



**FACTS FOR LIFE**

**Risk-Lowering Options for Women at Higher Risk of Breast Cancer**

Some risk factors put women at a higher than average risk of breast cancer. These include:

- An inherited *BRCA1* or *BRCA2* gene mutation (can be passed to you from either parent)
- A strong family history of breast cancer, such as a mother or sister diagnosed at a younger age
- Lobular carcinoma in situ (LCIS) or atypical hyperplasia
- Radiation treatment to the chest area between ages 10-30
- A personal history of invasive breast cancer or ductal carcinoma in situ (DCIS)

If you have a higher risk of breast cancer, talk with your doctor about your breast cancer screening options and ways to lower your risk.

**Risk-lowering options include:**

- Risk-lowering drugs (chemoprevention)
- Preventive surgery (prophylactic mastectomy and/or prophylactic oophorectomy)

**Risk-lowering drugs (tamoxifen and raloxifene)**

Tamoxifen and raloxifene are the only FDA-approved drugs used to lower the risk of invasive and non-invasive breast cancer for women at higher risk. Both are pills taken once a day for 5 years. These drugs lower the risk of hormone receptor-positive breast cancer. Neither lowers the risk of hormone receptor-negative cancer.

Tamoxifen is more effective at lowering breast cancer risk than raloxifene. However, raloxifene has fewer harmful side effects (see table below). This makes it a better choice for some women. Talk with your doctor about the risks and benefits of each.

	<b>Tamoxifen</b>	<b>Raloxifene</b>
Who can take the drug?	<ul style="list-style-type: none"> <li>• Premenopausal women ages 35 and older</li> <li>• Postmenopausal women</li> </ul>	<ul style="list-style-type: none"> <li>• Postmenopausal women only</li> </ul>
What are common short-term side effects?	<ul style="list-style-type: none"> <li>• Hot flashes and night sweats</li> <li>• Irregular periods or spotting (uterine bleeding)</li> <li>• Vaginal discharge</li> <li>• Vaginal dryness or itching</li> </ul>	<ul style="list-style-type: none"> <li>• Hot flashes and night sweats</li> <li>• Leg cramps</li> </ul>
What are possible health risks? (These effects occur mainly in older, postmenopausal women.)	<ul style="list-style-type: none"> <li>• Blood clots in the large veins or lungs</li> <li>• Cancer of the uterus or endometrium (lining of the uterus)</li> <li>• Cataracts</li> <li>• Stroke</li> </ul>	<ul style="list-style-type: none"> <li>• Blood clots in the large veins or lungs</li> <li>• Stroke</li> </ul>
What about use in breast cancer treatment?	Effective in the treatment of hormone receptor-positive breast cancer.	Not effective for treatment of breast cancer.

The aromatase inhibitor drugs anastrozole and exemestane are used to treat breast cancer. They have also been shown to lower the risk of breast cancer, but are not approved by the FDA for risk reduction.

## Preventive surgery

Some women with an inherited gene mutation are at higher risk of both breast cancer and ovarian cancer.

### Prophylactic mastectomy

Bilateral prophylactic mastectomy is the removal of both breasts to prevent breast cancer. It lowers the risk of breast cancer by at least 90 percent.

After a prophylactic mastectomy, you may choose to have breast reconstruction (plastic surgery to restore the look of the breast). It may be done at the same time as the mastectomy or later. Discuss your options with your plastic surgeon.

### Prophylactic oophorectomy

Prophylactic oophorectomy is the surgical removal of the ovaries. It lowers the risk of ovarian cancer by 70 to over 90 percent. It may also lower the risk of breast cancer.

## Am I still at risk of breast cancer?

Yes. While risk-lowering options greatly reduce the chance of getting breast cancer, they don't remove all risk. It's important to get regular breast cancer screening to make sure any breast cancer that develops is caught early, when chances of survival are highest.



## What can I do if I'm at higher risk of breast cancer?

Take time to gather information, talk with your doctor, get a second opinion and discuss your options with your family and those closest to you. The best decision is one that is well thought out and one you are comfortable with.

## Questions to ask your doctor

1. Am I at higher risk of breast cancer?
2. What risk lowering options do I have?
3. What are the risks and benefits of each?



### Related Educational Resources:

- Genetics and Breast Cancer
- Breast Reconstruction and Prosthesis After Mastectomy

## Resources

Susan G. Komen®

1-877 GO KOMEN (1-877-465-6636)

[www.komen.org](http://www.komen.org)

Facing Our Risk of Cancer Empowered (FORCE)

1-866-288-RISK (1-866-288-7475)

[www.facingourrisk.org](http://www.facingourrisk.org)

The above list of resources is only a suggested resource and is not a complete listing of breast health and breast cancer materials or information. The information contained herein is not meant to be used for self-diagnosis or to replace the services of a medical professional. Komen does not endorse, recommend or make any warranties or representations regarding the accuracy, completeness, timeliness, quality or non-infringement of any of the materials, products or information provided by the organizations referenced herein.

The Running Ribbon is a registered trademark of Susan G. Komen®. © 2018 Susan G. Komen® Item No. K00026 11/18