

## Apixaban

This factsheet introduces the anticoagulant apixaban to patients and carers, summarises how it works, and explains the advantages and side effects of this medication.

### AF and stroke risk

People who have atrial fibrillation (AF) are at higher risk of clots forming in the heart. If these clots travel through the bloodstream to the brain then this may cause an AF-related stroke.

AF-related strokes are often more serious than other strokes. This is because the large clots which form in the heart can cause more damage resulting in more disability.

To reduce the risk of AF-related stroke an anticoagulant is often prescribed. An anticoagulant lengthens the time a clot takes to form by just enough to address any risk of stroke.

Until recently warfarin was the most commonly prescribed anticoagulant and is a very effective medication, dramatically reducing the risk of AF-related stroke. Warfarin requires regular monitoring as its effectiveness can vary due to lifestyle, dietary intake, general health and other prescribed medications. Monitoring involves a blood test to check international normalised ratio (INR) levels. The result determines the dose of warfarin.

In recent years further anticoagulants have been developed. These are the non-vitamin K antagonist oral anticoagulants (NOACs), and include dabigatran rivaroxaban and edoxaban. Unlike warfarin, they do not require blood tests as they are unaffected by dietary intake, lifestyle or general health. NOACs also interact less with other medications.

The NOACs are as effective as warfarin in preventing an AF-related stroke.

### How it works

In February 2013, apixaban was approved by The National Institute for Health and Care Excellence (NICE) for use within the UK. It is prescribed for reducing AF-related stroke risk in people with AF that is not caused by a heart valve problem. It is only recommended if you have AF and risk factors for AF-related stroke, e.g. you have had a stroke or TIA in the past, you are 75 years or older, have hypertension, have diabetes etc.

The clotting of the blood is a complex process as blood should clot rapidly when required, but also remain fluid at other times. The process is often referred to as the 'clotting cascade' by clinicians. This term is used to explain how the stimulation to form a clot triggers a series of steps before producing the blood enzyme thrombin. The enzyme thrombin changes the soluble protein fibrinogen to the insoluble protein fibrin. Clots are made of fibrin.

Apixaban is a medication that has a direct effect on the an enzyme called 'Ten A', often written 'Xa'. This is part of the clotting cascade that leads to the soluble 'fibrinogen' being converted to the fibrous 'fibrin' then causes clots (thrombus). This controlled blocking of Xa stop the blood clotting as quickly so helps to prevent the formation of clots in the heart that cause strokes.

### Dose

The recommended dose of apixaban is 5mg twice daily. If you are over 80, have low body weight or impaired kidney function, you may be offered a lower dose of 2.5mg twice daily.

You should inform your doctor and dentist that you take apixaban before having any operation or procedure, or before changing or starting other medications including herbal remedies.

### What should I do if I miss a dose?

Apixaban is rapidly metabolised by the body, requiring a twice daily dose. If a tablet is missed or overlooked then it should be taken as soon as possible after the mistake is noticed, unless it is almost time for your next dose. Please check the patient leaflet which comes with your medication for further details. Double or extra doses of apixaban should not be taken.

### Advantages

In clinical trials, apixaban was shown to be at least three times more effective than aspirin in preventing AF-related stroke. There are no known lifestyle issues like those that apply to warfarin, and apixaban does not involve frequent blood monitoring.

There are few identified interactions between apixaban and other medications.

Trials have suggested that there may be fewer bleeds in the brain (intracranial haemorrhages) and fewer fatal bleeds when compared with warfarin.

### Disadvantages and side effects

All medications have side effects. Both the patient and the prescribing clinicians have to balance the benefits with the side effects. Apixaban (as with all anticoagulants) may, by its very nature, be associated with increased bleeding and if bleeding occurs this may continue longer than usual. Other side effects that have been noted include nausea, vomiting and constipation.

Taking aspirin or other anti-inflammatory painkillers (such as ibuprofen) together with apixaban increases the risk of a bleed and should be avoided unless under the direction of a prescribing clinician.

There are situations, such as after a heart attack or angioplasty (where the artery is opened using a balloon) when the clinician may advise use of aspirin (or an aspirin-like medication) with

apixaban. This is because people need the aspirin to reduce the risk of further heart attack, and the anticoagulant to reduce the risk of AF-related stroke.

Apixaban's anticoagulation effect is not currently reversible. Its effects on the blood's clotting do reduce over a few hours (this is why it is taken twice daily) so a bleed would not be indefinite. If you are concerned about a bleeding event then you should attend an A&E department as they may need to assist.

### What to do if you notice bleeding

Small bleeds or minor bruising are to be expected whilst on anticoagulants. If these are concerning to you then you should discuss them with your doctor or anticoagulation nurse.

You should seek medical assistance urgently if you experience any of the following:

- Nose bleeds that last for more than ten minutes.
- Blood in your sputum or vomit.
- Blood in your urine or faeces.
- Passing black coloured faeces.
- Severe or spontaneous bruising.
- Unusual headaches.
- Skin that is cool, moist or looks pale, ashen or bluish.

For further information on anticoagulants, please see AF Association's Preventing AF-related stroke: anticoagulation booklet.

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