This guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

NHS South West London

Anticoagulation Selection for Stroke Prevention in Non-valvular Atrial Fibrillation (NVAF) in adults

- Vitamin K antagonists (e.g. warfarin) and Direct Oral Anticoagulants (DOACs) are available for stroke prevention in NVAF. DOACs include apixaban, dabigatran, edoxaban and rivaroxaban and have shown advantages over warfarin therefore recommended as the agents of choice in NVAF when clinically appropriate.
- There are no published randomised controlled trials (RCTs) comparing one DOAC against another, so no direct comparison of effectiveness and safety is available. A network meta-analysis has compared the DOACs, however the heterogenicity of the data in the underlying studies limit comparison.[1]
- NICE guidance for stroke prevention and AF does not advise on a specific DOAC. The choice should be based on clinical appropriateness of the DOAC e.g. contraindications, renal impairment, availability of reversal agents and monitoring requirements.[1]
- NHS England's Commissioning recommendations for the national procurement of direct acting oral anticoagulants (DOACs)[2] **outlines the highest ranked joint best value** treatment choices **(generic Apixaban tablets- twice daily or generic Rivaroxaban tablets- once daily**) to maximise affordability and support treatment for the greatest number of patients. Edoxaban is ranked next if either of the highest ranked DOACs are contraindicated or not clinically appropriate for the specific patient. With increased diagnosis of AF, the recommendations aim to:[3]
  - improve availability of DOACs.
  - support uptake of DOAC medicines.
- This document is part of the available resources within SWL to help support with the prescribing of DOACs.
- The scope of this document does not cover switching between DOAC preparations.

Overleaf is a comparison chart (also produced as an accessible version) to support DOAC choice, when initiating anticoagulation in NVAF. Please use in conjunction with:

- NICE NG196 Atrial Fibrillation [1]
- NHS England. Operational note: Commissioning recommendations for national procurement for DOACs [2]
- NHS England. National medicines optimisation opportunities 2024/25 [3]
- SWL DOAC Initiation Guidance for NVAF & Guidance for HCPs monitoring DOACs Prescribed in all Indications and DOAC FAQs for Primary Care
- SWL Joint Medicines Formulary
- and the individual DOAC Technology Appraisals and SPCs

Links to other national resources:

- NHS Specialist Pharmacy Service (SPS): Managing interactions with direct oral anticoagulants (DOACs)
- NHS Specialist Pharmacy Service (SPS): Understanding direct oral anticoagulant (DOAC) interactions
- NHS Specialist Pharmacy Service (SPS): DOACs (Direct Oral Anticoagulants) monitoring

NVAF: DOAC Comparison Chart to Support Anticoagulation Decision Making with Patients

Before prescribing, please consult the SPC for each individual DOAC for a complete list of cautions, contraindications, interactions, dosage adjustments e.g. in liver/renal impairment

DOAC (linked to SPC)	Apixaban Tablet (Best Value)	Dabigatran Capsule	Edoxaban Tablet	Rivaroxaban Tablet (Best Value)
Exclusions to DOACs: • Mechanical prosthetic heart valves; • Moderate to severe mitral valve stenosis; • Antiphospholipid syndrome (APLS)- {except where advised by an anticoagulant specialist}; • Renal failure with creatinine clearance < 15ml/min; • Patient requiring a higher INR (> 2- 3); • Concomitant use of drugs which are contraindicated with DOACs- see Interactions section below; • SPCs				
Standard Dose	**5mg twice daily**	**150mg twice daily** if aged <75 years, CrCl> 50ml/min, low risk of bleeding	**60mg once daily**	**20mg once daily (with food)**
Reduced dose	Reduce dose to **2.5mg twice daily if:** • CrCl 15 - 29 ml/min **Or ≥ 2 of**: • age ≥ 80 years, • body weight ≤ 60 kg • serum creatinine ≥ 133 micromol/l	Reduce dose to **110mg twice daily if**: • aged ≥ 80 years or prescribed verapamil. Consider 110mg twice daily: • based on individual assessment of thrombotic risk and the risk of bleeding in patients aged between 75 and 80 years **or** • with CrCl 30-50ml/min **or** • with increased risk of bleeding (including gastritis, oesophagitis, gastro-oesophageal reflux)	Reduce dose to **30mg once daily if ≥1 of**: • weight ≤ 60kg • CrCl 15-50ml/min • on ciclosporin, dronedarone, erythromycin, ketoconazole	Reduce dose to **15mg once daily (with food) if:** • CrCl 15-49ml/min
Renal contra-indication	**CrCl <15ml/min**	**CrCl <30ml/min**	**CrCl <15ml/min** **(Caution CrCl >95ml/min)**	**CrCl <15ml/min**
Interactions **List not exhaustive** -for full details check: **SPC , BNF**, HIV Drug Interaction Checker and most current **EHRA practical guide on NOACs in AF**	Avoid with: HIV protease inhibitors, ketoconazole, itraconazole, voriconazole, posaconazole Use with caution: Rifampicin, antiepileptics, St. John's Wort	Avoid with: HIV protease inhibitors, ketoconazole, ciclosporin, itraconazole, tacrolimus, dronedarone, rifampicin, St John's Wort, antiepileptics Use with caution: Amiodarone, quinidine, ticagrelor, posaconazole, verapamil (use reduced dose) Antidepressants: SSRIs and SNRIs- increased bleeding risk	No data on co-administration with HIV protease inhibitors. Use with caution: Rifampicin, antiepileptics, St. John's Wort Reduce dose as above: Ciclosporin, dronedarone, erythromycin, ketoconazole	Avoid with: HIV protease inhibitors, ketoconazole, itraconazole, voriconazole, posaconazole, dronedarone Use with caution: Rifampicin, antiepileptics, St. John's Wort
Compliance aid?	✓	x	✓	✓
Licensed Reversal Agent	✓	✓	No licensed antidote. See SPC for options	✓
Swallowing difficulties/ enteral tubes {see SPCs, NEWT online}	Can be crushed (tablet)	**CANNOT** be crushed (capsule)	Can be crushed (tablet)	Can be crushed (tablet)
Special Circumstances- seek specialist advice (list not exhaustive)	• Extremes of body weight- <50kg and >150kg • Severe renal impairment (CrCl < 15ml/min)- (*warfarin preferred)* • Renal impairment- CrCl <30ml/min • High CrCl >95ml/min (*caution for edoxaban, consider alternative DOAC- eg. rivaroxaban preferred*) • Raised LFTs- AST/ALT (>2xULN), Bilirubin (>1.5xULN) • Active malignancy/ chemotherapy • Patients also prescribed antiplatelets • Significant bleeding issues abnormal clotting screen, low Hb with no identifiable cause, platelets <100 units, menorrhagia • Post coronary event/intervention/other VTE event		• Absorption problems • Previous serious bleed (consider a lesion or condition that is a significant risk for major bleeding e.g. current or recent gastrointestinal ulceration, known or suspected oesophageal varices) • Complex drug interactions (eg, antiepileptics, antiretrovirals, azole antifungals*)* • Pregnancy/breast feeding (*LMWH preferred*) • BioProsthetic heart valves/ valve repair-within 3months post-operative Note: For Transcatheter aortic valve implantation (TAVI) patients- DOAC acceptable post procedure • Moderate to severe mitral valve stenosis (*warfarin preferred*) • Antiphospholipid syndrome (APLS) (*warfarin preferred*)- except where advised by an anticoagulant specialist	

Note: The clinician, in conjunction with the patient, (shared decision making) will continue to determine the most appropriate treatment for their clinical needs.