

ductal carcinoma in situ

One type of CIS

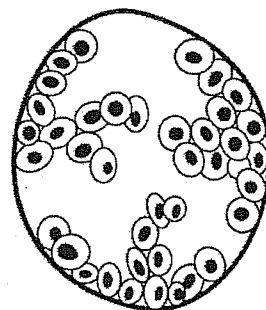
Carcinoma in situ (CIS) [kar-sin-OE-ma in SY-too] is an abnormal growth of cells that is still within the area in which it started. CIS has not invaded into surrounding breast tissue. The term *in-situ* means “in place.” *Ductal carcinoma in situ* (DCIS) — also known as intraductal carcinoma — affects only the ducts of the breast. These ducts carry milk from the lobules (where it is made) to the nipple of the breast. DCIS develops when the

cells of the duct lining grow out of control, but still stay within the breast duct itself. DCIS can affect one area (unifocal) or more than one area (multifocal) within the same region of the breast. Although DCIS is not invasive cancer, it is a pre-cancerous condition. Because the cells are pre-malignant (not yet fully cancerous), they need to be treated to reduce the chance of developing invasive breast cancer.

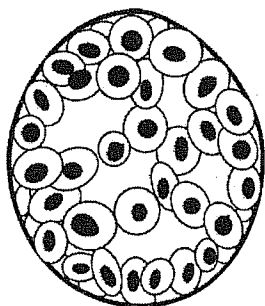
Different types of DCIS

The type of DCIS you have is just one of the factors your doctor will look at when choosing the best treatment for you. Be sure to ask your doctor for a copy of your pathology report, especially if you are not sure which type you have. Make sure you ask your doctor to discuss your pathology report with you. Here are the five types of DCIS:

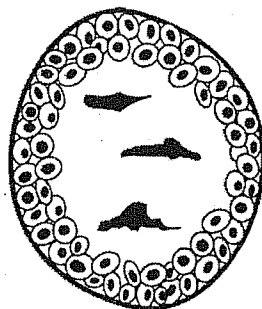
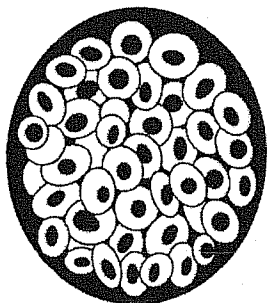
The *papillary* type looks like large, flowerlike growths. *Micropapillary* cells look similar to the papillary cells but are smaller in size.



Cribiform is a grouping of cells with holes (like a sponge).



Solid is a grouping of cells with no spaces.



In *comedo* [koh-ME-doe] type, the center of the duct is plugged with dead cells (necrosis [ne-KRO-sis]) making it look white. This is the fastest growing and most aggressive type of DCIS. It is also the type more likely to become invasive breast cancer in the future.



The Susan G. Komen
Breast Cancer Foundation

For more information about breast health or breast cancer, call the Susan G. Komen Breast Cancer Foundation's National Toll-Free Breast Care Helpline at 1-800 I'M AWARE (1-800-462-9273) or visit www.komen.org.

Treatment options for DCIS ~

Proper treatment for DCIS will reduce your chances of getting invasive breast cancer later on. The treatment choice depends on the type of DCIS you have. At present, there are three main treatment options:

Breast conservation alone (also known as lumpectomy or breast sparing) The surgeon will remove the breast lump or the abnormal area and a small margin of healthy breast tissue around it, leaving most of the breast. This surgery can be done on an outpatient basis.

Breast conservation alone may be an option when the DCIS tumor is very small and non-aggressive. There is a greater chance of DCIS returning (recurrence) without the addition of radiation therapy.

Breast conservation with radiation therapy

Radiation therapy uses high-energy X-rays to stop cancer cells from growing and to kill them. Radiation therapy given after breast conservation can reduce the chance of recurrence.

This option has the same benefits as breast conservation alone but the chance of recurrence is lower. Radiation therapy can be time consuming and has short-term side effects. Breast lymphedema (swelling of the breast) is a possible long-term side effect. Breast conservation with radiation therapy is not an option for patients with DCIS that has spread widely through the ducts of their breasts.

Total mastectomy

A total mastectomy is the recommended treatment for women who have DCIS that has spread widely through the ducts of the breast. The surgeon removes the entire breast. Since DCIS does not generally spread to the lymph nodes under your arm, they usually will not be removed. A total mastectomy requires a short hospital stay and recovery time.

A doctor's advice

Question:

How is DCIS different from invasive breast cancer?

Answer:

The term "breast cancer" describes a whole group of cancers that occur in the breast. DCIS is noninvasive, meaning that it has not spread from the breast ducts to other parts of the breast or body. Invasive breast cancers can spread to the lymph nodes or other areas in the body. DCIS can be found in more than one part of the breast because it travels through the ducts. You can reduce your risk of getting the more serious invasive breast cancers by getting the proper treatment for DCIS.

The drug tamoxifen can lower the risk of developing recurrent DCIS or invasive breast cancer in both the affected and opposite breast following breast conservation and radiation therapy or total mastectomy. Be sure to discuss these options in detail with your doctor. Ask your doctor whether you should take tamoxifen after surgery for DCIS. Because every woman is different, no single option will be best for everyone. Whatever you choose, you should plan on having careful, lifelong follow-up with regular breast exams and mammograms. Follow-up schedules may vary depending on the treatment.

Related fact sheets in this series:

- carcinoma in situ
- mammography
- treatment choices — an overview

The Susan G. Komen Breast Cancer Foundation is not a health care provider and does not give medical advice. The information provided in this material is not meant to be used for self-diagnosis or to replace the services of a medical professional.

*Developed in collaboration with the Health Communication Research Laboratory at Saint Louis University.
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