Ductal carcinoma in situ (DCIS) is a non-invasive breast cancer. In situ means “in place.” With DCIS the abnormal cells are contained in the ducts of the breast and haven’t spread to nearby breast tissue. The ducts carry milk from the lobules (where it’s made) to the nipple during breastfeeding. DCIS is also called intraductal carcinoma.

Without treatment, DCIS may progress into invasive breast cancer. Doctors don’t know which cases of DCIS might become invasive, so that’s why almost all cases of DCIS are treated.

With treatment, chances for survival are excellent.

**Treatment for DCIS**

Treatment involves surgery, with or without radiation. Surgery ([lumpectomy](#) or [mastectomy](#)) removes the abnormal breast tissue. Surgery options depend on how far the DCIS has spread in the ducts.

Talk with your doctor about your treatment options.

**Lumpectomy (breast conserving surgery)**

If there’s little spread of DCIS in the ducts, a lumpectomy can be done. The surgeon removes only the abnormal tissue. The rest of the breast is left intact. In most cases, lymph nodes aren’t removed.

**Mastectomy**

If DCIS affects a large part of the breast, a mastectomy will be needed. The surgeon removes the whole breast. No other tissue or lymph nodes are removed. Breast reconstruction (surgery to recreate the breast) may be done at the same time or later.

**Radiation therapy**

Radiation uses high-energy X-rays to kill cancer cells. Lumpectomy for DCIS is often followed by radiation. This lowers the risk of DCIS recurrence (returning) and invasive breast cancer.

Some women may have a lumpectomy without radiation. This is an option if they have smaller, lower grade DCIS and clean surgical margins. Radiation is rarely given after a mastectomy for DCIS.

Survival is the same for women with DCIS who have a mastectomy and those who have a lumpectomy (with or without radiation).

**Hormone therapy**

Hormone therapy may be given to women with hormone receptor-positive DCIS. Hormone receptor-positive tumors express (have a lot of) hormone receptors. Hormone therapy drugs slow or stop the growth of hormone receptor-positive cells by preventing the cancer cells from getting the hormones they need to grow. Options may be tamoxifen or an aromatase inhibitor.

Hormone therapy isn’t given to women who’ve had a mastectomy for DCIS.
Risk of developing invasive breast cancer after DCIS

After treatment for DCIS, there’s a small risk of:

- DCIS recurrence
- invasive breast cancer

These risks are higher with lumpectomy plus radiation than with mastectomy.

Survival is the same after either treatment. Learn more about DCIS on komen.org.

Emerging areas in the treatment of DCIS

Researchers are studying new ways to treat DCIS including:

- Ways to predict which cases of DCIS will progress to invasive breast cancer (to target treatment to those who are at higher risk)
- Determining which women may not need radiation therapy after lumpectomy for DCIS

After discussing the benefits and risks with your health care provider, we encourage you to join a clinical trial if there is one right for you. BreastCancerTrials.org in collaboration with Susan G. Komen® offers a custom matching service to help find clinical trials that fit your needs.

Questions for Your Provider

- What are my treatment options? Which treatments do you recommend for me and why?
- What are my chances for DCIS recurrence? What about developing invasive breast cancer?
- How long do I have to make a decision about my treatment?
- Is my DCIS estrogen receptor-positive or negative? Will I need to take hormone therapy, such as tamoxifen or an aromatase inhibitor?
- Were my tumor margins negative (also called uninvolved, clean or clear)? If not, what more will be done?
- How often will I have check-ups and follow-up tests after treatment ends?
- Will a follow-up care plan be prepared for me? Which health care provider is in charge of my follow-up care?
- Are there clinical trials enrolling people with DCIS? If so, how can I learn more?