

## Everolimus (Afinitor)

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### 1. What is everolimus?

Everolimus is a targeted (biological) therapy. This group of drugs block the growth and spread of cancer. They target and interfere with processes in the cells that help cancer grow.

Everolimus is the drug's non-branded name. Its brand name is Afinitor.

Everolimus is taken in combination with the hormone (endocrine) therapy exemestane.

### 2. Who might be offered everolimus?

Everolimus may be offered to post-menopausal women with ER positive, HER2 negative, locally advanced or secondary breast cancer whose breast cancer has come back during or after taking the hormone therapy drugs letrozole or anastrozole.

Everolimus is not currently given for primary breast cancer.

### 3. How does everolimus work?

Everolimus belongs to a group of drugs called mTOR inhibitors. mTOR is a protein that affects how cancer cells divide and grow. Everolimus works by blocking mTOR, which helps to stop or slow down the growth of the cancer.

### 4. How is everolimus given?

Everolimus is given as a tablet once a day.

You must take it whole with water, at the same time each day. You can take it with or without food.

Everolimus is always given alongside the hormone therapy drug exemestane.

## **If you haven't been through the menopause**

Everolimus with exemestane is suitable for women who have been through the menopause (when your periods stop).

If you haven't been through the menopause, you will also have treatment to stop your ovaries producing oestrogen, either temporarily or permanently. This is known as ovarian suppression.

## **What happens if I miss a dose?**

If you miss a dose of everolimus, or vomit soon after taking it, do not take an extra dose to make up for the one you missed. Keep to your usual amount and speak to someone in your treatment team.

## **How long will I take everolimus for?**

You'll have everolimus alongside exemestane for as long as your treatment team feels you're benefiting from it. This will vary from person to person

You may need to stop taking everolimus if you experience significant side effects.

## **5. Side effects of everolimus**

Like any treatment, everolimus can cause side effects. Everyone reacts differently to drugs and some people have more side effects than others. These side effects can usually be controlled and those described here will not affect everyone.

Because everolimus is given with exemestane, you may experience side effects from that drug as well.

If you're concerned about any side effects, regardless of whether they're listed here, talk to your treatment team as soon as possible.

## **Common side effects of everolimus**

### **Effects on the blood**

Everolimus can affect the number of blood cells in the body.

You'll have regular blood tests to check your blood count. Blood is made up of red cells, white cells and platelets.

## **Risk of infection**

Not having enough white blood cells can increase the risk of getting an infection.

**Your treatment team may give you guidelines to follow for reporting signs of an infection, but generally you should contact your hospital immediately if you experience any of the following:**

- **A high temperature (over 37.5°C) or low temperature (under 36°C), or whatever your treatment team has advised**
- **Suddenly feeling unwell, even with a normal temperature**
- **Symptoms of an infection, for example a sore throat, a cough, a need to pass urine frequently or feeling cold or shivery**

## **Anaemia**

Having too few red blood cells is called anaemia. If you feel particularly tired, breathless or dizzy, let your treatment team know.

## **Bruising and bleeding**

Everolimus can reduce the number of platelets that help the blood to clot. You may bruise more easily, have nosebleeds or your gums may bleed when you brush your teeth. Tell your treatment team if you notice any of these symptoms.

## **Sore mouth and taste change**

Looking after your mouth, including your teeth and gums, is very important during treatment. You'll be given mouthwash to try to reduce soreness, and to try to stop mouth ulcers developing.

It's advisable to see your dentist for a dental check-up before treatment begins. If you do need to have dental treatment, talk with your oncologist about the best time to have this.

Your taste can change, and some food may taste different, for example more salty, bitter or metallic.

Our information on [diet during breast cancer treatment](#) includes tips on dealing with taste changes.

## **Shortness of breath and coughing**

Everolimus can cause changes to the lungs which can be serious if not treated. Let your treatment team know immediately if you start to feel breathless or develop a cough.

## **Cancer-related fatigue (extreme tiredness)**

Cancer-related fatigue is extreme tiredness that doesn't go away with rest or sleep. It's a very common side effect of breast cancer treatment and may affect you physically and emotionally. It has many causes, from psychological factors such as the stress of coping with the diagnosis, to physical ones such as the side effects of treatment or progression (growth and spread) of the cancer.

If you think you have fatigue, tell your GP or treatment team so you can be fully assessed and offered advice on how to manage your energy levels.

[Find out more about managing fatigue.](#)

## **Skin changes**

You may get a rash and your skin may be itchy. Using a moisturiser regularly and a high-factor sunscreen in the sun may help. Let your treatment team know if you have any skin changes as they may prescribe creams or tablets to help.

## **Diarrhoea**

Your treatment team or GP can prescribe medicine to help control diarrhoea. Contact your treatment team if you have four or more episodes of diarrhoea within a 24-hour period.

## **Raised blood sugar levels (hyperglycaemia)**

Everolimus can cause your blood sugar levels to increase. If you notice you are more thirsty than usual or passing urine more often than normal let your treatment team know. You'll have regular blood tests to check this while taking everolimus.

## **High cholesterol**

Everolimus may cause your cholesterol levels to increase. You'll have regular blood tests while taking everolimus to check your cholesterol levels.

## **Nausea and vomiting**

You may feel sick (nausea) or be sick (vomit). Anti-sickness drugs can be prescribed to help with this. If you still experience nausea or vomiting contact your treatment team as they may be able to recommend a different anti-sickness drug and change your prescription.

## **Loss of appetite**

You may not feel like eating, especially if you feel sick. It might help to eat small meals regularly and drink plenty of liquids. You can also ask your GP or treatment team to refer you to a dietitian for more advice.

## **Headaches**

Everolimus may cause headaches. Tell your treatment team or GP about any headaches so they can assess you and help manage them.

## **Less common side effects of everolimus**

### **Allergic reaction**

Very occasionally, allergic reactions to everolimus can occur. Reactions can vary from mild to severe, although severe reactions are rare. If you have an allergic reaction to everolimus, it's more likely to happen the first time you have the treatment.

You should contact your hospital immediately if you notice any of the following symptoms:

- Itchy red bumps on your skin
- Swelling in your lips, tongue or throat
- Breathlessness, wheezing, a bad cough or sudden difficulty breathing
- Tight chest or chest pain

### **Kidney problems**

Everolimus can affect how well your kidneys work. You'll have regular blood tests while taking it to check how well they're working. If you have difficulty passing urine or not passing as much urine as normal, let your treatment team or GP know.

### **Liver changes**

Everolimus can affect how the liver works. You'll have regular blood tests to check that your liver is working properly. Sometimes treatment may need to be delayed or the dose reduced if the blood tests show any problems with your liver.

## **Hand-foot (palmar plantar) syndrome**

You may develop soreness, redness and peeling on the palms of your hands and soles of your feet. This is known as Palmar-plantar or hand-foot syndrome, and may cause tingling, numbness, pain and dryness.

Keeping the feet and hands clean, dry and well moisturised can help.

If you experience skin reactions, mention this to your treatment team so the symptoms can be managed.

## **Heart changes**

Although uncommon, everolimus may cause changes to your heart. This is usually temporary, but for a small number of people it may be permanent. Contact your treatment team if you develop any breathlessness, chest pain, a cough or notice any swelling in your arms, legs or feet.

## **Slow wound healing**

Everolimus may delay wound healing. If you need an operation you may have to stop taking everolimus for a short time and start it again once your wound has healed. Your treatment team can tell you more about this.

# **6. Other important information**

## **Blood clots**

People with breast cancer have a higher risk of blood clots. Their risk is higher because of the cancer itself and some treatments for breast cancer. If the cancer has spread to other parts of the body (secondary breast cancer), this also increases the risk.

Having everolimus increases the risk of blood clots such as a deep vein thrombosis (DVT).

People with a DVT are at risk of developing a pulmonary embolism (PE). This is when part of the blood clot breaks away and travels to the lung. Blood clots can be harmful but are treatable so it's important to report symptoms as soon as possible.

**If you experience any of the following symptoms contact your local A&E department, GP or treatment team straight away:**

- **Pain, redness/discolouration, heat and swelling of the calf or thigh**
- **Swelling, redness or tenderness where a central line is inserted to give chemotherapy, for example in the arm, chest area or up into the neck**

- **Shortness of breath**
- **Pain or tightness in the chest**
- **Unexplained cough or coughing up blood**

Find out more about [blood clots](#).

## **Hepatitis B**

If you have had hepatitis B (a liver infection) in the past, everolimus can make the hepatitis infection active again. Let your treatment team know if you have ever had hepatitis.

## **Medicines and food to avoid when taking everolimus**

When taking everolimus:

- Do not take anything containing St John's Wort
- Do not eat grapefruit or drink grapefruit juice

There are a number of drugs that should not be taken with everolimus.

Tell your treatment team about any prescribed or over-the-counter medicines you're taking.

If a healthcare professional (such as your GP or dentist) prescribes you a new drug, you should tell them you're taking everolimus.

Ask for advice from your specialist before taking any herbal medicines or supplements.

Everolimus contains lactose. If you know you're lactose intolerant discuss this with your treatment team first.

## **Sex, contraception and pregnancy**

Taking everolimus while pregnant may be harmful to a developing baby. Some women can still become pregnant even if their periods are irregular or have stopped.

You should use effective barrier contraception if you haven't been through the menopause, such as condoms and Femidoms, during treatment and for up to eight weeks after finishing treatment.

The effect on fertility is not known but it's thought that everolimus may decrease this. You may want to talk to your treatment team about fertility preservation before starting treatment.

Find out more about [options for preserving fertility](#).

## **Breastfeeding**

You'll be advised not to breastfeed during treatment and for at least two weeks after your last dose of everolimus. This is because there is a chance your baby may absorb the drug through your breast milk, which might cause harm.

## **Travel and vaccinations**

If you're planning a holiday or need to travel overseas, check with your treatment team first.

Everolimus may affect your body's immune response to vaccinations. This means vaccinations may be less effective while you are taking everolimus.

You shouldn't have any live vaccines while you're having everolimus. Live vaccines include mumps, measles, rubella (German measles), polio, BCG (tuberculosis), shingles and yellow fever.

Live vaccines contain a small amount of live virus or bacteria. If you have a weakened immune system, which you may do during treatment, they could be harmful.

It's safe to have these vaccinations six months after your treatment finishes. Talk to your GP or treatment team before having any vaccinations.

If anyone you have close contact with needs to have a live vaccine speak to your treatment team or GP. They can advise what precautions you may need to take depending on the vaccination.

## **Coronavirus (Covid-19) vaccination**

People having everolimus are advised to speak to their treatment team before having the coronavirus (Covid-19) vaccination.

[Find out more about the coronavirus vaccine.](#)

## **Flu vaccination**

Anyone at risk of a weakened immune system, and therefore more prone to infection, should have the flu vaccine. The flu injection is not a live vaccine so does not contain any active viruses. Talk to your treatment team about the best time to have your flu jab.

## **7. Further support**

Being diagnosed with breast cancer can make you feel lonely and isolated.

Many people find it helps to talk to someone who has been through the same experience as them. Breast Cancer Now's [Living with Secondary Breast Cancer](#) service can provide an opportunity to meet those in a similar situation, and offers helpful support and information in a relaxed environment. You might also find it helpful to join one of our [Live Chat](#) sessions, or visit our confidential online [Forum](#).

If you would like any further information and support about breast cancer or just want to talk things through, you can speak to one of our experts by calling our free [Helpline](#) on 0808 800 6000.

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