

Invasive Lobular Carcinoma (ILC)

Invasive lobular carcinoma (ILC) is the second most common type of breast cancer. About 10% of all breast cancers are ILC.

Invasive lobular carcinoma (ILC) is breast cancer that starts in the lobules, the glands in the breast that produce milk. Invasive means the cancer has spread into surrounding breast tissues. Carcinoma refers to any cancer that begins in the skin or other tissues that cover internal organs, such as breast tissue.

Symptoms of invasive lobular carcinoma

In many cases, invasive lobular carcinoma causes no symptoms and is found after your doctor sees a suspicious area on a screening mammogram. In other cases, you or your doctor may feel a thick or swollen area in your breast. ILC is less likely than other breast cancers to cause a hard lump. This is because lobular breast cancer cells tend to grow in straight lines, forming a sheet rather than a lump.

Any of the following unusual changes in the breast can be a first sign of invasive lobular carcinoma:

swelling of all or part of the breast

skin irritation

skin dimpling, sometimes looking like an orange peel breast

nipple pain

nipple discharge, other than breast milk

redness, scaliness, or thickening of the nipple or breast skin

a lump or swelling in the underarm area

Diagnosis of invasive lobular carcinoma

Diagnosing invasive lobular carcinoma involves a combination of procedures and almost always includes:

- breast physical exam
- mammogram
- biopsy

Other tests that may be used are:

- ultrasound breast
- MRI

Listen to The Breastcancer.org Podcast episode featuring Dr. Maxine Jochelson explaining the imaging tests for lobular breast cancer. Imaging Tests for Lobular Breast Cancer Nov. 9, 2023 00:00 -23:02

Staging invasive lobular carcinoma

The stage of invasive lobular carcinoma is determined by the cancer's characteristics, such as how large it is and whether or not it has hormone receptors. The stage of the cancer helps you and your doctor:

- figure out your prognosis, which is the likely outcome of the disease
- decide on the best treatment options for you
- determine if certain clinical trials may be a good option for you

Generally, the stage of invasive lobular carcinoma is described as a number on a scale of I through IV. Stages I, II, and III describe early-stage cancers and stage IV describes cancers that have spread outside the breast to other parts of the body, such as the bones or liver. Once a diagnosis of invasive lobular carcinoma has been made, your doctor will do more testing to collect information on the characteristics of the cancer. These tests, as well as the results of your biopsy, make up the parts of your pathology report.

Information commonly collected as part of a pathology report include:

- size of the breast cancer
- Nottingham grade of the cancer
- tumor necrosis
- tumor margins
- lymphovascular invasion
- lymph node status
- hormone receptor status
- HER2 status
- rate of cell growth (Ki-67 levels)

Treatment of invasive lobular carcinoma

Treatments for invasive lobular carcinoma may include:

Surgery: You and your doctor will work together to determine the type of surgery that's right for you, based on the characteristics of the cancer, your family and medical history, and your preferences.

Radiation therapy: Radiation therapy is almost always recommended after lumpectomy and may be recommended after mastectomy if the cancer is large or cancer is found in the lymph nodes.

Chemotherapy: Your doctor will consider the characteristics of the breast cancer and your medical history when deciding if chemotherapy is right for your unique situation.

Hormonal therapy: If the breast cancer has receptors for the hormones estrogen, progesterone, or both, your doctor likely will recommend hormonal therapy, which is also called anti-estrogen therapy or endocrine therapy. Hormonal therapy medicines work by lowering the amount of estrogen in the body or by blocking the action of estrogen on breast cancer cells.

Follow-up care after invasive lobular carcinoma treatment

Because of better diagnostic tests and advances in cancer treatments, more people are living longer than ever after being diagnosed with any type of cancer, including breast cancer. Experts estimate that there are more than 3.8 million breast cancer survivors in the United States. Still, because of the treatments they've received, many breast cancer survivors have a higher risk of developing other diseases as they age, including high blood pressure, heart disease, and osteoporosis. To make sure breast cancer survivors are regularly screened for these and other diseases, experts have developed the idea of survivorship care planning.

Subtypes of invasive lobular carcinoma

There are several subtypes of invasive lobular carcinoma, often named for how the cells look under a microscope.

- Classic ILC is the most common form of invasive lobular carcinoma and is made up of small cancer cells that invade the stroma, the fatty tissue and ligaments that surround the breast ducts and lobules. Classic ILC cells tend to invade the stroma in a single-file pattern.
- Solid ILC cells grow in large sheets with little stroma in between them.
- Alveolar ILC cells grow in groups of 20 or more.
- Tubulolobular ILC cells grow in a single-file pattern, but some of the cells also form small tube-like structures.
- **Pleomorphic ILC** cells look different from classic ILC cells. The cells are larger and the cells' nuclei the core of each cell that contains its genetic material look different from each other. Pleomorphic ILC also may be composed of signet ring cells, cells that are filled with mucus that pushes the nucleus to one side.

The symptoms, diagnosis, staging, treatment options, and survivorship care are the same for all ILC subtypes. This information is provided by <u>Breastcancer.org</u>.