Surrey Heartlands
HEALTH AND CARE PARTNERSHIP

Anticoagulant Selection Tool for Adults with Atrial Fibrillation (Flutter/paroxysmal AF)

Use in conjunction with NICE NG196 Atrial Fibrillation, NICE CKS Anticoagulation Oral and the individual drugs' Technology appraisals & SPC. **Always seek specialist advice in pregnancy/breastfeeding/planning pregnancy (LMWH is usually the anticoagulant of choice) and before anticoagulating patients with active/underlying cancer or hepatic disease associated with coagulopathy.**

Shared decision making with patient to start anticoagulation and reduce modifiable risk factors for bleed-See ORBIT bleed risk tool. Offer anticoagulation if CHA_2DS_2VASc ≥2 (consider anticoagulation if score =1 in men). Do not automatically stop antiplatelets without review or specialist advice. Offer gastroprotection if concomitant anticoagulant and antiplatelet is essential.

If any of the following apply prescribe warfarin:

- Mechanical heart valves (or within 3 months of a bioprosthetic (tissue) valve)
- Moderate to severe mitral valve stenosis
- Patient requiring a higher INR range (>2-3)
- Severe renal dysfunction CrCl <15ml/min
- Antiphospholipid Syndrome (See MHRA safety alert)
- Concomitant use of drugs which are contraindicated with DOACs– see SPCs

Consider Warfarin or seek specialist advice if weight <50kg or >120Kg or BMI >40kg/m^2 as there is limited data for DOACs at extremes of body weight in AF

For all other patients consider

1st Line GENERIC APIXABAN 5mg twice daily

Use Apixaban 2.5mg twice daily if CrCl 15-29ml/min or TWO of the following: Age ≥ 80 years, body weight ≤ 60 kg, serum creatinine ≥ 133 umol/l

E.g. if confirmed allergy to apixaban or compliance concerns with twice daily dosing, consider rivaroxaban next.

GENERIC RIVAROXABAN 20mg daily (With a meal)

Use If apixaban unsuitable or requires once daily dosing *but not for patients*:

- **with high risk of GI bleed**
- **who cannot take Rivaroxaban with a meal*****

Rivaroxaban 15mg once daily (with a meal) if CrCl 15-49ml/min (CrCl 15-29ml/min use with caution)

If both apixaban and rivaroxaban are unsuitable, consider the remaining DOACs depending on patient parameters.

EDOXABAN 60mg daily

Use Edoxaban 30mg daily if: CrCl 15-50ml/min or Body Wt. ≤ 60kg or concomitant use of the P-gp inhibitors (Dronedarone, Erythromycin, Ciclosporin, Ketoconazole)

If CrCL> 95mL/min: Consider alternative, a trend towards decreasing efficacy with increasing creatinine clearance has been observed compared to well managed warfarin*

DABIGATRAN 150mg twice daily* (Swallow whole)

Not for compliance aids or if CrCl <30ml/min

Use if patient at HIGH RISK of GI BLEED ** **and unsuitable for apixaban/edoxaban**
Dabigatran 110mg twice daily & gastroprotection

Use 110mg twice daily if: Age ≥ 80 yrs. or concomitant Verapamil
Consider Dabigatran 110mg twice daily based on individual assessment of thromboembolic & bleeding risk if: Age 75-80yrs or CrCl 30-50ml/min or increased risk of bleeding inc. (gastritis, esophagitis, or gastroesophageal reflux)

Write on the clinical system & discharge/outpatient letter the rationale **WHY NOT** apixaban if alternative prescribed.

Use Apixaban, Rivaroxaban, Dabigatran, Edoxaban and Warfarin only when clinically appropriate and within their SPCs. Helen Garrood June 2024 update

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Use **ACTUAL BODY** wt. to calculate creatinine clearance for dosing.

Seek specialist advice if weight <50kg or >120Kg or BMI >40kg/m^2 (If >120kg, use **adjusted body** wt. unless otherwise advised by specialist).

DOAC INFORMATION TABLE **See Surrey PAD for guidance on: Calculating CrCl, anticoagulant alert cards, patient information on DOACs and counselling checklist for DOACs**

DOAC linked to SPC	Apixaban	Edoxaban	Dabigatran	Rivaroxaban
Missed dose advice. Use drug reminder charts to support adherence	Take immediately if > 6hrs to next scheduled dose.	Take immediately if on the same day as missed dose.	Take immediately if > 6hrs to next scheduled dose.	Take immediately if > 12hrs to next scheduled dose.
Drug interactions List not exhaustive. Refer to product SPC for full list of drug interactions and contraindications. SPS resource: Managing DOAC Interactions	Avoid with HIV protease inhibitors, ketoconazole, itraconazole, voriconazole and posaconazole. Caution with rifampicin, carbamazepine, phenytoin, phenobarbital, St John's Wort.	No data on co-administration with HIV protease inhibitors. Caution with rifampicin, carbamazepine, phenytoin, phenobarbital, St John's Wort.	Avoid with HIV protease inhibitors, rifampicin, carbamazepine, phenytoin, phenobarbital, St John's Wort, dronedarone, ciclosporin, tacrolimus, ketoconazole, itraconazole. Caution with amiodarone, and verapamil.	Avoid with HIV protease inhibitors, ketoconazole, itraconazole, voriconazole, posaconazole and dronedarone. Caution with rifampicin, carbamazepine, phenytoin, phenobarbital, St John's Wort.
Contraindication (renal thresholds)	CrCl < 15 ml/min	CrCl < 15 ml/min	CrCl < 30 ml/min	CrCl < 15 ml/min
Administration	Take with / without food May be crushed and put through nasogastric tube if required	Take with or without food Can be crushed and put through nasogastric tube	Swallow whole with or without food Capsules CANNOT be opened as it results in a substantial increase in drug bioavailability	Take with biggest meal of the day Maybe crushed and put through nasogastric tube if required
Compliance aid use	Can be used in compliance aids	Can be used in compliance aids	Not suitable for compliance aids.	Can be used in compliance aids
Reversal Agent See SPC for overdose advice	**andexanet alfa** (Ondexxya®) Apixaban specific reversal agent for life threatening GI bleed (as per NICE TA697) otherwise with 4 factor PCC if indicated	No licensed medicine, clinical trials ongoing. Refer to edoxaban SPC section 4.9, for management of bleeding (**with 4 factor PCC**)	**idarucizumab** (Praxbind®) Dabigatran specific reversal agent for life threatening bleed in any body system or for when rapid reversal is required in emergency procedures	**andexanet alfa** (Ondexxya®) Rivaroxaban specific reversal agent for life threatening GI bleed (as per NICE TA697) otherwise with 4 factor PCC if indicated

Warfarin remains an option for AF patients in whom DOACs are contraindicated, or not suitable.

*For patients with (CrCl >95ml/min), generally patients <40yrs without co-morbidities, it is possible that DOACs are eliminated faster and have reduced efficacy. For these patients it may be better to prescribe warfarin, where levels can be monitored, or the DOAC with the longest half-life with a BD dosing, e.g. Dabigatran 150mg.

** **High risk factors for GI Bleeds** (list not exhaustive, **seek specialist advice before anticoagulating**): Previous GI bleed requiring endoscopic intervention or Varicies/portal hypertensive gastropathy or Angiodysplasia (aortic stenosis, renal disease, HHT) or previous gastric surgery or bleeding. ***Consider*** **Dabigatran 110mg** (rationale: idarucizumab (dabigatran specific reversal agent) has been shown to be less pro-thrombotic than other reversal agents and not because Dabigatran use has been shown to result in fewer bleeds).

***Rationale: Approx. 30% reduction in bioavailability of Rivaroxaban when taken without food as evidenced in Rocket AF trial and high rates of GI bleed observed in a large retrospective cohort study JAMA 2018;320:2221

Glossary: CrCl: Creatinine Clearance (use actual body weight to calculate) NVAF: Non valvular Atrial Fibrillation/Flutter. DOAC: Direct Acting Oral Anticoagulant. HHT: Hereditary Haemorrhagic Telangiectasia. LMWH: Low molecular weight Heparin. SPC: Summary of Product Characteristics. CKS: Clinical Knowledge Summaries.

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