AF Oral Anticoagulant FAQs

Q: How do I define Valvular / Non valvular Atrial Fibrilation and does this affect the choice of anticoagulant offered to the patient?

Valvular AF refers to AF that occurs in the presence of mechanical prosthetic heart valves or moderate-to-severe mitral stenosis (usually of rheumatic origin).

- **NOACs are licensed for the prevention of stroke and systemic embolism in adult patients with non-valvular atrial fibrillation (NVAF). As such they may be used in patients with aortic valve stenosis / regurgitation and / or mitral valve regurgitation.**
  - **NOACs should not be used for patients with mechanical prosthetic heart valves- where their use is contra-indicated.**
- **Vitamin K antagonist (i.e. warfarin) therapy is recommended for stoke prevention in AF patients with moderate-to-severe mitral stenosis or mechanical heart valves.**

Q: Is Aspirin/Clopidogrel monotherapy for stoke prevention a reasonable choice for my patient with atrial fibrillation?

Nice CG180 (June 2014) National Institute for Health and Clinical Excellence (2014) Atrial fibrillation: management. Clinical Guideline 180. London: NICE

- **Do not offer aspirin monotherapy solely for stroke prevention to people with atrial fibrillation.**

For people at increased risk of stroke the use of anticoagulants (compared to single antiplatelet therapy) decreases the risk of all cause mortality and ischaemic stroke and moderately decreases the risk of systemic emboli.

Q: Should my patient be prescribed aspirin/ clopidogrel whilst on an oral anticoagulant (OAC) for AF?

Combinations of oral anticoagulants and platelet inhibitors increase bleeding risk and should be avoided in AF patients without another indication for platelet inhibition.

- **The decision to continue aspirin /clopidogrel with an OAC for AF should be reviewed on an individual basis for each patient.**
- **The ESC and EHRA guidelines recommend OAC monotherapy, and not combination therapy with antiplatelets, in AF patients with stable Coronary Artery Disease who have not had an Acute Coronary Syndrome (ACS) and / or coronary intervention / stent in the previous 12 months.**

Further advice for individual cases may be sort by utilising the e-advice service from cardiology

Q: If Patient has previously refused anticoagulation then what is recommended.

A decision not to treat a patient at increased risk of stroke with an anticoagulant, should be regularly reviewed (at least annually)

If Patient refused due to monitoring requirements of warfarin

- **Consider use of NOAC for the patient as part of an informed patient discussion regarding risk benefit of anticoagulation.**

If Patient refused NOAC due to lack of antidote

- **There is now a licensed antidote for Dabigatran**

Q: Can I offer anticoagulation to patient with previous GI bleed?

- **The decision not to anticoagulate these patients should be reviewed and consideration should be given to initiating a NOAC with a lower gastric bleeding risk than warfarin-such as Apixaban.**

Q: Can I prescribe a NOAC in Patients at extremes of body weight?

- **NOAC not recommended for following body weight:**
  - **< 40 kg or > 120kg**

Q: Can I prescribe a NOAC in Patients with liver impairment?

- **If baseline ALT or AST >2 times upper limit of normal (ULN) or Bilirubin >1.5 ULN, avoid initiating NOAC. Similarly if during NOAC treatment, ALT / AST > 2ULN or Bilirubin > 1.5 ULN stop NOAC until LFTs recovered.**

Q: Can I prescribe Anticoagulation in patients with Cognitive impairment?

- **If a patient is currently receiving medication for primary or secondary prevention of a condition (such as a statin- for hyperlipidemia) then consideration must be given to initiating an anticoagulant. The choice of anticoagulant must reflect the patient's ability to adhere to monitoring requirements as well as any concordance issues.**

Q: Should I offer anticoagulation to a patient with a diagnosis of Paroxysmal atrial fibrillation (PAF)

- **Patients with PAF—as a group—appear to have a risk for embolic events that is at least similar to that of patients with persistent AF. These patients should therefore be treated as having AF for the purposes of OAC consideration.**
- **Presently there is no consensus as to how OAC should be used in an apparently isolated episode of PAF secondary to an underlying condition (e.g. hyperthyroidism or pneumonia). In general OAC therapy similar to other patients with PAF is recommended.**

In cases where further advice is required please refer patient to cardiology at UHW.

Q: Which Anticoagulant / dose of anticoagulant should be prescribed for patients with renal impairment?

Use of oral anticoagulants for prevention of stroke in Nonvalvular Atrial Fibrillation patients, with renal impairment				
Calculated Cr Cl (ml/min)	**Warfarin**	**Apixaban**	**Dabigatran**	**Rivaroxaban**
>80	Dose as INR	No dose adjustment required	No dose adjustment required	No dose adjustment required
51-80	Dose as INR	No dose adjustment required	No dose adjustment required	No dose adjustment required
30-50	Dose as INR	No dose adjustment required	Patients at high risk of bleeding or on interacting meds- consider maximum of **110mg BD**	**15mg OD**
<30	Dose as INR	**Use with Caution** [1]	Avoid	**Use with caution** [2]
<15	Dose as INR	Avoid	Avoid	Avoid

[1] **SPC for Apixaban** - For the prevention of stroke and systemic embolism in patients with NVAF, patients with severe renal impairment (creatinine clearance 15-29 mL/min), and patients with serum creatinine ≥ 1.5 mg/dL (133 micromole/L) associated with age ≥ 80 years or body weight ≤ 60 kg should receive the lower dose of apixaban 2.5 mg twice daily- **However limited clinical experience**

[2] **SPC for Rivaroxaban-** In patients with moderate (creatinine clearance 30 - 49 ml/min) or severe (creatinine clearance 15 - 29 ml/min) renal impairment, for the prevention of stroke and systemic embolism in patients with non-valvular atrial fibrillation, the recommended dose is 15 mg once daily. **However limited clinical experience**

Q: Should I consider anticoagulation for a patient with a history of falls?

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- **Do not withhold anticoagulation solely because the person is at risk of having a fall.**

History of mechanical falls is not a contra-indication to initiating anticoagulation. Consideration should be given to the cause of the fall(s) and whether a biological reason for the falls has been excluded.

Q: Can I prescribe a NOAC in patients with thrombocytopenia (low platelet count)?

- Thrombocytopenia is defined as a platelet count < 150 x 10^9/l

Differential diagnosis includes *immune peripheral consumption (ITP),* any cause of *bone marrow failure* (aplasia, malignant infiltration, myelodysplasia, B12 / folate deficiency), *alcohol*, *medication*, *sepsis*, *hypersplenism*, *disseminated intravascular coagulation (DIC)* and *TTP / HUS*.

- Patients with known ITP should be referred to their haematologist to discuss anticoagulation

The following should be referred urgently for haematology assessment:

- Platelet count < 50 x 10^9/l
- Platelet count 50 - 100 x 10^9/l in association with:
  - other cytopenia (Hb < 10g/dl, Neutrophils < 1 x 10^9/l) or
  - splenomegaly, lymphadenopathy, pregnancy, upcoming surgery

Appropriate investigation in primary care for patients not meeting criteria for urgent referral (Platelet count 100-150 x 10^9/l)**:**

- Blood film examination – may exclude platelet clumping artefact
- Thyroid function tests
- B12/ folate and ferritin levels
- Liver biochemistry
- Alcohol history
- Consider discontinuation of potentially precipitating medications
- Repeat FBC in 4-6 weeks

- Following appropriate investigations, patients with a stable platelet count of 100 – 150 x 10^9/l, can be commenced on anticoagulation

Q; Are there any definite contra-indications to anticoagulation?

- ***Absolute Contraindications***

- Known large oesophageal varices.
- Significant thrombocytopenia (platelet count < 50 x 109/L) - *refer to haematologist.*
- Within 72 hours of major surgery with risk of severe bleeding - *defer & reassess risk postoperatively.*
- Previously documented hypersensitivity to either the drug or excipients
- Acute clinically significant bleed - *defer & re-assess stroke versus bleeding risk within 3 months.*
- Decompensated liver disease or deranged baseline clotting screen (INR>1.5)
- Pregnancy or within 48 hours post partum - *seek urgent haematological advice.*
- Severe renal impairment (depending on selected Anticoagulant) ***–see above advice***
- Uncontrolled hypertension *(SBP > 180 / DBP > 100)*