

Plain English Summary

Anticoagulants to treat and prevent blood clots

What does the guidance say?

Apixaban is recommended for listing on the Standard Drug List (SDL) and rivaroxaban is recommended for listing on the Medication Assistance Fund (MAF) for government subsidy for treating and preventing blood clots in adults who meet certain criteria.

Dabigatran is not recommended for subsidy for this condition.

What are blood clots?

Blood clots occur when blood thickens and forms a semi-solid mass inside a vein. They can form in veins anywhere in the body and can stop blood from flowing properly.

Your doctor may use the term “venous thromboembolism” (VTE) which refers to all types of blood clots. VTE can be caused by surgery, certain medical conditions or not moving for a long time. Other factors that can increase the risk of blood clots include smoking, being overweight, having a family history of blood clots, or being over 65 years old.

In some patients with an irregular heartbeat (known as atrial fibrillation), blood can build up in the heart and not flow through the body normally. Atrial fibrillation can be caused by problems with heart valves (called valvular atrial fibrillation) or by other factors such as high blood pressure (called non-valvular atrial fibrillation). When the blood stays still for too long, it can form blood clots and cause a heart attack. If a blood clot breaks off and travels to other parts of the body, this is called systemic embolism. Blood clots that travel to the brain can cause a stroke.

When a blood clot blocks blood flow to the lungs, this is known as a pulmonary embolism. Symptoms can include shortness of breath, chest pain, coughing up blood, fast heart rate, rapid breathing and dizziness.

Blood clots that form in deep veins in your arms and legs are called deep vein thrombosis (DVT). Symptoms include pain, redness and swelling in the affected area. Treatment of a blood clot will depend on where the clot is. Medicines are commonly used to make the blood thinner and stop the clot from growing larger.

What are apixaban and rivaroxaban?

Apixaban and rivaroxaban belong to a group of medicines called anticoagulants (blood thinners) which stop a blood clotting protein called Factor Xa from working and help to prevent blood clots from forming.

They are taken orally each day. Your doctor will tell you how much you need to take and how long you need to take it for.

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Who can have apixaban or rivaroxaban?

Adults having hip or knee surgery can have apixaban to prevent blood clots.

Adults can also have apixaban or rivaroxaban to:

- Prevent a blood clot from forming in the heart if they have an irregular heartbeat (non-valvular atrial fibrillation) and at least one other risk factor; or
- Prevent a blood clot from breaking off and travelling to the brain (causing a stroke), or to other organs and preventing blood flow (systemic embolism); or
- Treat blood clots in leg veins (deep vein thrombosis) or in blood vessels in the lungs (pulmonary embolism) and prevent blood clots from coming back.

Your doctor can advise if apixaban or rivaroxaban are suitable treatments for you.

Why were apixaban and rivaroxaban recommended for subsidy?

ACE evaluates how well a treatment works in relation to how much it costs compared to other treatments. Apixaban and rivaroxaban were recommended because their benefit in treating and preventing blood clots for certain patients justifies their costs. Dabigatran was not recommended for subsidy because its clinical benefits do not justify its cost compared with apixaban and rivaroxaban.

Apixaban has been listed on the Standard Drug List (SDL). Drugs on SDL are subsidised at 50% for all Singaporean citizens who are treated in a public healthcare institution. Patients from lower to middle income households may receive a higher subsidy up to 75%.

Rivaroxaban has been listed on the Medication Assistance Fund (MAF). The MAF helps people pay for expensive treatments that are clinically necessary. If your doctor prescribes rivaroxaban for you, and you meet the MAF criteria, your treatment cost will be subsidised by 40% to 75%.

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