Living with a Non-Vitamin K Antagonist Oral Anticoagulant (NOAC)
dabigatran (Pradaxa®) | rivaroxaban (Xarelto®) | apixaban (Eliquis®)
Information for patients
Living with a Non-Vitamin K Antagonist Oral Anticoagulant (NOAC)

dabigatran (Pradaxa®), rivaroxaban (Xarelto®), apixaban (Eliquis®)

If you are prescribed warfarin please refer to the Living with Warfarin book.

What is a Non-Vitamin K Antagonist Oral Anticoagulant?

The Non-Vitamin K Antagonist Oral Anticoagulants, also known as NOACs or Fixed Dose Oral Anticoagulants, are a group of anticoagulant medications. An anticoagulant will help to lower the risk of blood clots forming by increasing the time it takes for the blood to clot. Blood clots can cause serious health problems when they block blood vessels in the brain, lung or legs.

There are three different medications in the NOAC group, as shown in the table below. Your doctor may prescribe one of these for you.

Circle the medication and strength you are taking.

<table>
<thead>
<tr>
<th>Medication</th>
<th>Strengths</th>
<th>Example of tablet or capsule</th>
</tr>
</thead>
<tbody>
<tr>
<td>dabigatran (Pradaxa®) capsules</td>
<td>75 mg 110 mg 150 mg</td>
<td>![Image of Pradaxa® capsules]</td>
</tr>
<tr>
<td>rivaroxaban (Xarelto®) tablets</td>
<td>10 mg 15 mg 20 mg</td>
<td>![Image of Xarelto® tablets]</td>
</tr>
<tr>
<td>apixaban (Eliquis®) tablets</td>
<td>2.5 mg 5 mg</td>
<td>![Image of Eliquis® tablets]</td>
</tr>
</tbody>
</table>

Although there are three NOACs available they are not all the same. Your doctor may prescribe one of these agents based on which is most appropriate for you and your condition.
Why take a NOAC?

A NOAC may be prescribed for you for one of the following reasons:

**Prevention of stroke in patients with atrial fibrillation (AF):**

AF is an irregular heartbeat which can increase the risk of blood clots forming in the heart. A blood clot may then travel to the brain or other parts of the body. This may lead to serious health problems such as stroke. NOACs lower your chance of having a stroke by helping to prevent blood clots forming.

**OR**

**Prevention of blood clots in patients who have had recent hip or knee replacement:**

Blood clots may occur in people who are not physically mobile. People who have had a hip or knee replacement may need an anticoagulant to prevent blood clots until they are able to move around.

**OR**

**Treatment of deep vein thrombosis (DVT) and prevention of recurrent DVT:**

DVT is a blood clot in one of the deep veins in your body, usually in your leg. Continuing treatment in people with a history of blood clots may be required to prevent further blood clots.

**OR**

**Treatment of pulmonary embolism (PE) and prevention of recurrent PE:**

PE is a blockage in blood flow when a blood clot from a vein breaks off and travels to the lungs. Continuing treatment in people with a history of blood clots may be required to prevent further blood clots.
How should I take this medication?

**Take your medication exactly as prescribed by your doctor**

Take your medication regularly, exactly as prescribed by your doctor. If prescribed:

- **once daily** – take at the same time each day, morning or night whichever is easiest for you to remember
- **twice daily** – take morning and night, 12 hours apart.

The usual instructions are listed below but might be changed by your doctor:

Circle the medication, diagnosis and instructions prescribed for you.

<table>
<thead>
<tr>
<th>What is your diagnosis?</th>
<th>Usual dosing instructions</th>
<th>Additional instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>dabigatran (Pradaxa®)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atrial fibrillation</td>
<td>Twice daily</td>
<td>Swallow whole with or without food – <strong>do NOT</strong> chew or open the capsule and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Keep capsule in original packaging until ready to take – <strong>do NOT</strong> transfer capsule to a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dose administration aid such as a dosette box or Webster pack</td>
</tr>
<tr>
<td>Hip or knee replacement</td>
<td>Once a day</td>
<td></td>
</tr>
<tr>
<td>apixaban (Eliquis®)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atrial fibrillation</td>
<td>Twice daily</td>
<td>Swallow whole – with or without food</td>
</tr>
<tr>
<td>Hip or knee replacement</td>
<td>Twice daily</td>
<td></td>
</tr>
<tr>
<td>To treat or prevent a blood clot</td>
<td>Twice daily</td>
<td></td>
</tr>
<tr>
<td>rivaroxaban (Xarelto®)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atrial fibrillation</td>
<td>Once daily</td>
<td>Swallow whole – with food</td>
</tr>
<tr>
<td>Hip or knee replacement</td>
<td>Once daily</td>
<td></td>
</tr>
<tr>
<td>To treat or prevent a blood clot</td>
<td>Twice daily for the first 3 weeks followed by once daily</td>
<td></td>
</tr>
</tbody>
</table>

NOACs need to be taken every day to be effective. It is very important that you do not skip a dose.
Length of treatment and stopping your NOAC

Do not stop taking your NOAC unless told by your doctor.

Your doctor will tell you how long you will need to take your NOAC and when you can stop.

The duration of treatment will depend on the condition being treated and your risk factors. It is very important you do not stop your NOAC unless advised by your doctor.

- **Prevention of stroke in patients with atrial fibrillation**: Continue to take your medication for as long as your doctor tells you.
- **Prevention of blood clots in patients who have had a recent hip replacement**: The usual treatment course is for 28 to 38 days.
- **Prevention of blood clots in patients who have had a recent knee replacement**: The usual treatment course is for 10 to 14 days.
- **To treat or prevent a blood clot such as DVT or PE**: Continue to take your medication for as long as your doctor tells you.

Monitoring with NOACs

NOACs do not have a test to monitor their effect on blood clotting like older anticoagulants such as warfarin. However, it is important to have regular blood tests to check your kidney function:

- **before** you start a NOAC
- **at least once a year** – especially if you are over 75 years or have kidney problems
- if you become severely dehydrated or have any other problems that may affect your kidneys.

It is important to have regular check-ups with your doctor to monitor your condition and for signs of bleeding.

Missed doses

Do not skip a dose – Never take a double dose to make up for a missed dose

If you take your NOAC **once daily** and you have forgotten a dose:

- If it is **less than 12 hours** since the missed dose was due, take the missed dose immediately.
- If it is **more than 12 hours** since the missed dose was due, do not take the missed dose Do not change or double up the next dose.

If you take your NOAC **twice daily** and you have forgotten a dose:

- If it is **less than 6 hours** since the missed dose was due, take the missed dose immediately.
- If it is **more than 6 hours** since the missed dose was due, do not take the missed dose Do not change or double up the next dose.

**Take your next dose at the usual time** and then continue taking your medication as normal.

If you take rivaroxaban **twice a day** the instructions from the manufacturer may be different. Speak to your doctor or pharmacist for further advice. Do not take more than 30mg of rivaroxaban in 24 hours.

If you are unsure of what to do or if you miss more than one dose of your NOAC talk to your doctor or pharmacist.
Other medicines

Tell your doctor or pharmacist if you are taking any other medicines including prescribed medications, vitamins and minerals, herbal supplements and medicines you buy without a prescription from a pharmacy, supermarket or health food store.

To minimise the risk of medication interactions with NOACs, let your doctor, pharmacist or complementary health practitioner know:
- what regular medications you are taking before starting a NOAC
- that you are taking a NOAC before you start any new medicines or complementary therapy
- your NOAC may interact with other medications.

If you are taking any of the following medications **do not** take a NOAC without first speaking to your doctor:

<table>
<thead>
<tr>
<th>Medication type</th>
<th>Medication name (for brand names ask your pharmacist)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicines for fungal infections</td>
<td>ketoconazole, itraconazole, voriconazole and posaconazole</td>
</tr>
<tr>
<td>Medicines for HIV infection</td>
<td>lopinavir/ritonavir, saquinavir</td>
</tr>
<tr>
<td>Some immune suppressing medicines</td>
<td>cyclosporin, tacrolimus</td>
</tr>
<tr>
<td>Medicine for high blood pressure and atrial fibrillation</td>
<td>verapamil, dronedarone&lt;br&gt;Only applies to dabigatran (Pradaxa®)</td>
</tr>
</tbody>
</table>

Other medications may interact with NOACs and your doctor may need to change your medication or the dose. Tell your doctor or pharmacist if you are taking any of the following:

<table>
<thead>
<tr>
<th>Medication type</th>
<th>Medication name (for brand names ask your pharmacist)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other medicines to prevent blood clots</td>
<td>warfarin, enoxaparin, dalteparin, clopidogrel, ticagrelor, prasugrel, aspirin</td>
</tr>
<tr>
<td>Some pain relief or anti-inflammatory medicine</td>
<td>aspirin, ibuprofen, naproxen, diclofenac, meloxicam, celecoxib</td>
</tr>
<tr>
<td>Some medicines for atrial fibrillation</td>
<td>amiodarone, diltiazem</td>
</tr>
<tr>
<td>Some antibiotics</td>
<td>clarithromycin, rifampicin</td>
</tr>
<tr>
<td>Some herbal or complementary medicines</td>
<td>St John’s Wort</td>
</tr>
<tr>
<td>Medicines for epilepsy</td>
<td>carbamazepine, phenytoin</td>
</tr>
</tbody>
</table>

There may be other medications not listed here. Ask your pharmacist or doctor for more information.

**Alcohol**

Alcohol can interact with NOACs and have an effect on bleeding. Avoid heavy or binge drinking while taking a NOAC. Small amounts (1–2 standard drinks on any day) should not cause problems.
NOACs and bleeding

As with all anticoagulants, bleeding is the main side effect of NOACs. There is currently no antidote to stop the effects of dabigatran, apixaban or rivaroxaban, however, there are procedures that can be carried out to stop the bleeding.

Taking the medication exactly as your doctor prescribes reduces the risk of bleeding. Some important things to remember are:

- know what to do if bleeding starts
- tell your doctor or dentist well before any planned procedure or surgery
- avoid activities and sport that may cause serious injuries
- if seeking medical attention for an emergency bleed, tell your doctor that you are taking a NOAC.

Signs and symptoms to watch for

Some common signs and symptoms of unusual bleeding are:

- unexpected bleeding or bleeding that lasts a long time (this includes nose bleeds, bleeding from your gums, bleeding from cuts and scrapes and/or menstrual periods).
- severe or unexplained bruising, or bruising that gets bigger without a cause
- red or dark urine
- red or black (tar like) bowel motions
- coughing blood
- dark or blood stained vomiting
- severe headache or dizziness
- unexpected new pain, swelling or discomfort.

What should I do?

You should call your doctor right away if you have any signs or symptoms of unusual bleeding. If there are signs of internal bleeding or the bleeding is severe then go to the nearest emergency department immediately.

Medical and dental procedures

Bleeding from medical and dental procedures may be increased if you are taking a NOAC. With simple dental procedures and minor skin surgery you may not need to stop taking your NOAC. Other procedures, such as endoscopy may require specialist advice. Your doctor will tell you what you need to do.

Tell your doctor or dentist that you are taking a NOAC well before any planned procedure including operations in hospital, minor procedures at the doctor’s surgery and some dental procedures. Your NOAC therapy will be considered during the planning of your operation or procedure. **Do not stop taking your NOAC unless told by your doctor.**
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Avoiding injuries
When taking a NOAC you can perform all your normal daily activities but you are at risk of excess bleeding if you are injured.

What can I do?
There are steps you can take to minimise your risk of injury which may cause bleeding:

- avoid activities such as contact sports (football, rugby, boxing) that may cause injury
- take care to prevent falls as falls may lead to significant injury
- wear gloves when gardening
- consider using an electric razor instead of a blade.

If you do cut or hurt yourself:

- clean and treat minor cuts and scrapes immediately
- even if there are not visible signs of injury tell your doctor about any falls, knocks to the head or body or other major injuries.

Adverse reactions/side effects
If any of the following occur go to the emergency department at your nearest hospital immediately:

- signs of allergy such as rash, itching, swelling of any parts of the body, difficulty breathing
- signs of liver problems such as yellowing of the skin and/or eyes (jaundice)
- signs of excessive bleeding: see NOACs and bleeding section.

Tell your doctor if you notice any of the following and they worry you:

- indigestion, discomfort when swallowing
- diarrhoea, stomach ache
- nausea, vomiting
- dizziness, breathlessness
- fever or general unwellness.

Special precautions
NOACs may not be suitable for you if you have:

- uncontrolled high blood pressure, liver problems or reduced kidney function
- artificial heart valves (particularly mechanical valves)
- had recent surgery (particularly brain, spine or eye surgery)
- a bleeding disorder or a history of bleeding problems (e.g. current or recent stomach ulcers)
- certain types of cancer.

Your doctor will need to take this into consideration before prescribing any NOAC.

Pregnancy and breastfeeding
NOACs are not recommended during pregnancy or whilst breastfeeding. If you plan to become pregnant or think you are pregnant talk to your doctor.
For emergencies

**Carry identification with you that states which NOAC you take**

If you have an accident or become very ill, ambulance and hospital staff need to know that you take a NOAC. Patients taking a NOAC should carry identification that mentions the NOAC they are taking. This might be an anticoagulant treatment card or Medical ID tag (e.g. Medic Alert). It is also a good idea to carry an up-to-date list of all your medicines.

Patients on long-term oral anticoagulation with a NOAC should consider joining Medic Alert and registering for an eHealth record.

**Medic Alert**

Joining Medic Alert involves providing personal details and medical history including NOAC therapy. This vital patient information can then be accessed by medical and emergency workers during emergencies. You can find out more information about Medic Alert from www.medicalert.org.au

**Personally Controlled Electronic Health Record (PCEHR)**

A personally controlled electronic health record is a secure online summary of your health information. Your eHealth record allows you and your doctors, hospitals and other healthcare providers to view and share your health information to provide you with the best possible care. For more information visit and register today at www.ehealth.gov.au

**Storage**

Keep your tablets in the pack until it is time to take them. Dabigatran (Pradaxa®) capsules **must not** be transferred out of the original packaging (foil pack or bottle) and must be used within 4 months once the bottle has been opened. Keep the bottle tightly closed. Do not package in dose administration aids such as dosette boxes or Webster packs. This does not apply to apixaban and rivaroxaban.

Keep your tablets in a cool dry place where the temperature stays below 30°C. Do not store your medications in the bathroom or near a sink. Do not leave it on a window sill or in the car. Store all medications out of reach of children.

**NOACs and warfarin**

You should not need to take warfarin and a NOAC at the same time. Ask your doctor for advice if you do.

**Which is better?**

As with all medications there are benefits and risks when taking warfarin or a NOAC. Warfarin and NOACs are just as effective as each other in preventing blood clots for certain conditions if they are taken exactly as instructed.

NOACs have not been clinically tested in as many disorders as warfarin, so cannot be used for some conditions such as mechanical heart valves and thrombophilia disorders. Your doctor will choose the most suitable option for you.
<table>
<thead>
<tr>
<th>Your name:</th>
<th>NOAC name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone:</td>
<td>Dose:</td>
</tr>
<tr>
<td>Emergency contact:</td>
<td>Frequency:</td>
</tr>
<tr>
<td>Prescribing doctor and contact:</td>
<td>Medical condition:</td>
</tr>
</tbody>
</table>

Fold and keep this card in your wallet
Useful contacts

Poisons information line – for immediate advice for overdoses or poisoning
24-hour telephone line: 131 126

NPS MedicineWise – for information about your medicines
Website: www.nps.org.au
NPS Medicines Line: 1300 633 424 (1300 Medicine)

healthdirect Australia – to speak with a registered nurse for health advice
24-hour telephone line: 1800 022 222