

Ductal carcinoma in situ (DCIS) is a non-invasive breast cancer that occurs in the milk ducts. 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. DCIS is also called intraductal (within the milk ducts) carcinoma. You may hear the terms “pre-invasive” or “pre-cancerous” to describe it.

Without treatment, DCIS may develop into invasive breast cancer. At this time, doctors cannot predict which cases of DCIS will progress to 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.

With treatment, prognosis (chances for survival) is usually excellent.

Treatment for DCIS

Treatment for DCIS usually involves surgery, with or without radiation therapy. Some people may take hormone therapy. 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 intact. In most cases, lymph nodes are not removed. It is usually day surgery (you do not need to stay overnight in the hospital).

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. 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 be able to have lumpectomy without radiation therapy.

Overall survival is the same for women with DCIS who have lumpectomy with or without radiation therapy. It's not given to women who are treated with mastectomy for DCIS.

Hormone therapy

Hormone therapy isn't recommended for women who have a mastectomy for DCIS. (Prognosis is excellent without hormone therapy and so its benefit is likely very small.)

For women treated with lumpectomy (with or without radiation therapy) for hormone receptor-positive DCIS, hormone therapy (with tamoxifen or an aromatase inhibitor) may lower the risk of invasive breast cancer and DCIS recurrence.



Risk of developing invasive breast cancer after DCIS

Although prognosis is excellent after treatment for DCIS, there's still a small chance DCIS could return or invasive breast cancer could develop. These risks are higher with lumpectomy plus radiation therapy 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 the [DCIS page](https://www.komen.org/DCIS) of [komen.org](https://www.komen.org)

Resources

Susan G. Komen®
1-877 GO KOMEN (1-877-465-6636)
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Related fact sheets in this series:

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

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