

# Taking tamoxifen to lower your chance of breast cancer.



## WHO IS THIS LEAFLET FOR?

You have been given this leaflet because one or more of the women in your family have had breast cancer. **Having a family history of breast cancer increases the chance of breast cancer.**

**Tamoxifen** is a drug that can be given to women who have an increased chance of getting breast cancer. Women can take tamoxifen before or after menopause (the time when a woman stops having her periods).

This leaflet tells you about the pros and cons of taking tamoxifen to lower your chance of breast cancer. **Discuss this information with your doctor before you decide whether to take tamoxifen.**

## WHY ARE MY CHANCES OF GETTING BREAST CANCER HIGHER THAN AVERAGE?

**There are a number of things that may increase your chance of getting breast cancer.** One of those is your genes – the genetic information you inherited from your parents.

Some women have a fault in one of the genes that normally protects them against breast cancer. These genes are called BRCA1 and BRCA2.

Women who have a fault in either of these genes often have several family members who have had breast cancer and have a much higher chance of breast cancer. Some women have several family members who have had breast cancer, but do not have a known gene fault. However, your chance of breast cancer may still be higher than average.

## WHAT IS TAMOXIFEN AND HOW DOES IT WORK?

Many breast cancers rely on the female hormone oestrogen to grow.

Tamoxifen is a hormone therapy drug that blocks oestrogen from getting to the breast cancer cells. This means that cancer may develop more slowly or stop developing altogether.

## WILL TAMOXIFEN LOWER MY CHANCE OF BREAST CANCER?

Yes.

- Studies have shown that taking tamoxifen every day for 5 years will lower your chance of breast cancer by around 40% (or almost half the chance).
- If you take tamoxifen for 5 years, it may protect you from breast cancer for at least 15 years after you stop taking it.
- It is unclear whether tamoxifen is helpful for women who have a fault in the BRCA1 or BRCA2 gene because very few women with these gene faults took part in the breast cancer prevention clinical trials.
- It is very likely that tamoxifen should work just as well for women with a BRCA2 gene fault because the hormone oestrogen is linked to the development of many BRCA2 breast cancers.
- We don't know yet if tamoxifen works well in women with BRCA1 gene faults.
- Speak to your doctor about using tamoxifen if you have the BRCA1 or BRCA2 gene fault. Your doctor will advise you if tamoxifen is right for you.

The diagrams below show the effect of taking tamoxifen everyday over 5 years on the chance of getting breast cancer over a lifetime.

Each diagram represents 100 women with a high chance of breast cancer because of their family history.

### Do not take tamoxifen

- 70 will not develop breast cancer
- 30 will develop breast cancer



### Do take tamoxifen

- 82 will not develop breast cancer
- 18 will develop breast cancer



## WHAT ARE THE SIDE-EFFECTS OF TAMOXIFEN?

Most women who take tamoxifen will feel the same, but some may experience side-effects (these are listed in the table below). It is important to remember that most side-effects are mild and should stop when you stop taking tamoxifen.

Women who take tamoxifen said their side-effects did not have a big impact on psychological or sexual well-being.

**Speak with your doctor if you take tamoxifen and you get any of these side-effects.** Your doctor may suggest ways to improve these or advise you to stop taking tamoxifen.

## POTENTIAL SIDE-EFFECTS OF TAKING TAMOXIFEN

### COMMON SIDE-EFFECTS:

SIDE-EFFECT	DESCRIPTION
Hot flushes and sweats	<p>The most common side-effects are hot flushes and sweats, often at night.</p> <p>Pre-menopausal women who take tamoxifen are 14% more likely to have flushes and sweats than those who do not.</p> <p>Post-menopausal women who take tamoxifen are 21% more likely to have flushes and sweats than those who do not.</p> <p>Often the flushes lessen over the first few months, but some women will have them for as long as they take tamoxifen.</p>
Changes in periods	<p>Pre-menopausal women may notice that their periods change while taking tamoxifen. Their periods may become irregular, lighter or sometimes stop completely. Tamoxifen does not cause early menopause or infertility.</p>
Increased vaginal discharge	<p>Some women may notice an increase in vaginal discharge. This will not have an odour unless a vaginal infection is also present.</p>

### LESS COMMON SIDE-EFFECTS:

SIDE-EFFECT	DESCRIPTION
Blood clots (thrombosis)	<p>Your chance of having a blood clot may increase while you are taking tamoxifen.</p> <p>The chance is on average 4 per 1000 women over 5 years. For pre-menopausal women the risk is lower, about the same as that of taking 'The pill' (oral contraceptive pill). This is only 4 more women in every 1000, over 5 years of taking tamoxifen.</p> <p>The chance of getting a clot is higher for women who smoke, or who have suffered clots in the past.</p> <p>For most women, the chance of a blood clot is low; however, if you get a blood clot, it is serious and possibly life-threatening. The chance of getting a blood clot goes back to normal once you stop taking tamoxifen.</p>
Cancer in the lining of the womb (endometrial cancer)	<p>Pre-menopausal women are not more likely to get endometrial cancer while taking tamoxifen.</p> <p>Post-menopausal women are more likely to get these cancers when taking tamoxifen. On average, this is only 4 more women in every 1000, who will get endometrial cancer, for every 5 years they take tamoxifen.</p>
Leg cramps, nausea and rash	<p>These side-effects are rare but may be linked with taking tamoxifen.</p>

### WHO SHOULD AVOID TAMOXIFEN?

Avoid tamoxifen if you:

- Have had a blood clot, including deep vein thrombosis ('DVT'), a blood clot in the lung ('pulmonary thrombosis') or stroke.
- Require blood thinning drugs, such as warfarin.
- Smoke cigarettes.
- Are pregnant, planning on falling pregnant or breast-feeding during the time you would take tamoxifen. Stop taking tamoxifen at least 3 months before falling pregnant.
- Rely on 'The pill' for birth control. Tamoxifen may stop 'The pill' from working. To prevent pregnancy, use other contraception such as condoms or an intrauterine device (IUD). Even if your periods stop while you are taking tamoxifen, you may still fall pregnant.
- Use hormone replacement therapy (HRT). Serious side-effects are more likely if you take tamoxifen and HRT together. If you take HRT and wish to take tamoxifen, speak to your doctor.

### HOW MUCH DOES TAMOXIFEN COST?

- For most patients, tamoxifen costs approximately \$10-15 per month for the standard 20 mg daily dose.
- Some women may get this cheaper through the Pharmaceutical Benefits Scheme (PBS), if they meet certain medical criteria. Speak to your doctor to see if this applies to you.

### OTHER IMPORTANT INFORMATION

- See your doctor immediately if you get sore or tender calf muscles (back of your leg between your knee and ankle), your legs swell, you feel leg pain, chest pain or unexplained shortness of breath.
- Tell your doctor if you get unusual vaginal bleeding or spotting, pressure or pain in the lower part of your belly (pelvis).

### OTHER IMPORTANT INFORMATION (CONT.)

- Stop taking tamoxifen before surgery. Speak to your surgeon about this.

If you would like more detailed information about your breast cancer risk and whether tamoxifen might be right for you, please go to [www.petermac.org/iprevent](http://www.petermac.org/iprevent)

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