Tamoxifen

Tamoxifen is a hormonal therapy drug used to treat breast cancer. It’s occasionally used to treat some other cancers. Tamoxifen can be used to treat or prevent breast tenderness and swelling, which are side effects of some hormonal therapies used in men with prostate cancer.

It’s best to read this with our general information about breast cancer or secondary breast cancer in women.

In this information:

- How tamoxifen works
- When tamoxifen is given
- Taking your tamoxifen tablets
- Possible side effects of tamoxifen
- Less common side effects of tamoxifen
- Other information about tamoxifen
- References and thanks

How tamoxifen works

Hormones are substances produced naturally in the body. They act as chemical messengers and help control the activity of cells and organs. Hormonal therapies interfere with the way hormones are made or how they work in the body.

Many breast cancers rely on the hormone oestrogen to grow. This type of breast cancer is called oestrogen receptor-positive (ER positive) breast cancer. Tamoxifen blocks oestrogen from reaching the cancer cells. This means the cancer either grows more slowly or stops growing altogether.

When tamoxifen is given

Tamoxifen is only effective for people who have hormone-positive breast cancers. It is the main hormonal therapy drug given to women who haven’t been through menopause. It is also sometimes given to women after the menopause.

Tamoxifen is used after surgery and other treatments to reduce the risk of breast cancer coming back. It also reduces the risk of getting a new cancer in the other breast. You usually take tamoxifen for five years or longer. Some trials show taking it for 10 years may further reduce the risk of it coming back. Or you may have tamoxifen for two or three years and then change to a different type of hormonal therapy.

Occasionally, tamoxifen is used before surgery to shrink a large breast cancer, to try and avoid having a mastectomy.
Tamoxifen is also used to control a cancer that has come back or spread to other parts of the body (secondary breast cancer).

**Taking your tamoxifen tablets**

Tamoxifen is taken as a tablet, usually once a day. You take it at the same time each day, morning or evening. It’s also available as sugar-free syrup. Always take your tablets exactly as your nurse or pharmacist explained. This is important to make sure they work as well as possible for you.

There are some important things to remember when taking your tablets:

- Don’t take a double dose if you forget to take your tablet.
- Keep tablets in the original package at room temperature and away from heat and direct sunlight.
- Keep them safe and out of the reach of children.
- Get a new prescription before you run out of tablets and make sure you have plenty for holidays.
- Return any remaining tablets to the pharmacist if your treatment is stopped.

**Possible side effects of tamoxifen**

We explain the most common side effects of tamoxifen here. But we don’t include all the rare ones that are unlikely to affect you. You may get some of the side effects we mention, but you are very unlikely to get all of them. If you are having other drugs as well, you may have some side effects that we don’t list here.

Always tell your doctor or nurse about the side effects you have. They can prescribe drugs to help control them and give you advice about managing them. Don’t stop taking tamoxifen without talking to your doctor first.

**Hot flushes and sweats**

These are common and are often mild, but this can vary. Hot flushes and sweats may lessen after the first few months. Some people continue to have them for as long as they take tamoxifen. Cutting down on nicotine, alcohol and hot drinks containing caffeine, such as tea and coffee, can help. Dress in layers, so you can remove clothes as needed. Natural fabrics, such as cotton, may feel more comfortable.

If hot flushes are troublesome, tell your doctor. Low doses of certain antidepressant drugs can help to reduce flushes. The antidepressants paroxetine (Seroxat®) and fluoxetine (Prozac®) may make tamoxifen less effective so doctors don’t usually prescribe these.

You can read more about treatments for menopausal symptoms like hot flushes in our information on [breast cancer and menopausal symptoms](#).
Vaginal effects

These can include discharge, itching and dryness. Non-hormonal creams and gels or lubricants can help to reduce vaginal dryness and any discomfort during sex. You can buy these at a chemist or your doctor can prescribe them.

Change in periods

If you are still having periods they may become irregular, lighter or sometimes stop altogether.

Feeling sick and indigestion

Any sickness usually improves after a few weeks. Try taking your tablets with food or at night. Let your doctor or nurse know if feelings of sickness continue, or if you have indigestion. They can give you advice or prescribe drugs to help.

Eye problems

Tamoxifen may cause cataracts or other problems, but this isn’t common. Have your eyes checked regularly while you are taking it. If you get blurry vision or notice any change in your vision, always tell your doctor or nurse.

Headaches

If you have headaches let your doctor or nurse know. They can usually be controlled with non-prescription pain killers.

Feeling dizzy

Tamoxifen may cause dizziness. Tell your doctor or nurse if this is a problem.

Leg cramps

Walking may stretch the muscle and help with this. Let your doctor know if leg cramps are a problem.

Tiredness and lack of energy

You may feel tired, sleepy or feel you have no energy when you start taking tamoxifen. Try to pace yourself until this improves. It’s important to get the right balance of having enough rest and being physically active. Going for regular short walks will help you to feel less tired. If you feel sleepy, don’t drive or operate machinery.
Skin rashes
You may get a mild rash. Tell your doctor or nurse if this happens. It’s very important to contact your doctor straight away if you get a severe skin rash.

Hair thinning
You hair may become thinner while taking tamoxifen. This is usually mild. Your hair will get thicker after treatment finishes.

Weight gain
You may put on weight when you're taking hormonal therapy. Eating healthily and being more physically active can help to keep you to a healthy weight. Your nurse can give you more advice.

Loss of sex drive
Your sex drive may be lower while taking tamoxifen. Occasionally men taking tamoxifen find it causes them sexual difficulties. Talk to your doctor or nurse for advice.

Changes in mood and concentration
Some people have mood changes or feel low or depressed when taking tamoxifen. Or you may find it harder to think clearly or to concentrate. Let your doctor or nurse know if this is a problem, especially if you feel depressed.

Less common side effects of tamoxifen

Blood clots (thrombosis)
Tamoxifen can slightly increase the chances of a blood clot. Let your doctor know if you have a history of blood clots or deep vein thrombosis (DVT).

A clot can cause symptoms such as pain, redness and swelling in a leg, breathlessness and chest pain. Contact your doctor straight away if you have any of these symptoms.

A blood clot is serious but your doctor can treat it with drugs that thin the blood. Your doctor or nurse can give you more information.
**Tumour flare**

If you’ve been prescribed tamoxifen for cancer that has spread to the bones you may get pain in the bones when you start taking it. This is sometimes called tumour flare. It can cause a raised level of calcium in the blood (hypercalcaemia). Symptoms of this are feeling sick or being sick, being very thirsty, constipation or, sometimes, being confused. If you have any of these symptoms let your doctor know straightaway so they can treat it.

**Voice changes**

Some people taking tamoxifen have reported that it affects their singing voice. If this is a concern for you, talk to your cancer doctor.

**Increased risk of womb cancer**

Women who have been through menopause and have taken tamoxifen over a long period of time have an increased risk of womb cancer. But this risk is outweighed by the benefits of taking tamoxifen. When womb cancer is found early, treatment is very successful. Abnormal vaginal bleeding can be an early sign, so if this happens it’s very important to tell your cancer doctor or nurse so they can check it. Bleeding is often caused by a non-cancerous condition, but always see your doctor or nurse.

**Liver changes**

Tamoxifen may cause changes in the way your liver works. You are very unlikely to notice any problems, but your doctor will take regular blood samples to check your liver is working properly.

**Bone thinning**

Taking tamoxifen after menopause may help to prevent, and reduce the risk of, bone thinning. But taking it before menopause may cause some bone thinning. Regular walking will help to keep your bones strong. Eating a healthy diet, not smoking and sticking to sensible drinking guidelines will also help. Let your doctor know if you have any problems with your bones.

We have more information on how you can keep your bones healthy on our website, and in a booklet called *Bone health*.
Other information about tamoxifen

Contraception

Your doctor will advise you not to become pregnant when you're taking tamoxifen. This is because tamoxifen may harm a developing baby. It's important to use an effective, non-hormonal form of contraception during treatment and for a few months after it finishes. Even if your periods have stopped or are irregular you still need to use contraception. You can talk to your doctor or nurse about this.

Fertility

Women who haven't been through their menopause may still become pregnant when they've finished treatment with tamoxifen. Doctors usually advise you to wait for a few months after tamoxifen treatment finishes before you try to get pregnant. Talk to your doctor first if you're thinking of trying to become pregnant.

If you have ongoing problems

Side effects can be controlled or managed most of the time. But, for a few women, they can be more troublesome. If this happens, make sure you talk to your cancer doctor or nurse. They can usually suggest ways to improve your side effects. If things don't improve, go back to your cancer doctor or nurse. They may suggest you try something else.

It’s really important not to stop taking tamoxifen without telling your doctor, as this may affect the success of your treatment. If side effects are very troublesome and can’t be managed, your cancer doctor may suggest you take a different type of hormonal therapy.

Other medicines

Tamoxifen can interact with other drugs. For example, it can increase the effect of a blood thinning drug called warfarin. Let your doctor know straight away if you’re taking warfarin or any other drugs. Some other drugs may make tamoxifen less effective.

Tell your doctor about any medicines you are taking, including ones you can buy for yourself, complementary therapies and herbal drugs.

Medical or dental treatment

If you need to go into hospital for any reason other than cancer, always tell the doctors and nurses that you are taking tamoxifen. Explain you are taking hormonal therapy that no one should stop or restart without checking with your cancer doctor first. Tell them the name of your cancer doctor so they can ask for advice.
Always tell your dentist if you are taking tamoxifen.

References and thanks

The information in this section has been produced in accordance with the following sources and guidelines:


If you’d like further information on the sources we use, please feel free to contact us.

Thanks

Thanks to Emma Foreman, Lead Pharmacist Cancer, who reviewed this edition.

Thank you to all of the people affected by cancer who reviewed what you’re reading and have helped our information to grow.

You could help us too when you join our Cancer Voices Network - [find out more.](#)

Content last reviewed: 1st August 2014

Next planned review: 2016

We make every effort to ensure that the information we provide is accurate and up-to-date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication or third party information or websites included or referred to in it.

Macmillan Cancer Support, registered charity in England and Wales (261017), Scotland (SC039907) and the Isle of Man (604). A company limited by guarantee, registered in England and Wales company number 2400969. Isle of Man company number 4694F. Registered office: 89 Albert Embankment, London SE1 7UQ.

For cancer support every step of the way, call Macmillan free on 0808 808 00 00 (Mon-Fri, 9am-8pm) or visit macmillan.org.uk