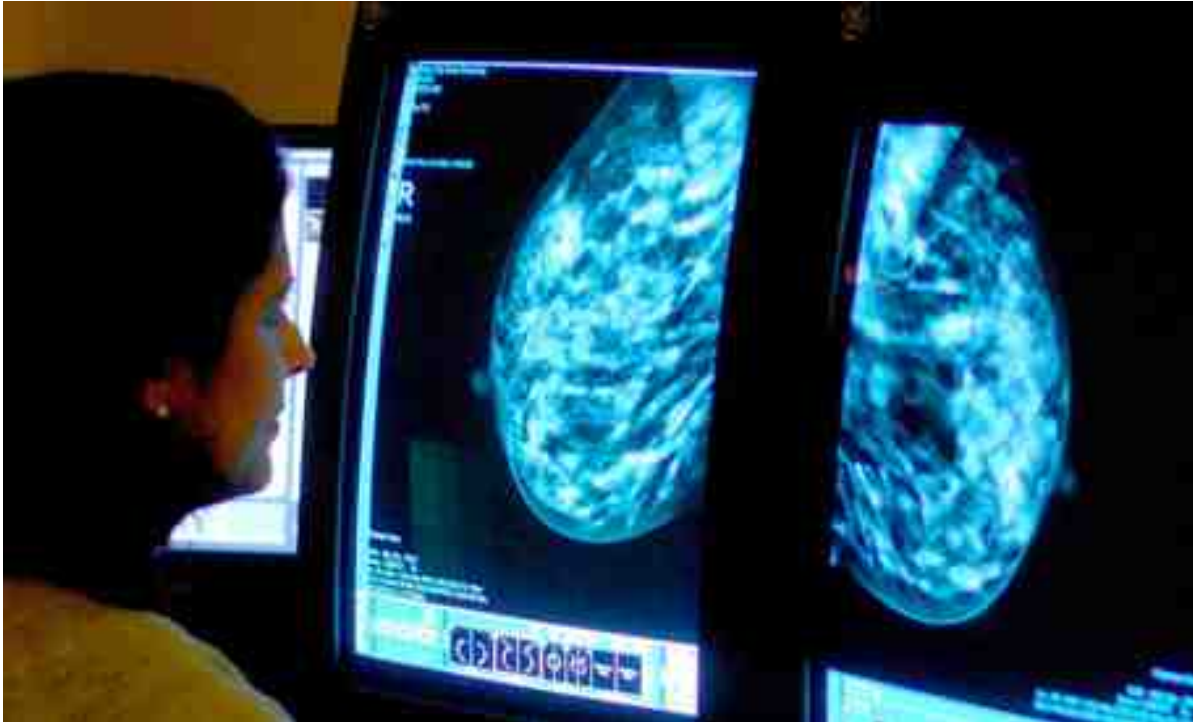


# Women at risk of breast cancer should be given daily pill, say NHS guidelines

Nice recommends course of anti-oestrogen drugs offered as alternative to surgery for those with family history of the disease

- [Sarah Boseley](#), health editor
- [The Guardian](#), Tuesday 25 June 2013



The NHS should offer the drugs to all women with a three in 10 chance of developing breast cancer and consider them for those with more than a one in six chance, says Nice. Photograph: Rui Vieira/PA

About half a million healthy women with a family history of [breast cancer](#) should be offered a five-year course of drugs to help prevent the disease under new NHS guidance published on Tuesday.

When the actor Angelina Jolie and celebrity Sharon Osbourne discovered they carried genes which gave them a very high risk of breast cancer, both opted for a double mastectomy. Jolie reduced her chances of cancer from 87% to under 5%.

But for the many women who would not want to undergo surgery, especially if their own risk is not quite as high as Jolie's was, a daily pill is now an option.

Two anti-oestrogen drugs, tamoxifen, which is used to prevent cancer recurring in women who have had the disease, and raloxifene, which is used to treat post-menopausal women with brittle bones, have been found in studies to reduce the risk of breast cancer by 30% to 40%. Neither is licensed for this use in Britain, but they are in the United States.

The guidance from the [National Institute for Health and Care Excellence \(Nice\)](#) says that the

NHS should offer the drugs to all women with a three in 10 chance of developing cancer and consider them for those with more than a one in six chance.

More genetic screening will take place – although not for everybody. Anyone who has a 10% risk of having inherited one of the two genes that give women a particularly high chance of breast cancer, BRCA1 and BRCA2, will be offered a blood test. At the moment, only those with a 20% risk get screened.

Women will no longer have to know somebody in their family with cancer caused by one of the genes to get a test – some women have been denied screening in the past because cancer had killed their grandmother, mother and aunts before testing was available.

Nice found it would be cost effective to screen even more women, but decided the NHS did not yet have the capacity to do it.

Maggie Alexander, chair of the Nice guidelines development group, said the publication was "a significant milestone for the very many thousands of women who have a family history of breast cancer".

Dr Caitlin Palframan, from [Breakthrough Breast Cancer](#), also on the guidelines group, called it "a game changer ... these new guidelines are a fantastic leap forward in the way we prevent breast cancer developing in those at highest risk".

Lady Delyth Morgan, chief executive of [Breast Cancer Campaign](#), said: "This is a truly historic moment in the treatment of women at increased risk of breast cancer, as we are witnessing a fundamental change of clinical practice driven by medical research." Around 50,000 women and 400 men are diagnosed with breast cancer in the UK every year. One in five of those diagnosed have family members who have developed breast, ovarian or prostate cancer, which are all genetically linked.

Drug treatment to prevent breast cancer is highly cost-effective. Tamoxifen is a 50-year-old British drug which is long out of patent and costs about £25 a year. Professor Gareth Evans, consultant in clinical genetics at St Mary's hospital in Manchester and another member of the guidelines group, said it was a minuscule amount compared with the many thousands of pounds that breast cancer treatment costs. Raloxifene is slightly more expensive and not quite as effective, but does not carry tamoxifen's slight increased risk of cancer of the lining of the womb.

Drugs to prevent cancer have long been a dream, but it remains to be seen how many women will take up the NHS offer. The side-effects of the treatment, which blocks the hormone oestrogen, involve menopausal symptoms, such as hot flushes, night sweats, mood swings, nausea and weight gain.

"Usually the symptoms wear off after about six months," said Evans. "Most of the women who get past six months take the drugs for the full five years."

An ongoing study in Manchester has offered tamoxifen to high risk pre-menopausal women and found about one in eight (12%) chose to take it. But there was relatively high adherence – 80% continued taking it longer than a year.

"BRCA1 and BRCA2 carriers have a risk of maybe 80%-90% in their lifetime," added Evans, commenting on Jolie's decision. "They find that is difficult to live with. Even reducing that risk

by 35%-40% may not be enough for them."

In the future, it is possible that more women could be offered the drugs. Most women at high genetic risk are younger, but as other women go through the menopause and especially if they put on weight, their risk can increase. Post-menopausal women produce more oestrogen from fatty tissue and their adrenal glands.

There are other options for reducing breast cancer risk, however, which do not involve drugs, including weight loss and exercise.

The guideline also recommends annual MRI screening for women under 50 who have had breast cancer – including those with BRCA1 or BRCA2 gene mutations – and remain at high risk of the disease returning.