Inclusion Team
rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy / policy / proposal / service function to be assessed:	Non-Vitamin K Oral Anticoagulants (NOACs) for the Prevention of Stroke and Systemic Embolism in Atrial Fibrillation Clinical Guideline V6.1
Directorate and service area:	Neurology and Stroke
Is this a new or existing Policy?	Existing
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Dr Mohana Maddula, Consultant Eldercare Department
Contact details:	07827833626

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	The aim of this document to guide clinicians on use of novel anticoagulation agents following stroke or TIA in patients with Atrial fibrillation.
2. Policy Objectives	The guidance enables clinical staff to prevent further cerebrovascular events.
3. Policy Intended Outcomes	Gold standard stroke care.
4. How will you measure each outcome?	Sentinel Stroke National Audit Programme Monthly Board Report.
5. Who is intended to benefit from the policy?	Patients with new stroke or TIA with AF in Cornwall.

Information Category	Detailed Information
6a. Who did you consult with? (Please select Yes or No for each category)	<ul style="list-style-type: none"> • Workforce: Yes • Patients/ visitors: No • Local groups/ system partners: No • External organisations: No • Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	Please record specific names of individuals/ groups: TPAS group, eldercare consultants Community pharmacy team, GP leads. Clinicians at RCHT, GPs, Managers, Stroke survivors, pharmacists.
6c. What was the outcome of the consultation?	Agreed
6d. Have you used any of the following to assist your assessment?	National or local statistics, audits, activity reports, process maps, complaints, staff or patient surveys: No

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	Any written information should be provided in a suitable format for the individual.
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	Any written information should be provided in a suitable format for the individual.
Religion or belief	No	

Protected Characteristic	(Yes or No)	Rationale
Marriage and civil partnership	No	
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Dr M Moddula Eldercare Consultant.

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:
[Section 2. Full Equality Analysis](#)