

Incentivisation for Pace of Change (IPoC) in primary care – Best value DOACs

Frequently Asked Questions

What is non-valvular atrial fibrillation (NV-AF)?

- The most recent European Society Cardiology guidance on AF (2024)¹ suggests replacing the historic term ‘non-valvular’ AF with reference to the specific underlying conditions.
- The term “Valvular AF” refers to patients with mitral stenosis (moderate or severe) or mechanical heart valves and such patients should be considered only for warfarin therapy for stroke prevention.
- The term “Non-valvular AF” therefore encompasses cases of AF in the absence of the above.
- Biological valve replacements, or other valvular heart conditions, such as mitral regurgitation, mild mitral stenosis, aortic stenosis, and aortic regurgitation, do not tend to result in conditions of low flow in the left atrium, and therefore are not thought to further increase the risk of thromboembolism brought by AF. This group of patients, when it comes to choice of oral anticoagulation, can also be included under the term non-valvular.

Why are Apixaban and Rivaroxaban the preferred Direct Oral Anticoagulants (DOAC) now?

- Apixaban is the first choice ‘twice daily’ DOAC and Rivaroxaban has been identified as the first choice ‘once daily’ DOAC by NHS England due to their effectiveness and better value to the NHS.
- Clinicians should use these DOACs when it is clinically appropriate. They are similarly effective to other DOAC options.
- This change will mean that more people in Dorset can be effectively treated.

What should I tell patients?

- NHS Dorset is reviewing all patients receiving a DOACs.
- Apixaban or Rivaroxaban are the first choice DOACs for use in Dorset.
- Apixaban or Rivaroxaban will only be used when clinically appropriate. They are similarly effective to other DOAC options but cost considerably less to the NHS allowing and more patients to be treated

¹ [ESC Guidelines for the management of atrial fibrillation](#)

Are Apixaban or Rivaroxaban as good as the other DOACs?

- NICE guidance Atrial Fibrillation: diagnosis and management (NG196 1.6.3 and 1.6.4 (published 27 April 2021, updated 30 June 2021) states that: “Apixaban, dabigatran, edoxaban and rivaroxaban are all recommended as options when used in line with the criteria specified in the relevant NICE technology appraisal guidance.”
- NICE guidance Atrial Fibrillation: diagnosis and management (NG196 1.6.5 published 27 April 2021, updated 30 June 2021) states that: “If DOACs are contraindicated, not tolerated or not suitable in people with atrial fibrillation, then offer a vitamin K antagonist.”
- Agent selection should be part of a shared-decision process with patients, taking into account individual clinical and life-style circumstances.

Will we need to do a further switch if the price of other DOACs fall?

- A further switch is not anticipated unless clinical evidence emerges that another DOAC is more effective and/or safer than apixaban or rivaroxaban.

Are Apixaban or Rivaroxaban suitable for all patients?

- As with all DOACs, if patients have metallic heart valves, treat with warfarin. DOACs should not be initiated.
- DOACs should not be considered if pregnant, breastfeeding or planning pregnancy.
- Specialist advice should be obtained in patients with a bleeding disorder, or antiphospholipid syndrome.
- Where creatinine clearance is reduced, please refer to the summary of product characteristics for each medicine or the technical guidance in scheme.
- Evidence and expert opinion support the use of apixaban and rivaroxaban in patients weighing up to 150kg. Patients who weigh more than 150kg should have therapeutic drug blood levels taken around 5 days after commencing to confirm suitability. Seek specialist advice as needed.
- Patients with AF should have an annual review of their anticoagulation with a clinician to assess together if it is still appropriate / they want to remain on it, weighing up the risks and benefits of treatment using decision aids²
- If both apixaban and rivaroxaban are contraindicated for the specific patient then, subject to the criteria specified in the relevant NICE technology appraisal guidance, clinicians should consider edoxaban as an alternative.
- Existing patients already on edoxaban for NV-AF are to be reviewed and a switch to apixaban or rivaroxaban should be considered.
- Consent from the patient should be obtained prior to switching DOACs.
- Guidance in the British National Formulary and the [MHRA advice on direct-acting oral anticoagulants](#), in particular for advice on dosages in people with renal impairment, contraindications and monitoring should be considered. [DOACs \(Direct](#)

• ² [Atrial Fibrillation GP Evidence](#)

• How do I safely switch patients from Edoxaban to Apixaban or Rivaroxaban?

- If a person meets the criteria for switching and provides consent, they should be issued with a prescription for apixaban or rivaroxaban.
- Patients may be advised to use up the supply of existing edoxaban before switching to apixaban or rivaroxaban. Once edoxaban has been stopped, patients should be switched to apixaban or rivaroxaban at the time the next scheduled dose of edoxaban would have been due.
- Apixaban can be taken twice a day with or without food. Rivaroxaban **must be taken once daily with food**. The precise time of day is not important, but it is important to try to take DOACs every day at a similar time of day.
- Community pharmacists are being informed of this change and will be able to provide advice to patients

Measuring renal functions changes over time

- Cockcroft-Gault equation is the standard method for estimating creatinine clearance (CrCl) and drug dose adjustment in adults for starting and dose adjustment of DOACs. It is recommended by the manufacturers of all DOACs for determining kidney function of patients when prescribing these agents. ([Calculating kidney function , Prescribing medicines in renal impairment: using the appropriate estimate of renal function to avoid the risk of adverse drug reactions - GOV.UK \(www.gov.uk\)](#))
- Use SystmOne Renal Disease Calculator for the creatinine clearance using actual body weight option, unless BMI > 30 kg/m² when need to use creatinine clearance using **adjusted** body weight option
- Estimated glomerular filtration rate (eGFR) **should not be used**, as data suggests this can lead to inappropriate dosing in up to 50% of patients.

How often do I need to check weight and renal function?

- Renal profile should be checked annually with full blood count and liver function.
- Recent weight and renal function should be recorded before initiation of treatment or when switching DOACs.
- More frequent monitoring may be considered when co-prescribing with drugs that affect renal and liver function or clinical conditions change. For further advice refer to [Specialist Pharmacy Services](#) .
- For new patients and those switching to apixaban or rivaroxaban with reduced renal function then please refer to the [summary of product characteristics](#) for correct dosing.
- For people with AF weighing more than 120kg, historically there has been a degree of caution surrounding the use of DOACs due to concerns of sub-therapeutic effect. Evidence is now available to support the use of apixaban and rivaroxaban at

standard doses in patients weighing more than 120kg as recommended by the [International Society of Thrombosis and Haemostasis](#) (ISTH). There is no need for DOAC therapeutic monitoring checks.

- For those weighing > 150kg and / or BMI greater than 50, it is recommended that specialist haematology advice is sought regarding checking specific drug levels.

What about patients with liver disease?

- All DOACs are contraindicated in patients with hepatic disease associated with coagulopathy and clinically relevant bleeding risk and are not recommended in patients with severe hepatic impairment.
- Rivaroxaban is contraindicated in patients with hepatic disease associated with coagulopathy and clinically relevant bleeding risk including cirrhotic patients with Child Pugh B and C

What drugs interact with Apixaban or Rivaroxaban?

- Concomitant use of 'azole' antimycotics e.g. ketoconazole, itraconazole, voriconazole, is not recommended.
- Concomitant use of HIV protease inhibitors e.g. ritonavir is not recommended.
- As with other anticoagulants, the risk of bleeding is increased if apixaban or rivaroxaban is used in combination with one or more antiplatelet drugs. This combination is clinically appropriate in certain circumstances, but this should only be done on the advice of a specialist and a clear treatment plan describing the intended duration of treatment.
- For a full list of drug interactions refer to [summary of product characteristics, Rivaroxaban | Interactions | BNF | NICE, SPS resource](#).
- A proton pump inhibitor should be *considered* if the patient is 75 years or older and offered for all age groups if the patient is also on medication that increases the risk of ulcerative gastrointestinal disease e.g. NSAIDs, Antiplatelets, SSRIs.

Can Apixaban or Rivaroxaban go into a patient compliance device?

- There are no known issues with using apixaban or rivaroxaban in a compliance device.

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Contact for this document	Medicine.question@nhsdorset.nhs.uk

