Cheshire & Merseyside Cardiac Network

NHS North West Coast Clinical Networks

NHS Cheshire and Merseyside

Initiating a DOAC in Patients with Atrial Fibrillation / Flutter (AF)

Patients to consider

- Newly identified patients with AF or previous diagnosis not on an OAC
- Patients on VKAs with consistently low TTR < 70%, it is recommended to switch to DOACs unless contraindicated

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Determine risk of stroke using CHA2DS2-VASc score and bleeding risk

- Patients with a CHA2DS2-VASc =1 in men or 2 in women should be considered for an oral anticoagulant (OAC)
- Patients with a CHA2DS2-VASc score ≥2 in men and ≥3 in women: It is recommended that these patients should be prescribed an OAC
- Assess bleeding risk using HAS-BLED score or ORBIT score and address modifiable risk factors for anticoagulation in all AF patients e.g. BP control, use of NSAIDs, alcohol intake, obesity

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Assess if suitable for oral anticoagulation

- Consider contraindications, concomitant medicines (e.g. aspirin, SSRIs, NSAIDs, bisphosphonates), alcohol and drug abuse.

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Does the patient have a contraindication to a DOAC?

- With a prosthetic mechanical valve
- With moderate to severe mitral stenosis
- With antiphospholipid antibody syndrome (APLS)
- Who are pregnant, breastfeeding or planning a pregnancy
- With severe renal impairment - Creatinine Clearance (CrCl) < 15ml/min (apixaban, edoxaban and rivaroxaban). If CrCl 15-30 mL/min use apixaban, edoxaban and rivaroxaban with caution. Do not prescribe dabigatran if CrCl<30 ml/min.
- Requirement for triple therapy (dual antiplatelet therapy plus OAC) or those requiring a higher INR than the standard INR range of 2.0 – 3.0, without appropriate discussion with an anticoagulant specialist or cardiologist
- With active malignancy/ chemotherapy (unless advised by a specialist)
- Prescribed interacting drugs – check SPCs for full list e.g. HIV antiretrovirals and hepatitis antivirals - check with HIV drug interactions website at https://www.hiv- druginteractions.org/ and some antiepileptics – phenytoin, carbamazepine, phenobarbitone or rifampicin are likely to reduce DOAC levels so should be discussed with an anticoagulation specialist
- If the patient has a lesion or condition considered a significant risk for major bleeding, including current or recent gastrointestinal ulceration, recent brain or spinal injury, recent brain, spinal or ophthalmic surgery, recent intracranial haemorrhage, known or suspected oesophageal varices, arteriovenous malformations, vascular aneurysms or major intraspinal or intracerebral vascular abnormalities – seek specialist advice.
- There is no data to suggest lack of DOAC efficacy in patients with active CA but consider specialist advice before initiation
- There are little data on DOACs for patients with venous thrombosis at unusual sites (e.g. portal vein thrombosis) - discuss with an anticoagulation specialist

If YES to any of the above, consider warfarin if clinically appropriate and discuss with specialist if required

If the answer if NO to all of the above, continue down the flowchart

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New Initiation of a DOAC in Patients with Atrial Fibrillation / Flutter (AF)

Is the patient at high risk of ischaemic stroke? e.g. Recurrent ischaemic stroke /systemic embolism/TIA with good anticoagulation control (TTR≥70%) or other DOAC

Yes

No

Has there been poor concordance previously with twice daily dosing or a strong requirement for once daily dosing?

Yes

Initiate Edoxaban 60mg daily,
OR
edoxaban 30mg daily if your patients has any of the following:

- Weight ≤60kg
- CrCl 15-50[a]ml/min
- On strong P-gp inhibitors e.g. ciclosporin, dronedarone, erythromycin or ketoconazole (see SPC)

No

Initiate apixaban 5mg BD or

Initiate apixaban at 2.5mg BD if your patient meets the following criteria:

- CrCl 15-29 ml/min

OR if your patient has at least TWO of the following risk factors:

- Age ≥80 years old
- Weight ≤60kg
- Serum creatinine ≥ 133 micromole / L

Yes

***Preferred*: Dabigatran 150mg BD if appropriate.** However, if the patient qualifies for the lower dose of dabigatran, use apixaban* at the appropriate dose instead i.e. patients who are:

- Age ≥80 years old
- Age 75-79 years and bleeding risk high
- Weight <50kg
- CrCl 30-50ml/min (alternative agent preferred)
- Concomitant verapamil
- High bleeding risk (HAS-BLED ≥3, ORBIT ≥4)

- **Dabigatran cannot be crushed or put in a blister pack**

*Only dabigatran 150mg BD showed significant superiority reducing ischaemic stroke vs. warfarin

Apixaban and edoxaban are appropriate to initiate for the majority of patients including the following:

- Patients requiring a blister pack /swallowing difficulties requiring crushing/NG tube
- High risk of bleeding HAS-BLED ≥3, ORBIT ≥4
- In patients with prior unprovoked bleeding, warfarin-associated bleeding, or at high risk of bleeding
- History of GI symptoms/ dyspepsia
- Patients with a BMI >40 kg m^2 or a weight >120kg can be considered for a DOAC such as apixaban or edoxaban
- Therapeutic monitoring of DOACs * is not routinely recommended and the availability of drug concentration level measurement is variable. Consider discussion with a Haematologist before requesting drug concentration levels under special circumstances e.g., bleeding, extreme obesity
- Patients with AF ≥ 48 h or unknown duration undergoing elective electrical or pharmacologic cardioversion, for at least 3 weeks before cardioversion and for at least 4 weeks after successful cardioversion to sinus rhythm, regardless of the baseline risk of stroke

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Version 3: February 2024

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DOAC Medicines Optimisation Review and consideration to change DOAC agent

Do any of the following criteria apply?

- Changed from an alternative DOAC before due to intolerance or treatment failure
- Taking for another indication or for off-licence use started under a specialist
- If there has been poor concordance previously with twice daily dosing

Yes

Continue existing DOAC at the appropriate dose

- **Edoxaban 60mg daily** or **edoxaban 30mg daily if:**
  - Weight ≤60kg
  - CrCl 15-50[a]ml/min
  - On strong P-gp inhibitor

Or

- **Rivaroxaban 20mg daily** or **rivaroxaban 15mg daily** if CrCl <50mls/min

Or

- **Dabigatran 150mg BD if appropriate**

Or if patient qualifies for the lower dose of **dabigatran 110mg BD** due to:

Age ≥80 years old
Age 75-79 years and bleeding risk high
Weight <50kg
CrCl 30-50ml/min (alternative agent preferred)
Concomitant verapamil
High bleeding risk

No

Consider the following options based on the patient's co-morbidities and risk scores and determine best alternative considering patient preference and dose frequency

- Recurrent ischaemic stroke /systemic embolism/TIA despite good anticoagulation control (TTR≥70%) or other DOAC

All other patients including:

- Patient requiring a blister pack /swallowing difficulties requiring crushing/NG tube
- High risk of bleeding HAS-BLED ≥3, ORBIT ≥4
- CrCl 15-29mls/min* (Use with caution, recheck in 4 weeks (and every 3 months thereafter)

- ***Preferred*: Dabigatran 150mg BD if appropriate** (check adherence)

However, if patient qualifies for the lower dose of dabigatran due to:

- Age ≥80 years old
- Age 75-79 years and bleeding risk high
- Weight <50kg
- CrCl 30-50ml/min (alternative agent preferred)
- Concomitant verapamil
- High bleeding risk

Do not use dabigatran, use apixaban at the appropriate dose

Initiate apixaban 5mg BD or

Initiate apixaban at 2.5mg BD if your patient meets the following criteria:

- CrCl 15-29 ml/min

OR if your patient has at least TWO of the following risk factors:

- Age ≥80 years old
- Weight ≤60kg
- Serum creatinine ≥ 133 micromole / L

Abbreviations:

DOAC = direct acting oral anticoagulant
VKA = vitamin K antagonist
BP = blood pressure
SSRIs = selective serotonin reuptake inhibitors
GI = gastrointestinal tract
PPI = proton pump inhibitor
AF = atrial fibrillation
TTR = time in therapeutic range
NSAIDS = non-steroidal anti-inflammatories
TIA = transient ischaemic attack
BMI – body mass index

*CrCl<20mls/min consider if OAC appropriate
See 'Initiating a DOAC Decision Aid' for abbreviation key