The Royal Wolverhampton NHS Trust

Non-Vitamin K Oral Anticoagulant (NOAC) / Direct Oral Anticoagulant (DOAC) Therapy

Keep this booklet safe. Take it to any medical appointments you may have.

Surname	Unit No
Forename	NHS No
Address	DOB
Postcode	(or affix patient label)

Gender: Male / Female

Contact Telephone Number:
Registered GP:
GP Telephone Number:
GP / Surgery Address:
Indication for NOAC / DOAC:
Creatinine Clearance [Cockcroft-Gault formula] (ml/min):
Date Calculated:

The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature
 or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice
 from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

Body weight: Date assessed: Name and dose of NOAC / DOAC: Treatment start date: Intended duration of treatment:

Adjuvant antiplatelet therapy (if essential):

Drug Name (for example: Clopidogrel)	Comment (for example: stop after 12 months)

Proton Pump Inhibitor (PPI) cover required: Yes / No (Strike out whichever is not applicable)

Next blood test (FBC, U&Es and LFTs) due on:

In an emergency obtain advice from:

Introduction

This booklet has been given to you because you are starting on a medication known as a Non-Vitamin K Oral Anticoagulant (NOAC) / Direct Oral Anticoagulant (DOAC) meant to thin your blood. A healthcare professional will go through this book with you, explain what it all means and answer any questions you may have, including any alternative medications to thin your blood. They will be able to give you advice at the start of your treatment or when you leave hospital, and at anytime that you need it.

How to use this booklet

The booklet provides you with important information about your treatment and contact information for you to obtain further advice. You should keep this booklet safe, and take it with you to any GP / hospital appointments.

A "NOAC / DOAC Alert Card" is provided, which you should fill in and carry with you at all times. This identifies that you take a NOAC / DOAC medication, which may be important in an emergency and to inform healthcare professionals before you receive other treatment.

Oral anticoagulants

An anticoagulant medicine prevents harmful clots from forming in your blood vessels by making your blood take longer to clot. Until recently, patients requiring an anticoagulant were commonly prescribed drugs known as Vitamin K Antagonists (VKAs), as they were the only anticoagulant which could be taken orally. The most commonly prescribed and well known example of this is warfarin, others being acenocoumarol ('Sinthrome') and phenindione ('Dindevan').

In the last decade, a new drug, known as Non-Vitamin K Oral Anticoagulants (NOACs) / Direct Oral Anticoagulants (DOACs) have been licensed which work in a similar way to VKAs to prevent clots from forming. Other names for these drugs are Newer Oral Anticoagulants or Novel Oral Anticoagulants. Large scientific studies, involving thousands of patients, have shown that this group of drugs are at least as effective, if not superior, when compared to warfarin.

Currently, there are four such drugs which are licensed for use, namely, apixaban, dabigatran, edoxaban and rivaroxaban. The National Institute of Clinical Excellence (NICE) has recommended their use over warfarin in patients with an abnormal heart rhythm known as atrial fibrillation or atrial flutter, or clots in the legs and, or, lungs (deep venous thrombosis, pulmonary embolism). Your healthcare professional will discuss with you which NOAC / DOAC you are, or will be, taking. The name is also written in this booklet. There are slight differences (for example, indications, dosing, side effects) among the four currently licensed NOACs / DOACs.

Nevertheless, when compared to warfarin, NOACs / DOACs have the following advantages:

- They start acting very quickly (within 3 hours)
- They do not require as frequent regular monitoring with blood tests
- There is less interaction of these drugs with food or medication
- Once ingested, their drugs levels are more predictable. The disadvantages of this group of drugs are that:
 - As they are shorter acting, patients are not protected if they do not take the medication regularly
 - Not all patients are suitable for them, for example, those with advanced kidney dysfunction, metallic valves, certain valve disorders, if pregnant or breast feeding

Common reasons for being prescribed a blood thinning medication are:

- If you have an irregular heart beat known as atrial fibrillation (AF) and, or, atrial flutter
- If you have had clots in your legs ('deep venous thrombosis' /DVT) or your lungs ('pulmonary embolism') or are at risk of having them.

The duration of treatment with NOACs / DOACs will vary with the condition for which it is being prescribed. Please discuss with your doctor if you need more information about this.

How do I take my NOAC / DOAC?

Take your NOAC / DOAC as prescribed by your clinician; this will either be once or twice a day depending on which one you are prescribed. It should be taken at about the same time each day, washed down with a full glass of water. If you have been prescribed rivaroxaban, please take it with food, for example, the main meal of the day; the others may be taken with or without food.

Make sure you do not run out of your NOAC / DOAC, and always have at least a week's supply with you.

Side effects

As is common with other drugs, NOACs / DOACs can cause side effects but not everybody gets them. The most common side effect, apart from bruising, is bleeding. However, your healthcare professional has deemed that the reduction in the risk of clotting outweighs the bleeding risk. Serious bleeding is uncommon but if you experience any of the following, you should seek medical attention:

- Severe bruising
- Prolonged nose bleeds (more than 10 minutes)
- Passing blood in urine or faeces
- Passing black faeces
- Unusual dizziness, weakness, appearing pale
- Blood in sputum
- Blood in vomit
- Unusual headaches
- In women, heavy or increased bleeding during periods or any other vaginal bleeding.

If you cut yourself, apply firm pressure to the site for at least five minutes using a clean, dry dressing.

Seek immediate medical attention if you:

- Are unable to stop bleeding
- Involved in major trauma or
- Suffer a significant blow to the head

Going to the dentist

It is important to tell anyone treating you, including your dentist, that you are taking a NOAC / DOAC, to ensure that it is safe to provide treatment. In the majority of cases it may be possible for your dental treatment to go ahead as normal without your anticoagulant treatment being stopped. In some cases it may be necessary to stop your NOAC / DOAC for a short period, for example, one or two days before treatment and to restart straightaway afterwards.

What if I forget to take my anticoagulant or take the wrong dose?

What you should do if you miss a dose of your NOAC / DOAC medication, depends on which NOAC / DOAC you are taking and why you are taking it. Advice on what to do is printed on the information leaflet you received with your medicines. If you are unsure what to do, then contact your GP, Anticoagulation Clinic or pharmacist for advice.

If you think you have missed more than one dose or if you have taken more than your normal dose, then please contact your doctor.

Monitoring treatment

Unlike warfarin or other Vitamin K Antagonists, frequent routine blood tests are not required to decide the correct dose.

However, blood tests to check blood counts, kidney and liver function will need to be done at least once a year to make sure the correct dose is prescribed. More frequent monitoring may be required if your kidney function is abnormal. Any dose changes made to your NOAC / DOAC medication based on your kidney function will be shared with your medical team and GP.

Going to your community pharmacy

If you are planning to buy over-the-counter medicines, including alternative or herbal remedies, tell the pharmacist that you are taking a NOAC / DOAC anticoagulant and show them your NOAC / DOAC Alert Card. They can then advise you on medicines that are safe for you to take.

Things that may affect the control of anticoagulation

Other medicines

Generally, the newer anticoagulants have fewer interactions with other medications as compared to warfarin or other Vitamin K Antagonists. If you are also starting or stopping another medication, the prescriber may advise that you should change your dose or change to another anticoagulant.

To decrease the risk of bleeding, you should not take aspirin unless it has specifically been prescribed by your doctor. Similarly, it is also advisable to avoid other non-steroidal anti-inflammatory drugs like diclofenac and ibuprofen, some of which can be brought over the counter in pharmacies with names such as Nurofen, Brufen or Ibuprofen. Topical forms of ibuprofen / diclofenac are fine to use, for example, voltarol gel

Paracetamol and codeine-based painkillers are acceptable, although be aware that some paracetamol "plus" products contain aspirin.

Diet

There is no need to change what you eat or drink when you are taking a NOAC / DOAC. However, it is important to eat a well balanced diet as part of a healthy lifestyle. If you lose a significant amount of weight, such as losing >5% of your body weight within 6-12 months, please alert your doctor as you may require a change in dose of your NOAC / DOAC medication.

Alcohol

It is recommended that you do not exceed the current national guidelines, for example, drinking no more than 14 units per week. It is best to spread your alcohol intake evenly over 3 or more days.

It is dangerous to "binge drink" whilst taking anticoagulants.

Other information

Pregnancy

NOACs / DOACs are not licensed for use during pregnancy or breast feeding. Whenever possible, women who are on a NOAC /DOAC should discuss plans for future pregnancy with their doctor before trying to conceive. Women who think they have become pregnant while on these drugs should seek a pregnancy test as soon as possible and, if this is positive, an urgent appointment with their doctor.

Periods

Women may experience heavier periods while they are taking NOACs / DOACs and may wish to discuss this with their GP, nurse or pharmacist.

Reversal Agents / Antidotes

Rarely, patients may need their anticoagulation to be reversed when taking a NOAC / DOAC, for example, if there is serious bleeding due to an injury or if they need emergency surgery. If reversal of anticoagulant effect is required, antidotes are available for the NOACs / DOACs, for example, dabigatran, apixaban and rivaroxaban. In the event of mild or major, but not life threatening bleeding, a range of measures are available to the healthcare professionals for treatment.

Further information

The information leaflet in the medicine box will give more detailed information on your NOAC / DOAC. In addition, a number of patient organisations can give you further information and support. Their contact details are available from your GP, Anticoagulation Clinic, hospital doctor, nurse or pharmacist

English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

Traditional Chinese

如果您需要以其他方式了解信息,如易读或其他语种,请告诉我们。 如果您需要口译人员或帮助,请告诉我们。

> Designed & Produced by the Department of Clinical Illustration, New Cross Hospital, Wolverhampton, WV10 0QP Tel: 01902 695377.