

Ductal Carcinoma in Situ

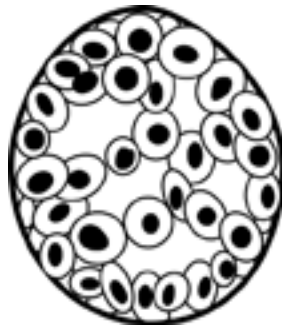
Ductal carcinoma in situ (DCIS) is a non-invasive breast cancer. The term *in situ* means “in place.” Non-invasive cancer is an abnormal growth of cells that is still within the area in which it started. DCIS develops when the cells of the duct lining grow out of control, but still stay within the breast duct itself. These cancer cells have not invaded into surrounding breast tissue. 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 can affect one area of the duct (unifocal) or more than one area of the duct (multifocal). Without treatment, the DCIS cells may spread beyond the duct over time. DCIS should 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 giving you treatment options. 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:

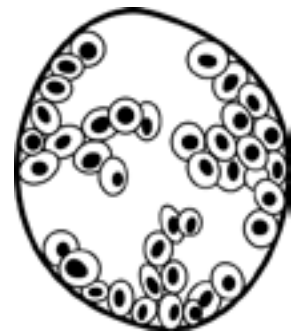
1. *Cribiform* is a grouping of cells with holes (like a sponge). >



- < 2. *Solid* is a grouping of cells with no spaces.

3. The *papillary* type looks like large, flowerlike growths. >

4. *Micropapillary* cells look similar to the papillary cells but are smaller in size.



- < 5. 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.



Surgery options for DCIS

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

Lumpectomy is also known as breast conserving surgery. The surgeon removes the abnormal area and a small margin (or area) of healthy breast tissue around it. This surgery can be done on an outpatient basis.

Lumpectomy alone

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

Lumpectomy with radiation therapy

Radiation therapy uses high-energy X-rays to stop cancer cells from growing and to kill them. Radiation therapy given after lumpectomy can reduce the chance of recurrence. This option has the same benefits as lumpectomy alone but the chance of recurrence is lower. Radiation therapy can be time-consuming and has short-term side effects. Lumpectomy with radiation therapy is not an option for patients with DCIS that has spread widely through the ducts of their breasts.

Research has shown lumpectomy with radiation therapy offer the same survival benefit as mastectomy for early stage breast cancer.

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 spread to the lymph nodes under your arm, they are not usually removed. A total mastectomy requires a short hospital stay and recovery time.

Breast reconstruction, surgery to recreate a missing breast, may be considered. It may be done at the time of the mastectomy or at a later 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 non-invasive, meaning that it has not spread from the breast ducts to other parts of the breast or body. Invasive breast cancers has spread out of the duct and 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.

Hormone treatment

The drug tamoxifen, raloxifene or an aromatase inhibitor can lower the risk of developing recurrent DCIS or invasive breast cancer in both breasts following surgery. Be sure to discuss these drugs in detail with your doctor. Because every woman is different, no single option works best for everyone. Whatever you choose, you should plan on having careful, lifelong follow-up with regular clinical breast exams and mammograms. Follow-up schedules may vary depending on the treatment.

Related fact sheets in this series:

- Aromatase Inhibitors
- Breast Surgery
- Follow-up
- Hormone Therapy
- Mammography
- Prognostic Factors
- Radiation Therapy and Side Effects
- Treatment Choices — An Overview