



FACTS FOR LIFE

## Ductal Carcinoma in Situ

*Ductal carcinoma in situ (DCIS)* is a non-invasive breast cancer that occurs in the milk ducts. DCIS is also known as intraductal (within the milk ducts) carcinoma. The ducts carry milk from the lobules (where it is made) to the nipple during breastfeeding. DCIS is called “in situ” (which means “in place”) because the abnormal cells are contained within the milk ducts and have not spread to nearby breast tissue.

Without treatment, DCIS may turn into invasive breast cancer. At this time, doctors cannot predict which cases of DCIS will turn into invasive breast cancer and which will not. So, almost every case of DCIS is treated with breast surgery. Sometimes, surgery is followed by radiation therapy and/or hormone therapy. Prognosis is usually excellent.

### Treatment for DCIS

Treatment for DCIS usually involves surgery, with or without radiation. Some people may also take the hormone therapy drug tamoxifen. Be sure to discuss your treatment options with your doctor.

#### Surgery

The first step in treating DCIS is surgery to remove the abnormal tissue in the breast. Depending on how far the DCIS has spread within the milk ducts, surgery can be lumpectomy or mastectomy.

#### Lumpectomy

If there is little spread of DCIS within the milk ducts, a lumpectomy (also known as breast conserving surgery) can be done. The surgeon removes only the abnormal tissue, but the rest of the breast is left in tact. In most cases, lymph nodes are not removed. It is usually done on an outpatient basis.

#### Mastectomy

If DCIS affects a large part of the breast, you will need a total (simple) mastectomy. The surgeon removes the entire breast, but no other tissue or lymph nodes. This treatment requires a short hospital stay. Breast reconstruction (surgery to recreate the breast) may be done at the time of the mastectomy or later.

#### Radiation therapy

Radiation therapy uses high-energy X-rays to kill cancer cells. It is not given to women who are treated with mastectomy for DCIS. Lumpectomy for DCIS is usually followed by radiation to lower the risk of invasive breast cancer and DCIS recurrence (returning). Some women with smaller, lower grade DCIS and clean surgical margins, may benefit from lumpectomy without radiation. Overall survival is the same for women with DCIS who have lumpectomy with or without radiation therapy.

## Hormone therapy

The hormone therapy drug tamoxifen may be used to treat hormone receptor-positive DCIS. For women treated with lumpectomy (with or without radiation therapy) for hormone receptor-positive DCIS, tamoxifen may lower the risk of DCIS recurrence and invasive breast cancer. Because women who have a mastectomy for DCIS have an excellent outcome, the benefit of tamoxifen is likely very small and tamoxifen is not usually prescribed.



## Risk of developing invasive breast cancer after DCIS

Although prognosis (chances for survival) is excellent after treatment for DCIS, there is still a small chance that DCIS could return or invasive breast cancer could develop. These risks are higher with lumpectomy plus radiation than with mastectomy. Yet, survival is the same after either treatment. With close follow-up, invasive breast cancer is usually caught early and can be treated successfully.

## How can I learn more about DCIS?

To learn more about DCIS, visit [komen.org](http://komen.org) or read the Komen Perspectives article titled *Is Ductal Carcinoma in Situ (DCIS) Breast Cancer?*

## Resources

Susan G. Komen®  
1-877 GO KOMEN (1-877-465-6636)  
[www.komen.org](http://www.komen.org)

### Related fact sheets in this series:

- Breast Cancer Prognosis
- Breast Cancer Surgery
- Follow-up After Breast Cancer
- Hormone Therapy For Early Breast Cancer
- Making Breast Cancer Treatment Decisions

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