



# South Infirmary - Victoria University Hospital

Old Blackrock Road, Cork, Ireland, T12 X23H

## DIRECT ORAL ANTICOAGULANT MEDICATIONS (DOACS)



**Medication:**

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**Indication:**

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Addressograph

## WHAT IS ANTICOAGULANT TREATMENT?

An oral anticoagulant medicine prevents harmful clots from forming in your blood vessels by making your blood take longer to clot. This is sometimes called “thinning” your blood, and these medicines may be called “blood-thinners.”

Clots form when blood cells and blood components stick together and block blood vessels.

Anticoagulant medicines are also used to stop existing clots from getting bigger and to stop parts of a clot breaking off and travelling to other parts of the body, such as the lungs.

The oral anticoagulants used in Ireland are warfarin and direct oral anticoagulants (also known as DOACs). This leaflet refers to **DOACs only**; if you are prescribed warfarin, you need a different booklet.

There are currently four **DOACs available in Ireland**:

- Apixaban (Eliquis®)
- Dabigatran (Pradaxa®)
- Edoxaban (Lixiana®)
- Rivaroxaban (Xarelto®)

These are **not** interchangeable, ensure that you should only take what is prescribed for you.

## Why do I need to take a DOAC?

You are prescribed a DOAC if you are at risk of developing a harmful clot or if you have an existing clot, such as in the following situations:

- Atrial Fibrillation – irregular heartbeat
- Deep Vein Thrombosis (DVT) – clot in the leg or arm
- Pulmonary Embolism (PE) – clot in the lung
- Prevention of recurrent PE or DVT
- Post-operative – e.g. after hip/knee surgery
- DOACs may be used for other conditions

Talk to your doctor, nurse, or pharmacist if you are not sure of your diagnosis.

- **Stroke Prevention**

If you have a form of irregular heart rhythm (also called non-valvular atrial fibrillation) this drug will prevent blood clots forming in your brain or other blood vessels in your body.

- **Treatment of a blood clot**

If you have been diagnosed with a blood clot (for example, in your lungs; PE, or legs; DVT), this medication will treat that.

- **Prevention of a blood clot**

If you are at risk of developing a blood clot, this medication will help to prevent that. Your risk of developing a blood clot may be higher for a number of reasons, including:

- Are admitted to hospital and for 90 days after you go home
- Are immobile, for example, being confined to bed for 3 days or more, travelling a long distance for more than 6 hours or immobility due to a limb being in a cast or boot
- Have a personal or family history of blood clots
- Have had surgery in the last 90 days
- Are over 60 years
- Are overweight
- Have varicose veins that are red and sore
- Are taking oestrogen-containing contraception (including the vaginal ring) or taking HRT
- Have other medical conditions such as lung, heart or inflammatory disease, thrombophilia, or cancer
- Are pregnant or have had a baby less than 6 weeks ago.

## How do I take a DOAC?

- The dose will depend on the reason you need to take a DOAC, and it may be prescribed once daily or twice daily.
- The duration of therapy will depend on the reason for taking this medicine.
- Check the label on your medication for dosing instructions and discuss with your pharmacist.
- See later in this leaflet for information specific to the different medicines.

## Do I need blood tests to monitor a DOAC?

- These medicines do not require a specific blood test to monitor their effect on blood clotting (as is the case with older anticoagulants such as warfarin).
- However, it is important you attend for a blood test at least once a year to check your kidney function and other health checks.
- Blood tests may need to be done more often if you are over 65 years, if you become very dehydrated, suddenly unwell, or have any other medical conditions, this is usually arranged through your GP, or hospital doctor in certain situations.

## What do I do if I forget to take a dose of a DOAC?

- It is important that you do not miss a dose, as your protection against a blood clot may be reduced.
- If you do miss a dose, see the specific information in this leaflet in relation to your particular medicine. Also you can read the patient information leaflet for the specific medicine in your medication pack or call your pharmacist or doctor for advice if necessary.

## What do I do if I take too many tablets?

Contact your doctor, pharmacist or nurse and seek medical attention straight away if you take too many tablets, as you may be at an increased risk of bleeding.

## What happens if I need a medical or dental procedure?

- Bleeding from medical and dental procedures may be increased if you are taking an anticoagulant.
- Tell your doctor or dentist that you are taking an anticoagulant (DOAC) in advance of any planned procedures. These may include operations or minor procedures in the hospital/GP surgery/dental practice. Your doctor/dentist will tell you when you need to stop taking your medication if necessary, and when to restart it.
- **Do not stop taking your DOAC medication unless you are advised to do so and have discussed the situation with your doctor.**

## Pregnancy and breastfeeding:

- DOACs should not be taken during pregnancy or breastfeeding. If you plan to become pregnant or think you are pregnant, talk to your doctor straight away.

NOTE: This leaflet is for general information only and is not a substitute for medical advice.

## What are the side-effects of DOACs?

It is not unusual to bruise easily while you are taking a DOAC, and bleeding will take longer to stop if you cut yourself. The bleeding should stop when pressure is applied for a few minutes, with a clean dry dressing. Serious bleeding is the most serious side-effect, although this is rare.

### Less serious:

- Heartburn, indigestion, stomach-ache
- Nausea (feeling sick), mild diarrhoea (loose stool)
- Mild skin rash or skin itch
- Minor bruising

**If present, talk to your pharmacist, nurse, or doctor.**

- **Women:** heavier periods than usual or other vaginal bleeding: Contact your doctor.

**More serious:**

- Cuts that will not stop bleeding, nosebleeds (longer than 10 minutes), or bleeding gums
- Coughing up blood
- Blood in vomit
- Blood in stool (red or black faeces)
- Blood in urine (red or dark brown pee)
- Severe or unexplained bruising
- Headache, dizziness, or weakness

**If present, contact your doctor immediately or go to your nearest Emergency Department.**

**Very serious:**

- Difficulty breathing
- Swelling of your face, lips, throat, or tongue
- Hives, skin rash or itching
- Severe bloody diarrhoea
- Severe bruising or bleeding
- Seizures

**If present, Call an ambulance at once. You may be having a serious bleed or an allergic reaction. Dial 999 for Emergency Services.**

This is not a complete list of side- effects. For specific advice on individual DOACs, refer to your patient information leaflet in your medicine pack. Talk to your doctor, nurse, or pharmacist about any side- effects that you experience.

## Can I play sports?

Continue to do your regular exercise and play sports. You may need to avoid any activity or sport that may result in a serious fall or injury such as certain contact sports. Discuss with your doctor, pharmacist, or nurse.

## How can I avoid injuries?

- When taking a DOAC, you can do all your normal daily activities, but you are at risk of excess bleeding if you get injured.
- If you do cut or hurt yourself, clean and treat minor cuts and scrapes immediately. Even if there are no visible signs of injury, tell your doctor, pharmacist or nurse about any falls or knocks to the head or body.
- If you suffer from a significant fall or injury, or from any **head trauma** you should seek urgent medical attention.

## Can I take other medications with an anticoagulant?

- As other medicines may interact with DOACs, including “Over The Counter” (OTC) medicines, you should always tell your doctor, dentist, pharmacist, or anyone else treating you, that you are taking an anticoagulant medication.
- Always let the pharmacist know you are taking an anticoagulant (DOAC) before you buy any medicines or supplements without a prescription, as some are not suitable to take.
- Avoid taking any medicines that may increase your risk of bleeding (such as Aspirin or Ibuprofen) unless your doctor has specifically prescribed them for you.
- Paracetamol may be taken for pain if necessary. Always check with your pharmacist.

## Do I need to change my diet or alcohol intake?

- You do not need to change what you eat when taking a DOAC. You should maintain a healthy and balanced diet.
- We recommend that you do not drink more than the safe limits of alcohol per week, as this can increase your risk of bleeding. Check current HSE alcohol guidelines.
- Discuss with your doctor, pharmacist, or nurse.

## Can I get vaccinations?

- You can have vaccinations if you are taking a DOAC. You will need to tell the doctor, pharmacist, or nurse that you are taking a DOAC so they can monitor you.

## Repeat prescriptions

- Do not run out of tablets or capsules and always have at least a week's supply.

## DOAC alert card

- DOAC alert cards are available in the specific medication pack, you should keep this on your person at all times.

## Other Information

For more information on blood clots see the Blood Clot Alert Card from Thrombosis Ireland, also available in the hospital, or scan the QR code below for this information in a variety of languages.





## SPECIFIC MEDICINES

### **Apixaban (Eliquis®):** ***Twice a day (12 hours apart)***

Apixaban can be taken with or without food.

If you forget to take it:

If a dose is missed, but you remember within 6 hours of when it is due, take the dose and continue as normal.

Do not take the forgotten dose if you remember more than 6 hours after the time you normally take it. Take the next dose when it is due and continue as normal. Make a note of the date, and remember to tell your doctor about any forgotten doses.

Never take a double dose (two doses at the same time) to make up a forgotten dose.

For patients with swallowing difficulties, the tablet may be crushed and dispersed in a small glass of water. Take care to ensure the whole dose is administered.

### **Edoxaban (Lixiana®):** ***Once a day***

Edoxaban can be taken with or without food.

If you forget to take it:

Take the forgotten dose immediately – as long as it's the same day the dose was due. Continue at the normal time the next day. Make note of the date and remember to tell your doctor about any forgotten doses.

Never take a double dose (two doses at the same time) to make up a forgotten dose.

For patients with swallowing difficulties, the tablet may be crushed and dispersed in a small glass of water. Take care to ensure the whole dose is administered.

**Rivaroxaban (Xarelto®):**  
**Once a day OR Twice a day**

**Must be taken with food (when dose is greater than 10mg daily)**

**If your dose is ONCE DAILY:**

If you forget to take it:

If you forget to take your ONCE DAILY tablet – if it's still the same day as the dose was due, take the forgotten dose immediately and continue at the normal time the next day. Never take a double dose to make up a forgotten dose.

Make a note of the date, and remember to tell your doctor about any forgotten doses.

**If your dose is TWICE A DAY (12 HOURS APART):**

This medicine is prescribed twice a day for the first 21 days to treat or prevent a blood clot. During this time, take twice daily, 12 hours apart, with food.

If you forget to take it:

If you forget to take it, and it's still the same day as the dose was due, take the forgotten dose immediately, this may even mean taking two (of the 15mg) tablets together at the same time. This is only allowed if taking Rivaroxaban twice a day. Continue to take doses at the normal times the following day.

Make a note of the date, and remember to tell your doctor about any forgotten doses.

For patients with swallowing difficulties, the tablet may be crushed and dispersed in a small glass of water. Take care to ensure the whole dose is administered.

## **Dabigatran (Pradaxa®):**

***Twice a day (12 hours apart) OR Once a day***

Dabigatran can be taken with or without food.

### **If your dose is TWICE A DAY (12 HOURS APART):**

#### If you forget to take the twice daily dose:

Take the forgotten dose only if you remember within 6 hours of the time you normally take it, and then continue as normal.

Do not take the forgotten dose if you remember more than 6 hours after the time you normally take it. Take the next dose when it is due. Continue at the normal times the next day. Make a note of the date, and remember to tell your doctor about any forgotten doses.

Never take a double dose (two doses at the same time) to make up a forgotten dose.

### **If your dose is ONCE DAILY:**

Dabigatran may be prescribed once daily to prevent a clot after a total knee or hip replacement.

#### If you forget to take the once daily dose:

Take the forgotten dose immediately – as long as it's the same day the dose was due. Continue at the normal time the next day. Make note of the date and remember to tell your doctor about any forgotten doses.

Never take a double dose (two doses at the same time) to make up a forgotten dose.

These capsules should **not** be opened, and Dabigatran is not suitable for administration via enteral tubes.

## Therapeutic Duplication

This information booklet is not for parenteral anticoagulants (such as Tinzaparin or Enoxaparin) and it is not for Warfarin. Perhaps you might have been taking or using a different agent in the past but if you are being given this booklet it is likely you are being switched from that medicine to one of the DOAC agents. You should never take Warfarin / Tinzaparin / Enoxaparin when taking your DOAC medicine. Consult your Doctor, Nurse or Pharmacist if you have any questions or concerns about this.

### References:

[www.medicines.ie](http://www.medicines.ie) – SPCs; Eliquis 2.5mg, 5mg; Xarelto 2.5mg, 10mg, 15mg, 20mg; Pradaxa 75mg, 110mg, 150mg; Lixiana 15mg, 30mg, 60mg, accessed May 2024

NHS Dosage of Anticoagulant medicines; <https://www.nhs.uk/conditions/anticoagulants/dosage/#:~:text=If%20you're%20taking%20apixaban,next%20scheduled%20dose%20a s%20normal.>, accessed 21/05/2024

Mayo Clinic; Apixaban (Oral Route); <https://www.mayoclinic.org/drugs-supplements/apixaban-oral-route/proper-use/drg-20060729>, accessed 21/05/2024

The NEWT Guidelines, <https://access.newtguidelines.com/>, accessed 26/07/2024

Thrombosis Ireland, [thrombosis.ie/alert-card/](http://thrombosis.ie/alert-card/), accessed 26/07/2024



## The South Infirmary Victoria University Hospital USEFUL CONTACT DETAILS

Main Reception	(021) 4926100
Ground Floor Victoria Ward	(021) 4926343
Level 1 Victoria	(021) 4926315
Level 2 Victoria	(021) 4926310
Pharmacy	(021) 4926166
L1S Observation Ward	(021) 4926128
L1S Elective Ward	(021) 4926157